

Construction of 3MLD Capacity Sewerage Treatment Plant and Laying Sewerage Network to Zone 2 of Koyilandy Municipality

Sewerage System to Koyilandy Municipality Phase - II

# **DETAILED PROJECT REPORT**



# **KERALA WATER AUTHORITY**

PPD & Sewerage Vertical Circle,
Kozhikode

#### ACKNOWLEDGEMENTS

We wish to express our sincere gratitude to the Additional Chief Secretary (WRD) Sri. T K Jose IAS, Chairman KWA, Sri. Venkatesapathy S. IAS, Managing Director, KWA, Sri. Sreekumar G. Technical Member, KWA, Smt. C K Preethimol, Chief Engineer, PPD-WASCON & Sewerage Works, for the valuable guidance and support.

We express our gratitude to the authorities of Koyilandy municipality for their support, without which this endeavor would not have been possible. We extend our sincere gratitude to Sri. Jithin Gopinath, Contractor for timely completing the DGPS survey work.

We are thankful to Sri.T.K. Sureshkumar, Deputy Chief Engineer and Sri. Jayakumar. P. Executive Engineer for providing their virtual support

We express our gratefulness to all the PPD Camp Office Kozhikode staff for their valuable support and hard work. We trust that the project will become a reality as per the timeline shown, and it would be beneficial to reduce the pollution load on the Koyilandy municipality and improve people's living standards in Koyilandy municipality.

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11	Thickened Sludge Sump
12	Centrate Sump
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14	Centrifuge Structure
15	Chlorinator Room
16	Blower Room
17	Administrative Building, MCC and Lab
18	Sludge Storage Shed
19	ASF/PSF
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# PROJECT AT A GLANCE

SI. No.	liem	Description
1	Name of the Project	Sewerage System to Koyilandy Municipality -Phase II- Construction of 3 MLD capacity Sewage Treatment Plant and Laying Sewerage Network to zone II of Koyilandy Municipality
2	Name of District	Kozhikode
3	Name of Municipality	Koyilandy
4	Project area Covered	15 km2
5	Population Benefitted	20071 (2054)
6	STP Capacity	3 MLD
7	Total Network Length	46334 m
8	Number of Wells	1
9	Number of Pumping Stations	14
10	Number of Manholes	1791
11	Number of connections	3000
. 12	O&M for 10 Years (With GST- 18% & including Electricity Charges)	Rs.350094891/-
13	Electricity charge for one year	Rs.140096016/-
14	Amount required for land acquisition	3 Crores
15	Total cost including 10 years O&M cost	Rs. 1,52,00,00,000/-
16	Implementation agency	Kerala Water Authority
17	Period of execution	2 Years

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#### General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY -PHASE 2-CONSTRUCTION OF 3 MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NET WORK TO ZONE 2 OF KOYILANDY MUNICIPALITY

(Dsor year: 2018)

SI No	Heading Description		Amount
1	PART-A1- STP1- ESTIMATE NO: 2022/2718(WITHOUT GST)	33093324.83	
2	PART-A2- STP2- ESTIMATE NO: 2022/2719(WITHOUT GST)		36328474.40
3	PART-A3- ELECTRO MECHANICAL- ESTIMATE NO: 2022/2720(WITHOUT GST)	43720111.80	
4	PART-B- NETWORK- ESTIMATE NO: 2022/2721(WITHOUT GST)		755530350.23
5	PART- C- O&M ESTIMATE NO: 2022/2698(WITHOUT GST)		296690585.61
6	PART-D- CENTAGE CHARGES @10%OF (A B C)		116536284.70
7	PART-E- GST@18% OF (A B C)		209765 312.40
8 PART-F- DPR PREPERATION CHARGES@2.5% OF (A B) 9 PART-G-UNFORESEEN ITEMS		21716806.53	
		6618749.50	
		Total	1520000000.00
	Ce	ntage @	0.0%
	Centage	Amount	0.00
	Kerr Provision for GST payments (	(in %) @	0.0%
	Amount reserved for GST p.	ayments	0.00
	Total &	Centage	1520000000.00
	Lumpsum for r	round off	0.00
	GRAND TO	TAL De	1520000000.00

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Kozhikode

Rupees One Hundred Fifty Two Crore Only

# **EXECUTIVE SUMMARY**

Environmental protection has long been recognised as a critical component of long-term development. A key factor in achieving this is proper sewage and septage management. Although the state has made significant progress in the drinking water sector, it has lagged far behind in the sewerage sector. Large-scale pollution of water resources has come from unplanned urbanisation and poor sewage management. This has become a complex problemfor both the environment and public health. Recognizing the danger, the government has spent the last few years deliberating and taking steps to address it. Furthermore, the National Green Tribunal (NGT) has mandated the implementation of a sewerage system throughout the state in a timely way.

The local bodies, who have been constitutionally entrusted with the responsibility of environmental protection, have only limited infrastructure and expertise to tackle the situation. Hence Kerala Water Authority, being a state wide establishment with qualified and experienced personnel in Public Health Engineering, has been considered by the government to take up the responsibility. As per the Kerala Water Supply and Sewerage Act, 1986 KWA has the function of rendering services in collection and disposal of waste water. KWA, as a knowledge partner, service provider and central agency for coordinating the activities related to the planning and implementation of sewerage systems for LSGIs can contribute in scientific and systematic way. To meet the growing demand for waste water management, KWA established a Sewerage Vertical Wing, led by the Chief Engineer, PPD & WASCON. The former Sewerage Circle office in Kochi, which had a Superintending Engineer, one Executive Engineer, and two Assistant Executive Engineers, has now been merged with this. In addition to their existing responsibilities, the PPD Wing's three circle offices in Thiruvananthapuram, Kochi, and Kozhikode have been designated as Sewage Circle offices. This wing is responsible for the investigation, planning, design, and DPR preparation of sewerage projects.

The entire Koyilandi Municipality is divided into two main sewer zones based on topography, population, railway line, and other factors. This Detailed Engineering Report envisions the establishment of sewerage facilities to the Koyilandi Municipality's Zone II and is designed to meet the sewerage demand up to the year 2054, using 2023 as the base year and a design period of 30 years. The ultimate sewage load for this Zone is 3 MLD including non-domestic demand and infiltration. A septage zone is also proposed in areas where the population density is less than 1500.km2. Furthermore, septage treatment is proposed in densely populated areas where there is no road Network. Septage treatment fiscality is provided as co-treatment unit with the 4 MLD capacity Sewage Treatment Plant for Zone1.

The scheme covers 15 km² area in Koyilandi Municipality's zone-2 area with the design population of 20071(2054). This proposal includes construction and commissioning of 3 MLD STP with MBBR technology at Naderi, Koyilandi Municipality, laying sewer network of 46334 m, 1791 manholes, a pumping station at Puthiya kavil road and fourteen number of lifting stations. Manholes at 30 m intervals and at all intersections are proposed to facilitate maintenance operations. Total Estimated cost of the project including 10-year O&M cost is

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Sewerage, PPD & WASCON N Kerala Water Authority Thiruvananthapuram -33

# ABSTRACT OF ESTIMATE

Sl No	Heading Description	Amount in Rs.
1.	SEWAGE TREATMENT PLANT	
2.	RAW SEWAGE RECEIVING CHAMBER CUM WELL	5648950.08
3.	INLETCHEMBER/SCREENCHANNEL/GRIT CHEMBER/PARSHALLFLUME	3824911.70
4.	EQUALISATION TANK	5790183.07
5.	MBBR 1 & 2	9219828.74
6.	SECONDARY CLARIFIER	3963530.54
7.	SLUDGE SUMP	274703.05
8.	SLUDGE THICKNER	1080387.65
9.	THICKENED SLUDGE SUMP	511126.53
10.	FILTER FEED TANK	794747.58
11.	TREATED WATER TANK	1643792.46
12.	CENTRATE SUMP	341163.43
13.	SITE PREPERATION	3850416.60
14.	ADMINISTRATIVE/LABORATORY/CHEMICALHOUSE/ CONTROL ROOM BUILDING	4782474.92
15.	SECURITY CABIN	320279.13
16.	AIR BLOWER BUILDING	2834146.05
17.	CHLORINATION BUILDING	2456623.55
18.	COMPOUND WALL	2145551.14
19.	INTERNAL ROADS	2048864.99
20.	STORM WATER DRAINS	551910.65
21.	TRANSFORMER BUILDING	628364.03
22.	DG ROOM	534866.07
23.	CENTRIFUGE BUILDING	3285165.34
24.	PSF/ACF FOUNDATION	534973.21
25	SLUDGE SHED	654838.72
26	LANDSCAPING, GREEN BELT FORMATION AND REUSE OF TREATED WATER	400000.00

27	ODOUR CONTROL SYSTEM	8800000.00
28	PROVIDING SOLAR ENERGY SYSTEM	2500000.00
29	MECHANICAL WORKS	21935912.82
30	ELECTRICAL WORKS	10084198.98
31	CHARGES FOR POWER ALLOCATION TO KSEB AND POWER EXTENSION BY CABLE	9000000.00
32	TOOLS AND PLANTS	200000.00
33	PROVIDING SCADA SYSTEM	2500000.00
	SEWER NETWORK	
34	LAYING OF SEWER NETWORK	271190262.03
35	ROAD RESTORATION WORK OF LAYING OF SEWERS AND PUMPING MAIN.	49308544.64
36	CONSTRUCTION OF PUMPING STATIONS	1851220.18
37	COMPOUND WALL WITH GATE FOR PUMPING STATIONS	3339050.48
38	CONSTRUCTION OF SCREEN CHAMBER AND VALVE CHAMBER	1660910.15
39	CONSTRUCTION OF VALVE CHAMBER	255472.28
40	CONSTRUCTION OF CONTROL ROOM AND GENERATOR ROOM	1363783.85
41	PROVIDING CABLE TRENCHES	180779.77
42	BATH CUM TOILETS	357701.44
43	MECHANICAL, ELECTRICAL - PUMPSETS, GRIT CHAMBER SCREEN, GENERATOR, TRANSFORMER & ALLIED WORKS COMPLETE	4678495.52
44	PUMPING MAINS	11887473.58
45	LAYING HDPE PIPES VIA HDD METHOD ABOVE 3M DEPTH	63123751.14
46	CONSTRUCTION OF MAN HOLES	190839433.57
47	ROAD RESTORATION - TO PWD/NH	119907382.13
48	LIFTING STATIONS AND ALLIED WORKS	33386089.45
49	WATER SUPPLY AND SANATORY ARRANGEMENTS, ELECTRICAL WIRING IN PUMPING STATIONS	800000.00
50	LINE EXTENSION, DEPOSIT TO KSEB, ETC	1400000.00

	O&M FOR 10 YEARS	
51	O&M FOR STP	83605582.33
52	O&M FOR SEWERAGE NETWORK	72988987.28
53	ELECTRICITY CHARGES FOR 10 YEARS	140096016.00
	TOTAL	1165362847
	DPR Preparation Charge@2.5%	21716806.53
	CENTAGE@10%	116536284.70
	GST@18%	209765312.40
	LUMP SUM	6618749.50
	GRAND TOTAL	1,52,00,00,000
	Rupees One Hundred and Fifty Two Crores Only	

### **EXECUTIVE SUMMARY**

Environmental protection has long been recognised as a critical component of long-term development. A key factor in achieving this is proper sewage and septage management. Although the state has made significant progress in the drinking water sector, it has lagged far behind in the sewerage sector. Large-scale pollution of water resources has come from unplanned urbanisation and poor sewage management. This has become a complex problem for both the environment and public health. Recognizing the danger, the government has spent the last few years deliberating and taking steps to address it. Furthermore, the National Green Tribunal (NGT) has mandated the implementation of a sewerage system throughout the state in a timely way.

The local bodies, who have been constitutionally entrusted with the responsibility of environmental protection, have only limited infrastructure and expertise to tackle the situation. Hence Kerala Water Authority, being a state wide establishment with qualified and experienced personnel in Public Health Engineering, has been considered by the government to take up the responsibility. As per the Kerala Water Supply and Sewerage Act, 1986 KWA has the function of rendering services in collection and disposal of waste water. KWA, as a knowledge partner, service provider and central agency for coordinating the activities related to the planning and implementation of sewerage systems for LSGIs can contribute in scientific and systematic way. To meet the growing demand for waste water management, KWA established a Sewerage Vertical Wing, led by the Chief Engineer, PPD & WASCON. The former Sewerage Circle office in Kochi, which had a Superintending Engineer, one Executive Engineer, and two Assistant Executive Engineers, has now been merged with this. In addition to their existing responsibilities, the PPD Wing's three circle offices in Thiruvananthapuram, Kochi, and Kozhikode have been designated as Sewage Circle offices. This wing is responsible for the investigation, planning, design, and DPR preparation of sewerage projects.

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## **CHAPTER 1**

#### INTRODUCTION

#### 1.1 BACKGROUND

Provision of drinking water and sanitation facilities has always been a key priority in our country as it is directly related with the health of the community and the responsibility for providing these services lies with the public domain. With unplanned urbanization the sewage management and pollution of water resources has become a complex challenge to the environment as well as to the public health. Even though Kerala State has achieved significant results in terms of improved water supply coverage through Kerala Water Authority, the sanitation sector could not cope up with the water supply sector. Immediate removal of sewage from its source of generation followed by proper treatment and safe disposal into environment in an eco-friendly manner or reuse is highly necessary to protect the public health and environment.

#### 1.2 SCOPE OF THE REPORT

The scope of this work consists of planning and design of a comprehensive sewerage scheme for zone II of Koyilandy Municipality of Kozhikode district in Kerala State. The project proposes a well-planned sewerage pipe line network for the core area of Municipality, pumping stations, and sewerage treatment plant with MBBR technology so as to ensure the quality of effluent as per KSPCB Standards. Septage management facility will be provided for the area where laying sewerage network is not feasible.

#### 1.3 PROJECT AREA

The historical town Koyilandy Municipality is located right in the middle of the coast of Kozhikode district, between Kozhikode and Vadakara, on National Highway 66. The historical place Kappad, where Vasco-da-gama landed in 1498 is near Koyilandy Municipality. India's first mangrove museum is situated in Koyilandy. Koyilandy is well connected to major towns like Kozhikode, Vatakara, Thamarassery, Balussery & Perambra.Koyilandy is the only port between Kozhikode and Thalassery. Municipality is Located on the north western bank of the river Korapuzha, which was considered as the traditional boundary between the erstwhile regions of North Malabar and South Malabar. Koyilandy is also one of the oldest ports in South India.

Koyilandy Municipality is well connected with road, rail and air. NH 66 passes through Municipality. Koyilandy Railway station is situated in the heart of city. The nearest airport is Kozhikode international airport situated at a distance of about 40 km from municipal area. The latitude for Koyilandy, Kerala, India is: 11.444647 and the longitude is: 75.693532. Koyilandy Municipality is in koyilandy Taluk of Kozhikode district and there are 44 Divisions in Koyilandy Municipality. The Municipality is under Vatakara Parliament Constituency and Koyilandy Assembly Constituency.

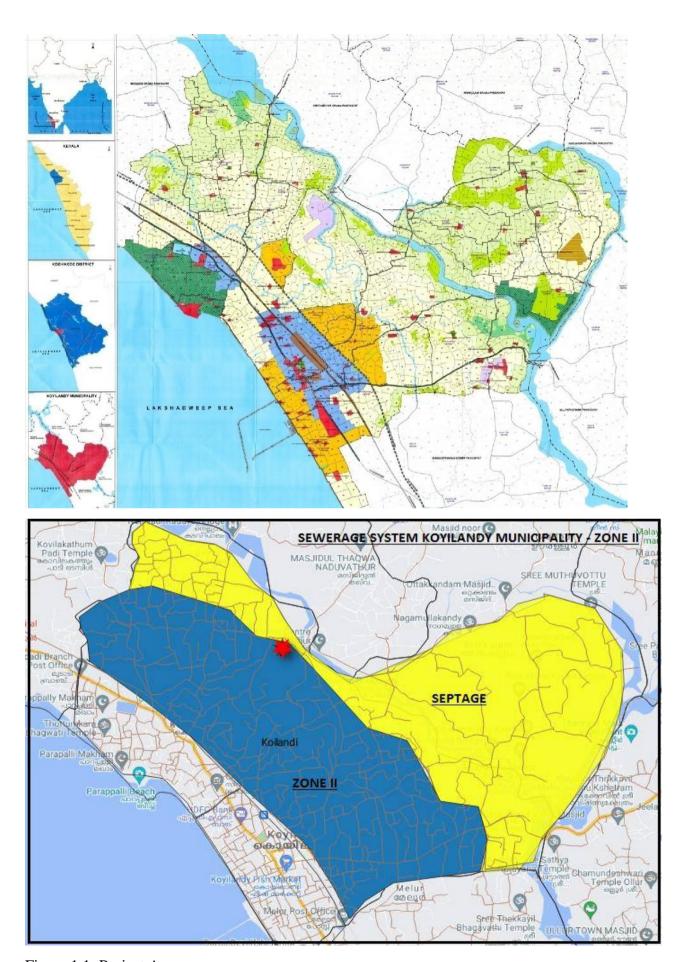


Figure 1.1: Project Area

#### 1.4 POPULATION PATTERN

The Koyilandy Municipality has population of 72045 of which 38655 are males while 33387 are females as per report released by Census India 2011. Density of population is 2480.03/sq.km

Population as per 2011 census	Male	Female	Transgender	SC/ST
72045	38655	33387	3	3727

Table 1.1 Population Pattern

#### 1.5 SOCIO-ECONOMIC PROFILE

As Koyilndy municipality is located nearly 20km from Kozhikode Corporation, the area is fast developing. There are many business establishments existing within the Municipality. The number of business establishments is increasing year by year as lots of construction activities are going on in Municipality. Literacy rate of Koyilandy is 95.11%, which is higher than Kerala average of 94.00%. A good number of people are engaged in business, employed in Government offices and private establishments. A minority of the population are agriculturists, the main agriculture product being coconut and arecanut. Small section of people in the coastal area is employed in fishing. The important public offices in Municipality are located in the Civil Station Building, Koyilandy Town.

#### 1.6 GEOGRAPHICAL FEATURES

Koyilandy Municipality covers area of 29.0km square and the boundaries are

South- Chengottukavu panchayath

North- Moodadi Panchayath

East- Kanayankodu River and Arikkulam Panchayath

West- Arabian Sea The coast covers a length of 30km. The altitude varies from +1 at the coast to +16 in the sea.

#### 1.7 RAINFALL & TEMPERATURE

Koyilandy Municipality has a mean annual temperature 27°c. The mean annual rainfall is 3100mm. The south west monsoon occurs between May and October. There is an average 160 rainy days in a year. Excessive rain fall causes frequent floods in rivers and canals causing submerges in low level areas.

#### 1.8 LAND USE

The current land use pattern indicates that 58% of the land is for residential use which comprises houses in individual plot scattered all over the city. Commercial area is comparatively less and comprises small establishment.

SI No	Land use	Percentage
1	Residential	57.58
2	Transport	5.53
3	Agriculture	27.14
4	Water bodies	6.18
5	commercial	0.1
6	Common land	2.37
7	others	1.1

Table 1.2 Land use Pattern

#### 1.9 SOIL TYPE

Three distinct soil types are dominant in the area. The western part of the Municipality, the coastal plain, comprises of alluvium, the fluvial plain covered dominantly by riverine, alluvium and the uplands comprise of lateritic soil. The coastal plain in the west comprises of older costal alluvium, recent costal alluvium, together with the present day beach sand along the coast. The recent coastal alluvium occurs just east of the beach environment, and further east is older coastal alluvium.

#### 1.10 DRAINAGE AND DRAINAGE PATTERN

The river Korapuzha is passes through Municipality area. The Korapuzha River is formed by the confluence of the Agalapuzha with the Punurpuzha and joins the sea at Elathur. The Agalapuzha is more or less a backwater while at Punurpuzha originates from Arikkankkuni at about +610 m. The river has a length of 40km with a drainage area for 624km<sup>2</sup>

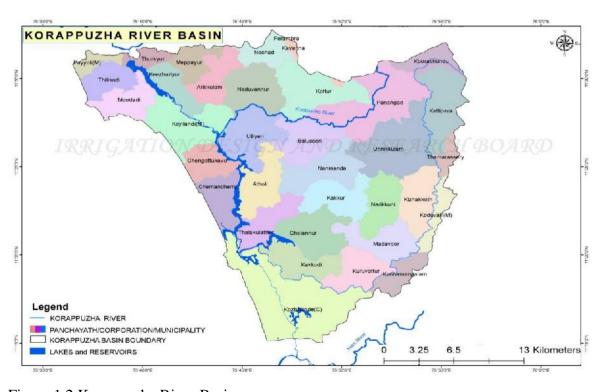


Figure 1.2 Korappuzha River Basin

#### **CHAPTER 2**

#### PROJECT RATIONALE AND METHODOLOGY

#### 2.1 SANITATION – VISION, STATUS AND GOALS

To address the situation of inadequate sanitation facilities to the urban population, the Government of India has formally approved the National Urban Sanitation Policy in 2008 which envisions the creation of totally sanitized cities and towns. The policy articulates awareness generation and behaviour change, open defecation free cities in which all urban dwellers have access to safe sanitation, integrated city wide sanitation planning and sanitary and safe disposal of urban wastes.

The vision of the policy is that the municipality shall be totally sanitized, healthy and liveable and ensure and sustain good public health and environmental outcomes for all the citizens with a special focus on hygienic and affordable sanitation. The policy articulates the following goals-

- 1. Awareness Generation and Behavioural Change
- 2. Open Defecation Free Cities
- 3. Integrated City Wide Sanitation
- 4. Sanitary and Safe Disposal
- 5. Proper Operation and Maintenance of all Sanitary Installations

Wastewater disposal and treatment is a major problem in cities in Kerala. The wastewater from toilets has been disposed through septic tanks and soak pits and grey form of wastewater from kitchen and bathrooms is directly discharged into the sludge drains without any treatment. As per Census 2011, 45.45% of the urban households have "no drainage". There are 14.32% of the households connected to centralized sewerage system. About 97.43% of the households in the urban areas of Kerala state have a toilet within their residential premises. Almost 56.69% of them are connected to septic tanks, 21.87% to pit latrines while households having connection to the centralized sewer system are about 14.32%. There are both technical and institutional dimensions to the problem of septic tanks in the state of Kerala. The septic tanks design does not comply with the national guidelines with reference to planning, design and construction. Local masons are unaware of the existing design and construction guidelines to construct and design the septic tanks. There are multiple agencies involved in operation and maintenance of water and sanitation services in Kerala. Septage management is viewed as private provision with limited role of urban local bodies. Another set of reasons cited for urgency in taking up septage management is the occupational hazards for emptying the septic tanks. The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 has expanded the definition of workers engaged in such sanitation works by including the practice of septic tank emptying and manual handling of such faecal sludge. The revised Manual Scavenging Act will require states to gear up the Municipal bodies in discharging their responsibilities effectively. In the absence of efficient waste water treatment systems and solid waste management systems, untreated domestic and industrial wastes, and agriculture-runoff flow into the rivers polluting the rivers in Kerala. There has been widespread bacteriological contamination of faecal origin in ground and surface water which relate to proximity of increasing numbers of leach pit latrines, leakages from septic tanks, washing, bathing and other domestic activities. Hence the goals for setting a sewerage strategy for a district will involve multi-faceted approach to cover every habitation and other institutions and establishments. This will render adequate results in both short term and long-term development plans. If a plan has been chalked out which can provide a systematic and flexible implementation mode, stage by stage implementation and better control over the system can be achieved. A district level plan document for sewerage prepared by KWA will create a backbone for the subsequent formation of detailed engineering reports for ULBs.

National Green Tribunal (NGT) while considering various OAs related to pollution of river trenches, pollution of coastal regions, pollution of ground water and restoration of water bodies in various States and UTs has ordered that all States and UTs shall ensure that various measures are taken to prevent the pollution of river stretches, water bodies and coastal areas on priority basis and within specified time limits. One of the directions is to ensure 100% treatment of sewage at least to the extent of in-situ remediation. Following this, being the agency for ensuring sewerage services in the State, Kerala Water Authority (KWA) has created a separate Vertical with in it exclusively for preparation of DPR sewerage works across the State. The newly formed Sewerage Vertical of KWA has prepared Preliminary Engineering Report for establishing a sewerage network/ septage management across the State.

As per order no GO(Rt) No.352/2021/P&EA dated 16/8/2021 Administrative Sanction has been accorded for conducting DGPS levelling survey work for 28 Urban Local Bodies and DPR preparation of 4 corporations in Kerala and Koyilandy Municipality is one among them. PPD and Sewerage Vertical Circle, Kozhikode is assigned with the task of preparation of DPR for sewerage scheme for Koyilandy Municipality.

#### 2.2 NEED FOR SEWERAGE SCHEME

The sewerage project in respect of which considerable public and social resources are being used, form a basic infrastructure for the country and an indisputable indicator of civilization and development. The works cover a number of substantial social needs and aim to improve the quality of life and to protect public health and the environment. Some of the benefits and advantages of the sewerage system are as follows:

#### (a) Upgrading the quality of life

The quality of life and the hygienic conditions in the areas where the system operates have already improved. The operation of the sewerage system has relieved these areas to a great extent from previous problems that were caused by the continuous emptying of cesspools. In the past, hotels and blocks of apartments were required to empty and maintain septic tanks and soak ways. The sewerage system provides a healthier and more appropriate way to manage liquid wastes.

## (b) Preserving the natural environment

Previously, all sewage waste was discharged in septic tanks and cesspits, resulting in the pollution of the ground water of the areas where such waste was discharged. Polluted waters then ended in the sea and caused various risks and other environmental problems. With the operation of the sewerage system no more pollution of ground water is effected and the discharge of sewage waste has significantly been reduced moreover, the wastewater treatment plant produces by-products such as treated biosolids and methane. Treated sludge is used as a soil-improving substance mainly

for tree cultivations whilst methane is being used for electricity generation, covering part of the power, required to operate the plant.

#### c) Saving and processing waters

Water is a substantial natural resource for our country and it should be managed in the best possible manner. The tertiary treated effluent at the wastewater treatment plant is reused for agricultural and other purposes. On completion of the project, the amount of water to be saved is expected to exceed 1.45 million cubic metres per year.

#### (d) Economic development and tourism

The most significant advantage of the system is maintaining sustainable development, the protection of the environment and improvement of the quality of life in our town, with a further impact on the development of tourism and the economy in general.

#### (e) Standard of living

As a result of the above, the sewerage system contributes to further development and increase of the standard of living of the town of Koyilandy inhabitants. Considering all the above advantages, there is no doubt that if we all cooperate at this time, ourselves and our children will enjoy a better quality of life in the years to come and that we will secure a better environment.



Figure 2.1: Wastewater

#### 2.3 PRESENT SEWERAGE SYSTEM- OVERVIEW

Like all other Municipalities in Kerala, Koyilandy Municipality is also not having a sewerage system. All the residential building, commercial buildings, institutional establishments are having their own septic tanks for collecting sewage from latrines and grey water is either collected in leach pits or directly disposed to drainage system and nearby canals. Most of septic tanks are

unscientifically constructed and do not have the facility for treating the effluent resulting in contamination of surroundings and the ground water .Even though Hospitals and other institutions are having their own independent facilities, in most cases partly treated effluent is discharged to nearby drains or water bodies. Most of dwellings have their own wells as drinking water source and proximity to the septic tanks leads pollution in well water also. Coliform bacteria is detected in 70% of wells in Kerala and emphasising the need for a well-planned sewerage system.

#### 2.4 WATER SUPPLY FACILITIES

#### 2.4.1 PRESENT SYSTEM

At present there are five numbers of water supply system within the municipality area, they are

- 1. WSS to Kollam
- 2. WSS to Kakkarattukunnu
- 3. WSS to Varakkunnu
- 4. WSS to Komathkara
- 5. WSS to MoozhikkalMeethal

All these schemes are very old and not functioning satisfactory due to many reasons such as quality problem, inadequacy of source, frequent leak in pipe lines, break down with old pump sets, etc. The distribution system laid very long back as a part of CWSS to Koyilandy and adj. panchayaths which is now in redundant stage are also not taken into account.

#### 2.4.2 ONGOING AND PROPOSED WATER SUPPLY SYSTEM

The capacity of the present scheme is only 0.3 MLD, whereas The total water requirement is about 13MLD, thus, the city face water shortage An ongoing project, Koyilandy and adjoining panchayaths is intended to provide adequate drinking water to the entire population of Koyilandi Municipality, Kottur, Naduvannur, Arikulam, Keezhariyur, Thurayur ,Kayanna ,Atholi , Chemanchery , Chengottukave & Ulliyeri grama panchayath . It is proposed to draw clear water initialy from JICA Kozhikode scheme by tapping its transmission main at Kayanna which is 16 kms away from Peruvannamuzhi .Form this tapping point , it is proposed to transmit clear water to the service reservoirs .For Koyilandy municipality 3 OHSR/GLSR are constructed at Valiyamala (zone-1) ,near Irrigation Quarters (Koyilandy own ,zone2) and Kottakkunnu (zone 3) respectively.On line boosting using 30 HP centrifugal pumpset is proposed for the gravity main branch for service reservoir at Koyilandy zone 1 (valiyamala) since its ground level is high. Then later in next phase it is proposed to implement the required production components in Peruvannamuzhi. Till the intermediate demand year 2035, it is possible to draw the required quantity of clear water from JICA Kozhikode.

The distribution systems for the LSGI is scheduled in the next phase

Tank Location	Capacity (LL)	Туре
Valiya Mala	17 LL	GLSR
Near Irrigation Quarters	23 LL	OHSR
Kottakkunnu	17 LL	OHSR

Table 2.1: Water Tank details

#### 2.4.3 GROUND WATER SOURCES

Most of the people depends ground water source, open wells and shallow tube wells for their drinking water needs. Studies have revealed that

- Almost all samples were contaminated with Total Coli forms
- Level of bacteriological contamination is very high during monsoon
- Elevated areas had comparatively lesser level of contamination
- Contamination was higher in the vicinity of onsite sanitation structures especially in open wells situated within 10-15 m from latrines
- In a number of cases cause of contamination is of human origin

#### 2.5 METHODOLOGY FOR PREPARATION OF SEWERAGE MASTER PLAN

The following tasks have been performed during the planning of the proposed Sewerage System:

- Data Collection and Field Visits
- Review of adequacy of existing sewerage system
- field levelling survey using DGPS
- Social survey
- Population Projection and Sewage Flow Estimation
- Design of Sewage Collection System
- STP site identification, assessing area requirement
- Phasing of construction of STP
- Capital cost and O & M costs

#### 2.6. FIELD INVESTIGATIONS

General Field investigations like topographic survey, geotechnical investigation, and sewage samples analysis to be conducted to ascertain the topography of the area, the soil classifications and to ascertain its characteristics for designing the type of treatment, which forms the basis for proceeding further in designing the sewerage system.

#### 2.6.1 SURVEY WORK

Topographical Survey Topographical survey forms a very important component in formulating the sewerage project. A detailed topographical survey has been performed covering the area using DGPS and Total Station.



Fig. 2.2: DGPS Survey

Topographical survey of the project area was conducted using DGPS and Total station. Ground Levels have been taken along the roads at suitable intervals along straight portions and at all junctions of alignment. Important features and obligatory points like junctions such as culverts, major drains, and public utilities, cross roads, railway line have been captured. Using the topographical survey data and detailed base map showing the features like roads, land marks, public buildings, parks etc. has been developed.

# 2.6.2 SOCIAL SURVEY

Social Survey was carried out for locating each building for arriving the sewer load in manholes. Identifying and arriving possible shock loads from institutions such as, flats, and other establishments are very important for avoiding overflows in manholes. Moreover the areas likely to be developed in future are to be identified for arriving sewer load to be incorporated in design.

## **CHAPTER 3**

#### **DESIGN CRITERIA**

#### 3.1 SEWAGE COLLECTION & CONVEYANCE SYSTEM

The sewerage system or storm water carriage system can be separate system or combined system or partially separate system depending on domestic sewage and rain water are drained through two separate set of pipes or through single set of piping. However, the combined system is not quite suitable in tropical Indian conditions as;

- i) Heavy and concentrated rainfall occurs during the monsoon period and thus there is a large variation in the quantity of sewage during different months of the year,
- ii) Dry weather flow is generally a very small proportion of the total flow and hence sewers are likely to get silted up due to low velocity of flow in lean periods,
- iii) Capital funds are limited,
- iv) Treatment costs and pumping costs are significantly reduced in separate system due to reduction in quantity.
- v) If the system is overdesigned, external flushing to attain the areas where the self-cleansing velocity is not attained which will increase the O&M cost. It affects system efficiency.

#### The pipes for collection can have;

- i) Zonal pattern in which entire city is divided into suitable zones and a separate interceptor is provided for each zone,
- ii) Radial pattern in which sewers are laid radially outwards from the center of the city to dispose sewage at multiple points,
- iii) Interceptor pattern in which sewers are intercepted by large size sewers laid along the natural watercourses or.
- iv) Fan pattern in which the STP is located at a certain point and the entire sewage flow is directed towards this point.

#### 3.2 ESTIMATION OF QUANTITY OF SEWAGE

Separate drainage system is proposed for rain water as such only dry weather flow will pass through sewers. The connection of roof, backyard and foundation drains to the sanitary sewers should be avoided and hence shall not be considered for estimation of sanitary sewage. The prevalent sewerage systems in India do receive rain water even if separate system for rain water exists but sewers are designed for 30 years and have spare capacity in early phases of implementation and considering that by end of 30 years sewerage system will become water tight to rain water, it is appropriate to design system assuming no rain water penetration in sewers. The quantity of domestic sewage can be best estimated by quantity of water supply consumption minus evaporation plus sewage flow from personal water sources which are other than those of community water supply and this water reaching to sewers. Another important factor in Indian cities is generally less connectivity of sewage to the sewerage system as many people continue to use on site sanitation i.e. septic tanks and soak pits etc. particularly in colonies where sewerage system is laid after a

long gap of construction of houses which is a general phenomenon in Indian cities. In actual practice about 70-80% of the water supplied is reaching to sewers. As such 80% of quantity of water supply can be taken as sewage generation.

#### 3.2.1 INFILTRATION AND LEAKAGE.

Some quantity of ground water or subsoil water may infiltrate into sewers through defective joints, broken pipes etc. This is significant when water table is high and head of ground water is more than the head of sewage in sewers. Some quantity of sewage may leak out from defective joints and defective pipes when head of sewage is more in sewers than head of ground water outside. Infiltration and leakage mainly depends on quality of construction and water table levels. Infiltration can be considered 5000-50000 litters per day per hectare or 500-5000 litters per day per km length of sewers or 250-500 litters per day per manhole for sewers laid below ground water level.

#### 3.2.2 ESTIMATION OF INDUSTRIAL SEWAGE

The quantity of industrial sewage will vary with type and size of industry, the manufacturing processes involved, degree of water reuse and onsite treatment methods that are used, if any. However, in general the quantity of industrial sewage may be taken 80 to 90 % of quantity of water supplied through public water supply system. Some industries develop their own source of water supply and may discharge their liquid waste into sewers. This should be estimated separately for large industries. It may, however, be stated that industrial sewage should be treated to the standards prescribed by the Pollution Control Boards before being discharged into sewers.

#### 3.3 DESIGN PERIOD

Sewerage projects are normally designed to meet the requirements over a period of 30 years after their completion. However, the period of 30 years may be modified in respect of certain components of the project depending on their useful life or the facility for carrying out extensions when required and rate of interest, so that expenditure far ahead of its utilization is avoided. As such design period for various main components has been taken as indicated in Table below.

S.	Design Component	Design	Remarks
N		Period	
1	Land Acquisition for STP,	30	Land acquisition in future difficult
	SPS, sewers etc.	Years	
2	Sewer network (laterals,	30	Replacement difficult and costly
	Trunk mains, Outfall etc.)	Years	
3	Pumping mains	30	Cost may be economical
		Years	
4	Pumping Stations- Civil Work	30	Life of civil structure is 30 years
		Years	
5	Pumping Machinery	15	Life of pumping machinery is 15 years
		Years	

6	Sewage Treatment Plants	30 Years	The construction shall be modular in phased manner as actual population less than design population and in Indian cities initially flows are much less due to connectivity problems
7	Effluent disposal and utilization	30 Years	Provision of design capacities in the initial stages itself is economical

Table 3.1: Design Period of Sewerage Components

#### 3.4 VARIATION IN RATE OF FLOW

The rate of flow of sewage varies from season to season (seasonal or monthly variation), from day to day (daily variation) and from hour to hour (hourly variation). For design of sewers maximum or peak flow rates are adopted. The value of peak factor (ratio of maximum flow to average flow) depends on the contributing population and the values recommended in the Manual on Sewerage and Sewage Treatment prepared by CPHEEO are given in Table below.

S.N	Contributing Population	Peak Factor
1	Up to 20,000	3.00
2	20,000 - 50,000	2.50
3	50,000 - 7,50,000	2.25
4	Above 7,50,000	2.00

Table 3.2: Peak Factor

The variation between maximum and average rates of flow is large for domestic and lateral sewers because they receive the flow directly from the source. This variation gradually diminishes as the flow reaches the branch or sub main sewers and the main sewers. Minimum rate of flow: The minimum rate of flow may vary from 0.5 to 0.33 of the average flow.

#### 3.5 HYDRAULIC DESIGN OF SEWERS

The design for sewage collection system presumes flow to be steady and uniform. The unsteady and non-uniform sewage flow characteristics are accounted in the design by proper sizing of manhole. The sewage is mostly liquid containing about 0.1% of solid matter and hence follows same laws of flow as water. However the difference in design for water supply network and sewer network is, i) In order to avoid clogging of sewers due to settlement of heavier particles of solids, sewers are to be laid at such gradient that self-cleansing velocity is achieved at all values of discharge and that the inner surface of the sewers should be capable of resisting the wear and tear due to abrasive action of solid particles and ii) sewage flows under gravity as open channel flow and as such sewers are laid at continuous downward gradient.

#### 3.5.1DEPTH OF FLOW

The sewers shall not run full as otherwise the pressure will rise above or fall below the atmospheric pressure and condition of open channel flow will cease to exist. Moreover, from consideration of ventilation, sewers should not be designed to run full. In case of circular sewers, the Manning's formula reveals that:

The velocity at 0.8 depth of flow is 1.14 times the velocity at full depth of flow.

The discharge at 0.8 depth of flow is 0.98 times the discharge at full depth of flow.

Accordingly, the maximum depth of flow in design shall be limited to 0.80 of the diameter at ultimate peak flow.

#### 3.5.2 HYDRAULIC FORMULAE FOR DESIGN OF SEWERS

Manning's formula has been used for design of sewers in case of gravity flow. For pressure flow (Pumping Mains), the Hazen-William's formula has been used. Sewer Network design has been done with the help of Manning's Formulae i.e.

Velocity  $V = [(1/n) \times (R2/3 .S1/2)]$  (in m/s)

For Circular Sections

 $V = (1/n) (3.968 \times 10-3D2/3S1/2) Q = (1/n) (3.118 \times 10-6D8/3S1/2)$ 

Where, Q = discharge in lps, S = slope of hydraulic gradient; D = internal diameter of pipe line in mm; R = hydraulic radius in m; n = Manning's Coefficient of roughness

#### 3.5.3 PER CAPITA SEWAGE FLOW

The rate of water supply has been adopted 150 LPCD at consumer end throughout the whole design period as water supply schemes are designed with per capita supply of 150lcd in Kerala. 80 percent of the water supply has been considered as sewage flow into the sewerage system

#### 3.5.4 MINIMUM VELOCITY OF FLOW

A minimum velocity of 0.6 m/s for present peak flow and 0.8 m/s at design peak flow is recommended for sanitary sewers. Thus the sewers are designed on the assumption that although silting might occur at minimum flow, it would be flushed out during peak flows.

#### 3.5.5 RECOMMENDED SLOPES FOR MINIMUM VELOCITY

For sewers running partially full, for a given flow and slope, velocity is little influenced by pipe diameter. As such for present peak flows up to 30 lps, the slopes given in Table below may be adopted which would ensure minimum velocity of 0.6 m/s in the early years.

S.N	Present Peak Flow in LPS	Slope per 1000	
1	2	6.0	
2	3	4.0	
3	5	3.1	
4	10	2.0	

5	15	1.3
6	20	1.2
7	30	1.0

Table 3.3: Recommended slope

#### 3.5.6 EROSION AND MAXIMUM VELOCITY OF FLOW

Erosion of sewers is caused by sand and other gritty material in the sewer and also by excessive velocity. Non-scouring or limiting velocities in sewers of different materials are given in CPHEEO manual. Accordingly maximum velocity for cement concrete pipes is 2.5- 3.00 m/s.

#### 3.5.7 SEWER TRANSITIONS

Sewers shall be designed to ensure that the energy gradient is a continuous smooth line, thus transitions from larger to smaller diameters shall not be made. The crowns of sewers shall be kept continuous. In no case, the hydraulic flow line in the large sewers shall be higher than the incoming sewer. To avoid backing up, the crown of outgoing sewer shall not be higher than the crown of incoming sewer

#### 3.5.8 MINIMUM PIPE DIAMETER

Minimum pipe diameter recommended in CPHEEO manual is 150 mm except that in hilly areas, where extreme slopes are prevalent, 100 mm can be used. Some states and ULBs have started adopting minimum diameter as 200 mm or even 250 mm. The logic is Maintenance of sewer system is generally not good and 150 mm dia sewer will block frequently and remain un-attended for some time, Quality of construction in smaller size RCC main such as 150 mm is not good ,The sewerage system is not totally closed one and undesired waste such as solid waste and drains finds way in sewerage, making smaller size sewer lines more prone to frequent blocking ,The cost of pipe line element is only about 15 percent of total project cost and increase in pipe size from minimum of 150 mm to minimum of 200 mm size will increase cost of project by 2 percent whereas flow capacity increases by more than 80 percent.

The minimum diameter may be adopted as 200 mm for cities having present / base year population of over 1 lakh. However, depending on growth potential in certain areas even 150 mm diameter can also be considered. However, in towns having present / base year population of less than 1 lakh, the minimum diameter of 200mm shall be adopted.

The house sewer connection pipe to public sewer shall be (a) minimum 100 mm or higher based on the number of houses / flats connected and (b) subject to the receiving public sewer being of higher diameter. In this project 200 mm diameter have been suggested as minimum diameter in design of sewerage network.

#### 3.6 MATERIAL OF CONSTRUCTION FOR GRAVITY SEWERS

Brickwork is used for large diameters as sewers can be constructed in any shape. However now it is not common. Concrete pipes are commonly used now as can be manufactured to any reasonable strength and laying is easy and jointing is leak proof. However these pipes are subject to corrosion where acid discharges are carried or where velocities are not sufficient to prevent septic conditions or where the soil is highly acidic or contains excessive sulphates. Only high alumina cement

concrete should be used when it is exposed to corrosive sewage or industrial wastes. Salt glazed stoneware pipes are mostly manufactured in sizes 80-1000 mm but sizes greater than 380 mm are generally not used due to economic considerations. The length of these pipes is 60 cm75 cm and 90 cm. These pipes are good for corrosion resistance and erosion resistance. However due to less length, more joints, difficulty in jointing, requirement of special bedding and less compressive strength of pipes manufactured in India; use of these pipes is reducing in India.

S · N	EVALU ATION CRITE RIA	RCC PIPES	DI PIPES	HDPE PIPES	DWC HDPE PIPES
1	Type of Joint	Available in both collar and S&S joints.	Tyton joint With rubber gasket	Butt fusion welding process.	Simple push fit joints with Elastomeric sealing Ring for online system or with extra couplers.
2	Weight	Heavy	Lighter than R.C.C.	Light	Very Light in Comparison of Other Solid Wall Pipes.
3	Corrosio n resistanc e	To prevent corrosion sulphate resistant cement concrete to be used for pipe manufacture.	Protective layers are Required to protect corrosion	Highly corrosion resistant	Highly corrosion resistant
4	Remarks on Cost	NP2isCheapest among all materials	Costlier than other pipes but cheaper than HDPE pipes.	Smaller diameter pipes are cheaper and higher diameter Pipes are costlier.	Uses minimal material for equal strength, therefore cost cheaper from other pipes.
5	Infiltrati on	Infiltration is less	Infiltration is very less	Infiltration is very less	Infiltration is very less

6	Workabil ity	due to heavy weight handling to be done with care	Good	Light weight for easy handling.	They are user friendly, very fast and inexpensive in installation
7	Jointing	Jointing is easy in S&S pipes with Rubber ring joints.	Jointing is easy in S&S pipes with Rubber ring joints.	Jointing is expensive	Joining time is 2-5 minutes per joint
8	Maintena nce	Almost nil if proper velocity is maintained.	Minimum	Pipe ma y get damaged due to rodding	Maintenance is low because of non adherence of sewage elements.
9	Previous Experien ce/Perfor mance	In use for long period and performance is Good	It is durable pipe.  Performance is yet to be proven	Recent use started in India. It is durable.	They are maintenance free and therefore, once installed, will lie underground for years.
1 0	Trenchle ss compatib ility	Micro tunnelling	Micro tunnelling	HDD &Micro tunnelling	Not suitable for Trenchless

Table 3.4: Pipe material Comparison

AC pipes cannot stand high superimposed loads, subject to corrosion from acids in sewage and high sulphate soils, require special bedding and weak against erosion where high velocities are encountered; as such use of AC pipe is not prevalent. Cast iron, DI and steel pipes are not used due to high cost. uPVC pipes are manufactured in sizes 75-, 90,110,140,160,250,290- and 315-mm outer dia. uPVC pipes are smooth, light, easy to joint and have leak proof joint. Rates are also low. These days these pipes are used for making connection from house to sewer but not prevalent in street sewers.

GRP pipes are widely used in other countries where corrosion resistant pipes are required at reasonable rates. When using concrete or reinforced concrete, high density sulphur resistant cement should be used. These pipes are made of slag cement that contains fewer calcareous (CaOH2) particles than pipes made of Portland cement. These particles react with the sulphuric acid (created

by bacterial dissipation of hydrogen sulphide) in sewers, causing the aforementioned crown corrosion. If this particular cement is not used, lifetime of concrete sewers cannot be expected more than 30 years. A comparative study of characteristics of various pipe options for gravity sewers is presented in table above.

## 3.6.1 BENEFITS OF HDPE PIPES FOR SEWERS

When compared to other common wastewater piping system materials, such as PVC, ductile iron, or concrete, HDPE pipe offers significant benefits. Some of these include:

- Chemical Resistance. Hydrogen sulphide gas (H2S) corrosion is a serious threat to conventional sewer lines, like concrete and ductile iron, greatly reducing their service life. WL Plastics HDPE pipe is not attacked, corroded or degraded by H2S, ensuring a service life of 100 years.
- Anti-corrosive properties. HDPE piping systems are immune to the harmful effects of corrosion and tuberculation, common factors that reduces the operational life of concrete and ductile iron wastewater systems. HDPE also resists other corrosive or harmful agents, including scaling and organics such as fungi, bacteria, and other microbial contaminants.
- Leak-free. HDPE pipe is joined together via heat fusion, creating a welded, leak- free joint unlike conventional bell and spigot joints. These leak-free joints prevent infiltration and exfiltration making it a truly sanitary piping system.
- Durability. HDPE pipe is resistant to fatigue from water hammer and surge events in sewer force mains. HDPE pipe is also abrasion resistant, ensuring that flowing water and slurries won't damage the pipe throughout its service life.
- Lightweight. HDPE pipes are much lighter in weight compared with ductile iron or concrete alternatives, which makes transportation and installation significantly easier and safer.
- Cost-effectiveness. HDPE pipe is cost competitive with other sewer pipe options. HDPE pipe is faster, easier, and safer to install due to longer cut lengths and more linear footage per truck, which significantly reduce the overall project costs. With low maintenance costs and long service life, HDPE pipe is the ideal solution for wastewater systems.

However, HDPE pipes are slightly costlier compare to RCC pipe but as of now most of sewer pipes are laid through Trenchless technology method and because of this, plastic pipes like HDPE/uPVC are most suitable and easy to use for trenchless as well as open cut trench method for pipe laying. The use of HDPE pipes are more economical and to be considered for smaller diameter pipes up to 110mm where they are available on coils thereby avoiding joints. Hence lesser number of joints thereby reducing leaks and the rates of pipes are reasonable. As a general pipe policy decision the use of HDPE pipe shall be preferred up to 200mm & occasionally upto 350mm (source- KWA pipe policy, page 19).

Therefore, considering the above benefits of HDPE pipe over RCC pipes, HDPE pipes are recommended to use for maximum stretch of network. The pipe policy of KWA also favours adoption of HDPE pipes. However, RCC pipe (HDPE lined) has been recommended for higher diameter pipe (i.e. above 700 mm) as HDPE pipes for higher diameter pipes are not easily available and very costly for large diameter and generally not manufactured.

## 3.7 MANHOLES

#### **3.7.1 GENERAL**

A manhole is an opening constructed on the alignment of a sewer for facilitating a person to access the sewer for the purpose of inspection, testing, cleaning and removal of obstructions from the sewer line. Manholes will be located at:

- Change of direction
- Change of slope
- Change of pipe diameter
- Change of material
- Ginning of each line at points of branches Manhole Sizes

SI.No	Depth of Manhole(m)	Diameter of Manhole(m)
1	Up to 2.50m	1.2m
2	Above 2.50m and up to 9.0m	1.5 m

Table 3.5: Size of manholes provided

#### 3.7.2 TYPE OF MANHOLES

## 3.7.2.1 STRAIGHT - THROUGH MANHOLES

The simplest type of manhole is that built on a straight run of sewer with no side junctions. Where there is change in the size of sewer, the soffit or crown level of the two sewers should be the same, except where special conditions require otherwise.

## 3.7.2.3 JUNCTION MANHOLES

A manhole is provided at every junction of two or more sewers, and the curved portions of the inverts of tributary sewers have been formed within the manhole. The gradient of the smaller sewer may be steepened from the previous manhole sufficiently to reduce the difference of invert level at the point of junction to a convenient amount.

#### 3.7.2.4 DROP MANHOLES

As per CPHEEO manual, drop manhole is to be provided when a sewer connects with another sewer, where the difference in level between water lines (peak flow levels) of main line and the invert level of branch line is more than 600mm or a drop of more than 600mm is required to be given in the same line and it is uneconomical or impractical to arrange the connection within 600mm.

The drop pipe may be either outside the manhole shaft and encased in concrete or supported on brackets inside the shaft. If the drop pipe is outside the shaft, a continuation of the sewer should be built through the shaft wall to form a rodding and inspection eye, which should be provided with a half blank flange. If the drop pipe inside the shaft, it should be in cast iron/ductile iron and it would be advantageous to provide adequate means for rodding and water cushion of 150mm depth should also be provided. The drop pipe should terminate at its lower end with a plan or duck-foot bend

turned so as to discharge its flow at 45 degrees or less to the direction of the flow in the main sewer and the pipe, unless of cast iron, should be surrounded with 150mm concrete.

## 3.7.2.5 FLUSHING MANHOLES

Where it is not possible to obtain self-cleansing velocities due to flatness of the gradient especially at the starting point of branch sewers which receive very little flow, it is essential that some form of flushing device to be incorporated in the system. Flushing can be very conveniently accomplished using a fire hydrant or tanker and hose pipe.

The upper reaches of lateral sewers, the discharges shall be partially full even at the ultimate design flow conditions, because of necessity of adopting the prescribed minimum size of sewer. In such situations, flushing arrangements have to be provided in the initial years.

## 3.7.3 MATERIAL OF CONSTRUCTION FOR MANHOLE

## 3.7.3.1 BRICK MASONRY MANHOLES

Bricks used for construction of manholes shall conform to the relevant Indian Standards. They shall be sound, hard and homogeneous in texture, well burnt in kiln without being vitrified, table moulded, deep red, cherry or copper coloured, of regular shape and size and shall have sharp and square and parallel faces. The bricks shall be free from pores, chips, flaws or humps of any kind. Bricks containing unground particles and/or which absorb water more than 1/6 th of their weight when soaked in water for twenty-four hours shall be rejected. Over burnt or under burnt bricks shall be liable to rejection. The bricks shall give a clear ringing sound when struck and shall have a minimum crushing strength of 35 Kg/sq.cm unless otherwise noted in drawings.

The class and quality requirements of bricks shall be as laid down in IS: 1077. The size of the brick shall be 23.0 x 11.5 x 7.5 or unless otherwise specified. Mortar for brick masonry shall be prepared as per IS: 2250. Manholes shall be constructed in brick masonry with cement mortar (1:4), 20 mm thick inside plaster with plasticized water proofing material consisting of 12 mm thick backing coat in CM 1:3 and 8 mm thick finishing coat in CM 1:1 and 15 mm thick outside plaster in CM 1:3. Whenever a pipe enters or leaves a manhole, bricks on edge must be cut to a proper form and laid around the upper end of the pipe so as to form an arch. All around the pipes, there shall be a joint of cement mortar (1:2) 13 mm thick between it and the bricks. The manhole base has been kept as 150mmfor manholes upto1mdepth, and 200mmfor manholes from 1 to 2 m depth and 300 mm for greater depths. In all cases, the thickness shall be counter checked for uplift conditions based on maximum ground water elevations at the site on the soil side by considering empty manhole conditions.

The thickness of walls shall be typically one brick up to 1.5 m deep manholes, one and a half brick for depths greater than 1.5 m. The actual thickness in any case shall be verified on the basis of engineering design in difficult soil conditions

## 3.7.3.2 RCC MANHOLES

The idea of RCC manholes is essentially to quicken the work of construction in the roads by adopting precast sections assembled at site. Thus, the issues related to their construction are more of design itself and quality control in casting. In general, plain and reinforced concrete work for manholes shall be carried out in accordance with the specification given in CPHEEO manual

otherwise specified in this specification. Wherever good quality of brick and workmanship of the construction cannot be ensured, it is advisable to go in for RCC manholes. The provisions of IS: 456 and IS3370 Part I, II and IV shall inter alia apply to the design. The entire structure shall at all times be designed to the condition where the ground water is at ground level itself and the inside is empty and there is no superimposed load on the manhole and not considering the skin friction of the manhole side wall with the soil.

Now the newly available precast RCC chambers shall be conveniently used for the manholes upto 6.0m or more depth. This will make the construction very easy and faster. So the same are proposed for Kozhikode scheme.

## 3.7.3.3 HDPE MANHOLES

Polyethylene manholes remain leak-free because there is no chemical attack. The toughness of polyethylene eliminates the chance of cracking during installation. There is no infiltration of external ground water, reducing the amount of treatment required. There is no exfiltration of sewage to the environment. HDPE manholes are available with ladders installed. Ladder design has been inspected and meets all OSHA dimensional requirements

## **CHAPTER 4**

## PROPOSED SEWERAGE SYSTEM

## 4.1 POPULATION PROJECTION

Population of the city normally depends on factors such as birth and death rates, migration, industrial development, general environmental conditions etc. Usually the population forecast of a city is made on the basis of methods of population forecast as provided for in section 1.5 of the CPHEO manual for sewerage and sewerage treatment. The latest available census records are that of 2011. As far as Kerala is concerned it is quite different from other states on education, health, life expectancy etc. The demographic pattern of the state therefore is quite different and need to take into account all the developmental parameters so as to avoid undue over designs.

The anticipation of future growth in any community in terms of population or commercial and industrial expansion forms the basis for preparation of plan for providing the amenities including installation of sewers in the area to be served. The anticipated population, its density and its waste production is generally estimated for a specified planning period. The recommended planning period is 30 years.

Decadal growth of 4.2% is adopted for population projection, as the district average for the decade from 2001 to 2011 is 4.2%

Decimal increase	4.2%
Current Year	2022
Execution Period	2 Year
Design Year	2054
Design Period	30 Years

Based on topography, population etc municipality is divided into two sewer zones as below. Population for the zone 1 and 2 has been worked out and provided as per the projection the designed population is as follows

Sl No	Name	Area	2011	2021	2024	2039	2054
1	koyilandy	Municipality	72045	75071	75979	80766	85553
2	zone 1	Coastal Area	26274	27378	27709	29455	31201
3	zone 2	East Area	45771	47693	48270	51311	54352

Table 4.1: Population Projection

Zone	West	East	south	North
Zone- 1	Arabian sea	Railway line	Chengottukavu	Moodadi
Zone 2	Railway line	Arikkulam	Chengottukavu	Moodadi

Table 4.2: Zone Boundary

Based on the population density a septage zone is also proposed to area where population density is below 1500/km2. In addition, in the high density populated areas but where there is no road network, septage treatment is proposed. Since the Zone 2 area is not densely populated as coastal area, there are chances to migrate people due to the land availability. Hence a floating population of 2500 is added to the design population at 2054 year.

		Population	Projected Population				
No	Туре	2011	2021	2024	2039	2054	Capacit y
1	Municipality	72045	75071	75979	80766	85553	
2	Zone-1		20120	20373	21657	22941	4 MLD
3	Zone-2		17603	17825	18948	20714(including floating population 2500)	3 MLD
4	Septage Area		39448	39937	42420	44934	12KLD

Table 4.3: STP Capacity

Zone II coverage area of 15 km<sup>2</sup>. The total length of sewer network comes to 46334 m. The proposed location of treatment plant is near Naderi. One number of Pumping station is proposed Puthiya Kavil road. The capacity of the plant is 3 MLD

#### 4.2 COLLECTION SYSTEM

The collection system has been designed for ultimate year peak flow. The cumulative flows and the cumulative contributory population are discussed zone wise in the succeeding sections. The design diameter and slope have been finalized based on the minimum flow velocity of 0.60 m/s (present peak flow) with maximum velocity of 3.00 m/sec.

The system has been designed using EPASWWM software. Design calculations are shown in Annexure attached. The sewerage system network has been so planned to limit lifting and pumping stations. The Maximum depth of the sewer lines are kept at 5.5 m from the existing ground level. However in a few places (20 pipes) more than 5.5 m depth of cutting provided to avoid additional lifting stations

## SEWERAGE NETWORK AND MANHOLES

Design & estimates of the sewer collection system has prepared so as to limit the depth of excavation and to accommodate changes in location of STP. It is proposed to have separate collection System for each sub-Zone with a common STP

Zone II will have 14 lifting stations and 1 No pumping station. Sewage collected in well of LS-1 will be pumped to a MH No n3003. LS2 will be another lifting station which will pump to MH no 2582, LS3 will pump to MH no 2162, LS 4 to MH no 1571 and LS 5 to MH no 2443, LS 6 to MH no 1480, LS 7 to MH no MH-714, LS 8 to MH no 1877, LS 9 to MH no MH 602, LS 10, LS11, LS12 to MH no 566, LS 13 to MH no 266 and LS14 to n2726 Sewage collected in wet well is pumped directly to plant in Naderi.

Based on the analysis of the topography of the city area and its surroundings, the existing and future land use of the area, the existing status of water courses, the proposal for network, manholes have been arrived.

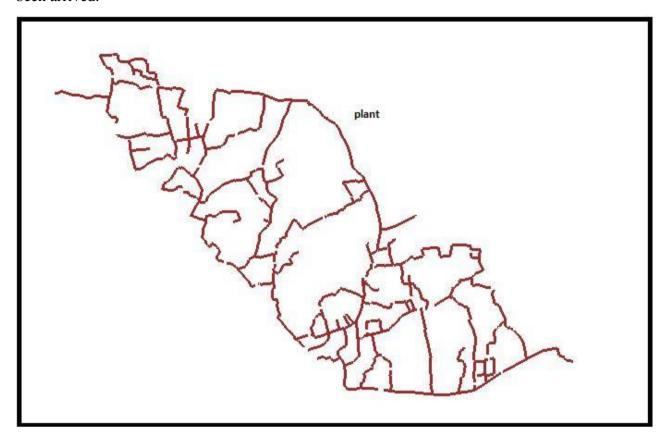


Figure 4.1: Network Sketch

## 4.2.1 DETAILS OF SEWER NETWORK

Abstract of sewer network is furnished below

SI NO	Diameter in mm	Pipe Material	Length in metres
1	200	HDPE PE100	42720
2	250	HDPE PE100	1573
3	315	HDPE PE100	1518
4	400	HDPE 100	523
	Total		46334

Table 4.4: Network details

Upto3 meter depth of sewer line open cutting is proposed and above 3 m depth pipe laying through HDD method is proposed. However, a few quantity (total 31 m in two places) 400mm HDPE above 3m depth is provided as open cutting for working easiness.

	200mm	250mm	315mm	400mm	Total
Open Cut in	31109	997	1488	523	34117
metres					
HDD in	11611	576	30	0	12217
metres					
Total	42720	1573	1518	523	46334

Table 4.5: Excavation Details

## **4.2.3 MANHOLES**

Total number of manholes comes to 1791

Manhole depth in Meters	No of manholes
Up to 1.5	754
1.5 to 2.5	420
2.5 to 3.5	302
3.5 to 4.5	159
4.5 to 5.5	136
5.5 to 6.5	20
Total	1791

Table 4.6: Details of Manholes

## 4.3 PUMPING STATION AND RISING MAIN

## **4.3.1 GENERAL**

Pumping or force mains deliver wastewater discharged from a pumping station to its destination, which may be a treatment plant or the final disposal point.

## 4.3.2 LIFTING STATION / PUMPING STATION

Pump stations are normally required in a sewage collection system to lift the sewage against a gradient or to limit the depth of cutting of the pertinent sewer line. A simplified form of the pump station, called a Lift Station, is also employed for the same purpose. The primary difference between a pump station and a lift station is that the Pump Station shall handle greater flows with arrangements for removal of floating material and grit prior to pumping through a force main. Lift Stations will have only an enlarged manhole as a wet well with pumps installed and a small control room adjacent to it, for lifting the sewage to ground level.

Lift stations are generally used to restrict the depth of cutting and discharging normally to the manhole in a downstream trunk sewer. No screens and grit wells are provided in lift stations.

Pumping and lifting stations shall use submersible pumps, such stations have a single well, circular or rectangular, in which pumps are installed. Superstructure requirement is minimum. The pump

stations have been designed considering easy removal and reinstallation of the pumps without disturbing the connecting delivery pipe work.

# Hydraulic Criteria:

According to the existing ground level contour from the topographic survey, the number of pumping stations has been finalized. Lift stations are generally proposed where depth of cutting exceeds 5.5 m. However in a few places (20 pipes) more than 5.5 m depth of cutting provided to avoid additional lifting stations. The location of pumping stations is at lower points of the network, but away from public and flood areas. Overflow is not allowed

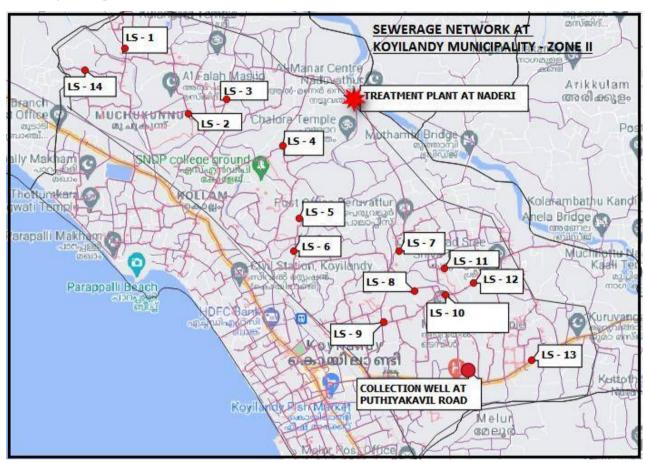


Figure. 4.2 LS/PS Location details

## 4.3.3 DETAILS OF PUMPING STATIONS

S1 No	Wet well No	Peak Flow in LPS	Detention Period in Minutes	Storage Capacity m3	SWD in Metres	Diameter in metres	Total Depth in metres
1	PH1	34.25	10	20.55	1.5	4.2	6.15
2	STP-PH	78.25	10	46.95	1.2	7	7.06

Table 4.7: Pumping station details



Figure 4.3 Proposed site for Pumping Station

# 4.3.4 DETAILS OF LIFTING STATIONS

Forteen number lifting stations are proposed at various places

Sl No	LS No	Peak Flow in LPS	Detention Period in Minutes	Storage Capacity m3	SWD in Metres	Diamet er in metres	Total Depth in metres
1	LS1	3.01	10	1.81	1	1.6	6.09
2	LS2	5.72	10	3.43	1	2.1	6.9
3	LS3	8.26	10	4.96	1	2.6	6.33
4	LS4	17.21	10	10.33	1	3.7	6.7
5	LS5	1.42	10	0.85	1	1.2	6.49
6	LS6	3.31	10	1.99	1	1.6	6.21
7	LS7	1.21	10	0.73	1	1	5.73
8	LS8	3.87	10	2.32	1	1.8	6.31
9	LS9	6.75	10	4.05	1	2.3	6.53
10	LS10	15.26	10	9.16	1.8	2.6	6.62
11	LS11	6.84	10	4.1	1	2.3	6.39
12	LS12	5.41	10	3.25	1	2.1	6.64
13	LS13	4.21	10	2.52	1	1.8	5.79
14	LS14	5.94	10	3.52	1	2.2	4.22

Table 4.8: Lifting station details

## 4.3.5 PUMPING MAINS AND LIFTING MAINS

SINO	Name	Length in metres	Diameter in mm	Material	Route
1	LS 1	40	100	DI	MH 3006to 3003
2	LS 2	40	100	DI	MH 2584 to 2582
3	LS 3	40	100	DI	MH 2159to 2162
4	LS 4	40	100	DI	MH1569 to 1571
5	LS5	50	100	DI	MH 2446to 2443
6	LS6	40	100	DI	MH1477to 1480
7	LS7	50	100	DI	MH711 to MH714
8	LS8	40	100	DI	MH1874 to 1871
9	LS9	50	100	DI	MH604 to 602
10	LS10	40	100	DI	MH 563to 566
11	LS11	500	100	DI	MH 75 to 566
12	LS12	380	100	DI	MH 579 to 566
13	LS13	40	100	DI	MH 270 to 266
14	LS-14	1050	100	DI	MH 2924 to 2726
7	PH 1 to plant	3850	200	DI	To plant
8	Well at STP to Receivin g chamber	20	300	DI	Well to Receiving Chamber

Table 4.9: Pumping mains and Lifting mains

## 4.4 PUMP AND OPERATION CONTROL

Fluid level activated switches will be provided to start and to stop the pumps depending upon the quantity of sewage available in the pump house. This will ensure that the pumps will not run dry. A sluice valve will be provided on the suction side and a sluice valve and a non- return valve will be provided on the delivery side. Flow meter (digital type) will be provided to measure the quantity of sewage flowing out of the pumping station. It will be an integrating type indicating instantaneous flow and the cumulative flow.

#### 4.4.1 DETAILS OF PUMP SETS

SI NO	Name	Number of Pup sets	НР	Туре	Remarks
1	LS1	2	1	Submersible	
2	LS2	2	1	Submersible	
3	LS3	2	1.5	Submersible	
4	LS4	2	3.5	Submersible	
5	LS5	2	0.50	Submersible	
6	LS6	2	1	Submersible	
7	LS7	2	0.5	Submersible	
8	LS8	2	1	Submersible	
9	LS9	2	2	Submersible	
10	LS10	2	2	Submersible	
11	LS11	2	3	Submersible	
12	LS12	2	3	Submersible	
13	LS13	2	3	Submersible	
14	LS-14	2	3	Submersible	
15	PH1	2	27	Submersible	
16	STP-PH	2	25	Submersible	

Table 4.11: Details of pump sets

#### 4.5 LAYING OF SEWER NETWORK

In the following sections, important matters in connection with the laying of sewer network and making the system efficiencies illustrated in detail.

## **EXCAVATION AND LAYING**

- 1. On all excavation work, safety precautions for the protection of life and property are essential; and measures to avoid too great in conveniences to the public are desirable. Such measures and precautions include the erection and maintenance of signs (to forewarn public), barricades, bridges and detours; placing and maintenance of lights both for illumination and as danger signals; provision of watchmen to exclude unauthorized persons, particularly children from tress passing on the work.
- 2. Computation of the safe load carrying capacity of the pipe when installed and bedded in themannertobespecifiedusingasuitablefactorofsafetyandmakingcertainthedesignsupportin gstrengththus obtained is greater than the maximum load to be applied.

- 3. Sewers may be laid in trenches or under embankment in areas which may be temporarily orpermanentlysubmergedinwater. The fill loadinsuch cases will be reduced and will correspond to the buoyant weight of the fill material. However, effect of submergence could be ignored which provides an additional factor of safety, but it may be necessary to check whether a pipe is subject to flotation. Under submergence, the minimum height of the fill material that will be required to prevent flotation ignoring the frictional forces in the fill can be determined. Wherever sufficient height of fill material is not available, anti-flotation blocks should be provided.
- 4. All rigid pipes may be tested for strength in the laboratory by the three-edge bearing test (ultimate load).
- 5. Width of the trench specified for a particular job should be minimum in consonance with the requirements of adequate working space to allow access to all parts and joints of pipe.
- 6. The Field Engineer should keep in touch with the Design Engineer throughout the duration of the Project and any deviation from the design assumptions due to the exigencies of work, should be immediately investigated and corrective measures taken in time.
- 7. All pipes used on the work should be tested as per the IS specifications and test certificates of the manufacturers should be furnished for every consignment brought to the site.
- 8. Whenever shoring is used, the pulling out of planks on completion of work, should be carried out in stages and this should be properly supervised to ensure that the space occupied by the planks is properly backfilled.
- 9. Proper backfilling methods both as regards to selection of materials, methods of placing and proper compaction should be in general agreement with the design assumptions.
- 10. In quicksand conditions, it is necessary to anchor the sewer to the ground and hold it at the grade as laid in the face of soil sinkage.
- 11. The type of bedding (granular, concrete cradle, full concrete encasement etc.) would depend on the soil strata and depth at which sewer is laid.
- 12. It is understood that the line (horizontal alignment) and grade layout of a sewer line as per design must be carried out meticulously. The horizontal layout determines the location as well as direction of the sewer line, while slope (grade) of the line provides the necessary hydraulic carrying capacity of the sewerage system.
- 13. The location of the trench is generally laid out first as an offset line running parallel to the proposed sewer centre line. This offset line is demarcated by wooden stakes driven into the ground surface at intervals of, say, 15 m. The offset line, as is clear, is quite away from the sewer centre line with a view not to allow it being disturbed during construction; however, it must be proximate enough so that the transfer of measurements to the actual trench can readily be done.

## **4.6 GANTRY**

Gantry of adequate capacity having floor control pendant will be provided for handling heavy parts of equipment's, valves etc. during erection and maintenance of pumping stations. Proper opening to lift the heavy equipment will be provided at motor floor slab in pumping station.

## 4.7 ARRANGEMENTS FOR POWER SUPPLY

KSEB will supply power at 11/22KV HT supply or 440 V LT supply for the operation of pumps in the pumping stations and for operation of equipment in the STP. In respect of HT supply, suitable transformers would be provided to step down the voltages to 440V. In case the Horse Power of pump set is less than 75HP, 440V LT supply will be availed. Each pumping station shall have Motor control centre for start-stop and other controls for protection and safety of motors and other auxiliary equipment. Capacitors of suitable capacity would be provided to improve the power factor to so that power consumption can be brought down.

## **CHAPTER 5**

## PROPOSED SEWERAGE TREATMENT PLANT

## **5.1 GENERAL**

The constituents of concern found in wastewater are removed by physical, chemical, and biological methods. The individual methods usually are classified as physical unit operations, chemical unit processes, and biological unit processes. Treatment methods in which the application of physical forces predominate are known as physical unit operations. Examples of physical unit operations include screening, mixing, sedimentation, gas transfer, filtration and adsorption. Treatment methods in which the removal or conversion of constituents is brought about by the addition of chemicals or other chemical reactions are known as chemical unit processes. Examples of chemical unit processes include disinfection, oxidation and precipitation. Treatment methods in which the removal of constituents is brought about by biological activity are known as biological unit processes. Biological treatment is used primarily to remove the biodegradable organic constituents and nutrients in waste water. From practical observations, the rates at which physical, chemical and biological reactions and conversions occur are important, as they will affect the size of the treatment facilities that must be provided. The rate at which reactions and conversions occur, and the degree of their completion, is generally a function of the constituents involved, the temperature, and the type of reactor. The fundamental basis for the analysis of the physical, chemical and biological unit operations and processes used for wastewater treatment is the material mass balance principle in which an accounting of the mass is made before and after reactions and conversions have taken place.

## 5.2 CHARECTERISTICS OF SEWAGE

## 5.2.1 INFLUENT CHARACTERISTICS

Parameters	Units	Value
Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/l	250
Chemical Oxygen Demand (COD)	mg/l	400
рН	Units	6.00-7.00
Total Suspended Solids (TSS)	mg/l	400
Total Dissolved Solids (TDS)	mg/l	800
Total Organic Nitrogen (Kjeldhal)	mg/l	>35<55
Oil and Grease	mg/l	>1<10

Table 5.1: Influent Characteristics

## 5.2.2 EFFLUENT CHARACTERISTICS

Parameters	Units	Value
Biochemical Oxygen Demand (BOD5)	mg/l	<10
Chemical Oxygen Demand (COD)	mg/l	<50
рН	Units	6.5–7.5
Total Suspended Solids (TSS)	mg/l	<10
Total Dissolved Solids (TDS)	mg/l	100

Table 5.2: Effluent Characteristics

## 5.3 CAPACITY CALCULATION OF STP

The details of forecasting of population and demand for zone II is shown below

Last census Population 2011	15503 Persons
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Floating population 2100

Population for sewerage zone-2011 17603

Decennial increase 4.2%

Current year 2022

Design period 30 Years

Execution period 2 Years

Projected population 2054 20714 Persons

Per capita water supply 150 LPCD

Waste water generated 80% of water supply

Quantity of waste water generated 2.412 MLD

Groundwater Infiltration for pipeline & Manholes 5000L/km/day

Total Ground water infiltration 0.1 MLD

Number of persons per house 5Persons

Average roof area 55m2

Rainfall intensity 100mm/day

Number of household sin 2054 40143Nos

Waste water generated accounted for Rain water 0.225 MLD

Non domestic demand 0.0.259MLD

Total sewerage load 2.996

Say 3 MLD

# 5.4 UNIT OPERATIONS IN TREATMENT OF SEWAGE

Sl N o.	Unit	Function	Unit Operations /Phases
1	Primary	• Removal of rags, floating matter, grit, oil and grease etc.	<ul> <li>Screening</li> <li>Grit removal</li> <li>Oil and grease trap</li> </ul>
2	Second	<ul> <li>Removal of Bio degradable organic matter and suspended solids</li> <li>Also include nutrient removal (Nitrate and Phosphate) in advanced technologies</li> </ul>	<ul> <li>Aerobic suspended growth (Aerobic and anaerobic)Lagoon</li> <li>Nitrate and phosphate removal</li> <li>Chemical oxidation</li> <li>Suspended growth</li> <li>Nitrification/Denitrification</li> <li>Air stripping</li> <li>Ion exchange</li> <li>Chemical treatment</li> <li>Biological nutrient removal</li> </ul>
3	Tertiary	Polishing the effluent for reuse application	<ul> <li>Pathogen removal</li> <li>Chlorine compounds</li> <li>O<sub>3</sub> ,UV Radiation</li> <li>Membrane filtration</li> <li>Filtration variation</li> <li>Carbon Adsorption</li> <li>Iron exchange</li> </ul>

Table 5.3: Unit Operations

# 5.5 THEPROPOSED PFD PROCESS FLOW DIAGRAM OF PROPOSED STP

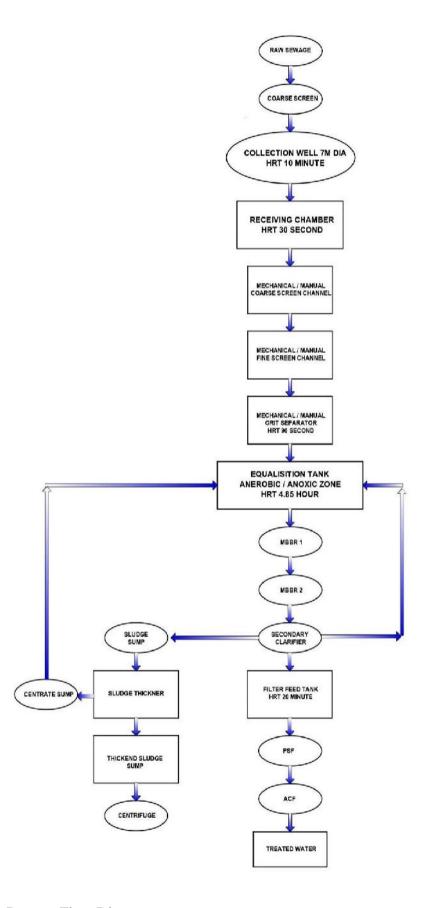


Figure 5.1 Process Flow Diagram

## 5.6 SELECTION OF TECHNOLOGY FOR THE PROPOSED STP

MBBR Technology is opted for secondary treatment in this project for following reasons.

- 1. MBBR has been in existence for a long time, also in India is approved technology.
- 2. Minimum footprint
- 3. Better Stabilized sludge
- 4. Better Effluent Quality
- 5. Less sophisticated
- 6. Spare parts available
- 7. Lower lifecycle cost
- 8. Nil odour nuisance and other environmental hazards

#### 5.6.1 FEATURES OF MBBR

Biochemical oxygen demand (BOD) is an indirect measure of the concentration of biodegradable organic matter in water or wastewater. Organic matter (as measured by BOD) is one of the major constituents removed from wastewater in domestic wastewater treatment plants. The reason for being concerned about organic matter in water is its effect on dissolved oxygen in the receiving stream. Dissolved oxygen in water is essential for much of aquatic life, so organic contaminants that affect dissolved oxygen level in water are of concern.

The two major reactions that take place in the organic carbon cycle are biological oxidation of waste organic matter and photosynthesis, which is the process by which green plants produce organic matter from carbon dioxide and water in reactions that are catalysed by sunlight and the chlorophyll in the green plants. Through the biological oxidation process, aerobic microorganisms utilize oxygen in breaking down organic matter to carbon dioxide and water together with small amounts of other end products.

The process takes place as aerobic microorganisms utilize the waste organic matter as their food (energy) source. The process uses oxygen, so if it is taking place in a water body, dissolved oxygen is consumed. A large quantity of organic matter in the water will result in multiplication of microorganisms and rapid removal of dissolved oxygen, leading to oxygen depletion below the level needed by aquatic life. This is also the process that takes place in biological oxidation processes in wastewater treatment plants for removal of organic matter from the incoming wastewater.

The MBBR process for wastewater treatment was invented and initially developed by Professor HallvardØdegaard in the late 1980s at the Norwegian University of Science and Technology. Use of this wastewater treatment process has spread rapidly.

The MBBR process is an attached growth biological wastewater treatment process. That is, the microorganisms that carry out the treatment are attached to a solid medium, as in trickling filter or RBC systems. By contrast, in a suspended growth biological wastewater treatment process, like the activated sludge process, the microorganisms that carry out the treatment are kept suspended in the mixed liquor in the aeration tank. In the conventional attached growth biological treatment

processes, like trickling filter or RBC systems the microorganisms are attached to a medium that is fixed in place and the wastewater being treated flows past the surfaces of the medium with their attached biological growth, which are described in more detail in the next section. The MBBR treatment processes typically take place in a tank like an activated sludge aeration tank. In contrast, an MBBR process utilizes small plastic carrier media, which are kept suspended by a diffused air aeration system for an aerobic process or by a mechanical mixing system for an anoxic or anaerobic process. A sieve is typically used at the tank exit to keep the carrier media in the tank.

MBBR processes use plastic media support carriers like those shown in Figure 11. As shown in Figure, the carrier is typically designed to have a high surface area per unit volume, so that there is a lot of surface area on which the microorganisms attach and grow. Two properties of the carrier are needed for the process design calculations are the specific surface area in m2 /m3 and the void ratio. The specific surface area of MBBR carriers is typically in the range from 350 to 1200 m2 /m3 and the void ratio typically ranges from 60% to 90%. Design values for these carrier properties should be obtained from the carrier manufacturer or vendor (Harlan H. Bengtson).

The MBBR wastewater treatment process is quite flexible and can be used in several different ways:

- 1. Single stage BOD removal 2. Two stage BOD removal 3. Two stage BOD removal and Nitrification
- 2. Single stage tertiary Nitrification 5. Pre-Anoxic Denitrification 6. Post-Anoxic Denitrification (Harlan H. Bengtson).

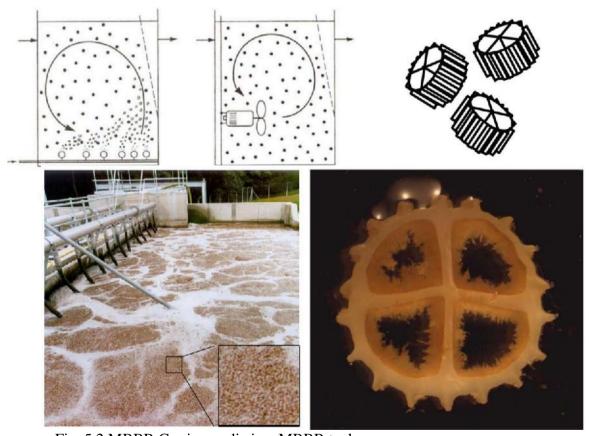


Fig. 5.2 MBBR Carrier media in a MBBR tank

The idea behind the development of the moving bed biofilm process was to adopt the best from both the activated sludge process and the biofilter processes without including the worst. Contrary to most biofilm reactors, the moving bed biofilm reactor utilises the whole tank volume for biomass growth, as does also the activated sludge reactor. Contrary to the activated sludge reactor, it does not need any sludge recycle, as also the case in other biofilm reactors. This is achieved by having the biomass grow on carriers that move freely in the water volume of the reactor, kept within the reactor by a sieve arrangement at the reactor outlet. Since no sludge recirculation takes place, only the surplus biomass must be separated – a considerable advantage over activated sludge process. The reactor may be used for both aerobic, anoxic or anaerobic processes (H. Ødegaard).

The key design parameter for sizing the MBBR tank is the surface area loading rate (SALR), typically with units of g/m²/day, that is g/day of BOD coming into the MBBR tank per m² of carrier surface area. Using design values for wastewater flow rate and BOD concentration entering the MBBR tank, the loading rate in g BOD/day can be calculated. Then dividing BOD loading rate in g/day by the SALR in g/m²/day gives the required carrier surface area in m². The carrier fill %, carrier specific surface area, and carrier % void space can then be used to calculate the required carrier volume, tank volume and the volume of liquid in the reactor (Harlan H. Bengtson).

As an improvement over the attached growth systems, the concept of trapping the microbes into the attached biomass concentration and long solids retention time in a biological reactor can limit the waste sludge production for a given reduction of BOD. This is due to the higher biomass concentration in the reactor due to the immobilized biomass and hence the Food/Microorganism ratio Nitrification going beyond the extended aeration. It is stated that during aeration, the synthesis and accumulation of readily biodegradable storage compounds are observed and these can be used for denitrification under starvation conditions.

Enhancing active biomass concentration, prolonging the life of immobilized carrier and improving the stability of immobilized microorganism play important roles in the process efficiency. The construction, operation, preventing clogging and reducing renewal costs are challenges in the commercial engineering of this technology. However, the fact remains that there are commercially operating STPs built with this technology in our country using various patented media of the respective vendors and with their own design criteria. As such, this technology holds the potential of reducing the footprint of the STP especially in land locked high density urban centres and thus merits its relative consideration.

The requirements for reactor media are high specific surface area, high percent void space, resistance to abrasion or disintegration during placement, insolubility in sewage and resistance to spalling and flaking. The inbuilt configuration must permit hydraulic self-cleaning of the media itself and thereby safeguarding the need to take the reactor out of service to attend for cleaning the clogged media.

Netting to hold back media is an important requirement and is usually provided near the top outlet of the treated sewage in the form of spread-out netting across the entire plan area or a netted cowl around the off take of the outlet pipe. Care is needed periodically to renew these.

## 5.6.2 NITRIFICATION

Biological nitrification/denitrification is a twostep process. The first step is nitrification, which is conversion of ammonia to nitrate through the action of nitrifying bacteria. The second step is nitrate conversion (denitrification), which is carried out by facultative heterotrophic bacteria under anoxic conditions.

There are two groups of chemoautotrophic bacteria that can be associated with the process of nitrification. One group (Nitrosomonas) derives its energy through the oxidation of ammonium to nitrite, whereas the other group (Nitrobacter) obtains energy through the oxidation of nitrite to nitrate. Both the groups, collectively called Nitrifiers, obtain carbon required, from inorganic carbon forms.

Combined system is favoured method of operation as it is less sensitive to load variations - owing to larger sized aeration tank - generally produces a smaller volume of surplus sludge owing to higher values of qc adopted, and better sludge settleability.

Care should be taken to ensure that the oxygenation capacity of aeration tank is sufficient to meet oxygen uptake due to carbonaceous demand and nitrification. Recycling of sludge must be rapid enough to prevent denitrification (and rising sludge) owing to anoxic conditions in the settling tank. This is rising sludge happens, the tertiary filters will chock very fast and will result reduction in plant capacity.

In separate system, the first tank can be smaller in size since a higher F/M ratio (Food to Microorganism Ratio) can be used, but this makes the system somewhat more sensitive to load variations and also tends to produce more sludge for disposal. An additional settling tank is also necessary between the two aeration tanks to keep the sludge separate. A principal advantage of this system is its higher efficiency of nitrification and its better performance when toxic substances are feared to be in the inflow.

## **5.6.3 DENITRIFICATION**

The biological reduction of nitrate (NO3) to nitrogen gas (N2) by facultative heterotrophic bacteria is called Denitrification. "Heterotrophic" bacteria need a carbon source as food to live. "Facultative" bacteria can get their oxygen by taking dissolved oxygen out of the water or by taking it off of nitrate molecules.

Denitrification occurs when oxygen levels are depleted and nitrate becomes the primary oxygen source for microorganisms. The process is performed under anoxic conditions, when the dissolved oxygen concentration is less than 0.5 mg/L, ideally less than 0.2. When bacteria break apart nitrate (NO3-) to gain the oxygen (O2), the nitrate is reduced to nitrous oxide (N2O), and, in turn, nitrogen gas (N2). Since nitrogen gas has low water solubility, it escapes into the atmosphere as gas bubbles.

Free nitrogen is the major component of air; thus, its release does not cause any environmental concern.

## 5.6.4 PHOSPHOROUS REMOVAL

The consciousness to restrict the phosphorous in the treated sewage before Discharge into the environment to curtail eutrophication is being recognised. The phosphorous can be removed by a process called as the luxury uptake. There are at least six different variations of these processes

which have all been developed in advanced countries and every situation will need a separate evaluation and validation.

An alternative process is to introduce a chemical precipitation either in the secondary clarifier or as a separate tertiary stage where phosphorous is precipitated by coagulating with Ferric or Aluminium salts. There is also another technology of high Lime followed by acidification or carbonation whereby in addition to phosphorous removal, colour, heavy metals, fluorides, silica and magnesium can also be simultaneously removed. It is necessary to conduct lab studies to establish the efficiency and the type of chemicals.

#### **5.6.5 A2O PROCESS**

The combined removal of carbon, nitrogen and phosphorus can be achieved by several biological treatment processes. Two common biological treatment processes are the A2O and Barden-pho processes. The A2O process is a modification of A/O phosphorus removal process is to include an anoxic stage for denitrification. Influent and return activated sludge flow into the anaerobic tank while nitrified liquor is recycled with a circulating pump from the aerobic (nitrification) tank to the anoxic (denitrification) tank. Ammonia nitrogen is oxidized to nitrite or nitrate in the aerobic tank, and then nitrite or nitrate is denitrified to nitrogen gas in the anoxic tank

## 5.7 PROPOSED TREATMENT UNITS

## 5.7.1 RECEIVING CHAMBER

The sewage received in the collection well located at the plant premises is pumped to the receiving chamber. The average quantity of flow in to the receiving chamber is assumed to be130.43cum/hr whereas peak flow is taken as 326.09cum/hr. Dimension of receiving chamber is  $2.25 \times 1.0 \times 2m$  with a free board of 0.5m.

## **5.7.2 SCREEN CHANNEL**

After receiving chamber, sewage passes through screening chambers provided. The principal role of the fine screening is to remove floating materials from the sewage that could damage subsequent process equipment, eliminate materials that may inhibit the beneficial reuse of bio solids and reduce overall treatment process effectiveness. Screened materials are mechanically removed by the scrappers. In case of emergency, the screen chamber can be bye passed to the manual screen chamber so that the treatment is continuously ensured. Sizes provided are:

Mechanical and Manual Coarse Screen Channel- 2.75x1x1, Screen with 60 degree inclination Mechanical and Manual Fine Screen Channel-2.75x1x1, Screen with 45 degree inclination

## 5.7.3GRIT SEPARATOR

The grit chamber is used to remove grit, consisting of sand, gravel, cinder, or other heavy solids materials that have specific gravity much higher than those of the organic solids in waste water. Grit chambers are provided to protect moving mechanical equipment from abrasion and abnormal wear; avoid deposition in pipelines, channels, and conduits; and to reduce frequency of digester cleaning. Two numbers of grit chambers are provided in the plant (one stand by) with a dimension of 3.0x3.0 x2.50 m.

## 5.7.4 APPROACH CHANNEL FOR PARSHALLFLUME

A Parshall flume is a fixed, hydraulic structure that is placed in a flow stream to determine the flow of water. The flume accelerates flow by both a contraction of the parallel sidewalls and a drop in the floor elevation in the throat. It is used to measure volumetric flow rate in industrial discharges, municipal sewer lines, and influent/effluent flows in waste water treatment plants.

## 5.7.5 EQUALISATION TANK

Flow equalization is used to minimize the variability of water and waste water flow rates and composition. Each unit operation in a treatment train is designed for specific waste water characteristics. Improved efficiency and control are possible when all unit operations are carried out at uniform flow conditions. The equalization tanks are provided (i) to balance fluctuating flows or concentrations, (ii) to assist self-neutralization, or (iii) to even out the effect of a periodic "slug" discharge from a batch process. The design is done to have a hydraulic retention time of 4.85 hours. A circular with 16 m diameter proposed with a depth of 4.50m. Equalization tank is divided into Anaerobic and Anoxic areas with the help of baffle wall for denitrification

## **5.7.6 MIXING EQUIPMENT**

Mixers are often employed in equalization basins to achieve homogeneity in and to aerate the wastewater. Various types of mixers are available. The classification of mixers depends on the flow pattern the mixers produce.

## 5.7.7 MOVING BED BIOREACTOR (MBBR)

Moving Bed Biofilm Bioreactor (MBBR) process uses the whole tank volume for biomass growth. It uses simple floating media, which are carriers for attached growth of bio films. Biofilm carrier movement is caused by the agitation of air bubbles. This compact treatment system is effective in removal of BOD as well as nitrogen and phosphorus while facilitating effective solids separation. Design of the reactor is based on the actual wastewater characteristics and local conditions. MBBR units are placed in series based on the load entering each reactor. Two circular MBBR tank is designed with diameter 14.8m and 13.8m and a depth of 4.50m.

#### 5.7.8 AIR BLOWERS

Aeration is the most critical component of a treatment system using the Moving Bed Bio Reactor. A well designed aeration system has a direct impact on the level of sewage treatment it achieves. An ample and evenly distributed oxygen supply in an aeration system is the key to rapid, economically-liable, and effective waste water treatment. Two numbers (3W+1S) of air blowers of 46 HP each with a total air discharge of 4342.08 cum/ hr. are provided.

## 5.7.9 SECONDARY CLARIFIER

Clarifiers are settling tanks built with mechanical means for continuous removal of solids being deposited by sedimentation. A clarifier is generally used to remove solid particulates or suspended solids from liquid for clarification and (or) thickening. Secondary Clarifier is a circular basin in which effluent from the MBBR process is held for a period of time during which the heavier biomass (microorganisms) settle to the bottom as "activated sludge". There is no need for sludge recirculation in MBBR due to its high MLSS values. So secondary settling tanks are just used for removing excess settleable solids present in the effluent comes out from MBBR tanks. One number

of secondary clarifier with 13.60m diameter and 3.3m depth is provided with a retention period of 3.10 hrs.

## **5.7.11 SLUDGE SUMP**

Total sludge generated in the secondary clarifier is calculated as 914.46kg/day. Sludge sump is designed to have a hydraulic retention time of 2hrs. One number of sludge sump having circular shape with diameter 1.9m and depth 2.35 m is provided.

## 5.7.12 THICKENER FEED PUMP

The major function of sludge thickener feed pump is to transfer the sludge from sludge sump to sludge thickener. Two numbers (1W+1SB) of non-clog, submersible pumps are provided with a discharge of 13.45cum/hr.

## 5.7.13 SLUDGE THICKENER

Sludge thickening normally refers to the process of reducing the free water content of sludge or Thickening is a procedure used to increase the solids content of sludge by removing a portion of the liquid fraction. Sludge thickener with diameter 5.2m and depth 2.85m provided.

## 5.7.14 CENTRIFUGE FEED PUMP

The major function of Centrifuge feed pump is to transfer the sludge from thickened sludge sump to Centrifuge. Two numbers (1W+1SB) of non-clog, submersible pumps are provided with a discharge of 4.12cum/hr.

## 5.7.15 SLUDGE CENTRIFUGE

Centrifugal thickening and dewatering of sewage sludge is a high speed process that uses the force from rapid rotation of a cylindrical bowl to separate wastewater solids from liquid. The centrifugal force in the decanters is utilized to separate the solids from the water. The use of organic flocculants, the poly electrolytes, made it possible to coagulate the fines sludge particles to relatively large sludge floc in the centrifugal field so that reliable separation of solids and water could take place.

## 5.7.16 PRESSURE SAND FILTER (PSF)

The treated water which is collected in the filter feed tank shall be pumped into the Pressure Sand Filter using the Filter Feed Pumps. They are the most popular method for removal of turbidity from water. The Pressure Sand Filter consists of a multiple layer of sand with a variety in size and specific gravity. These Filters are designed to remove turbidity and suspended particles present in the feed water with minimum pressure drop. Raw water flows down wards through the filter bed and as the suspended matter, which is treated by addition of a coagulant like alum or poly electrolyte, is retained on the sand surface and between the sand grains immediately below the surface. There is steady rise in the loss of head over a period of time and the flow reduces once the pressure drop across the filter is excessive. The filter is then taken out of service and cleaning of the filter media is effected by flow reversal also called as backwash. To assist in cleaning the bed, the backwash operation is sometimes preceded by air scouring by way of agitation through the under drain system. The air scouring agitates the sand with a scrubbing action, which loosens the intercepted particles.



Fig 5.3: Pressure Sand Filter

Pressure sand filter is designed to have a dimension of 2.4mØ and 2.5m height (3 numbers). The work pressure is 3.5bar and it can be increased up to a maximum of 3.50 bar. Materials used in pressures and filter are sand and anthracite (Dual media).

## **5.7.17 ACTIVATED CARBON FILTER(ACF)**

Filtered wastewater from Pressure sand filter is then passed through the Activated Carbon Filter. They are generally employed in the process of removing organic compounds and/or extracting free chlorine from water, thereby making the water suitable for discharge.

Activated carbon is commonly used for removing organic constituents and residual disinfectants in water supplies. This not only improves taste and minimizes health hazards; it protects other water treatment units such as reverse osmosis membranes and ion exchange resins from possible damage due to oxidation or organic fouling. Activated carbon is a favored water treatment technique because of its multifunctional nature and the fact that it adds nothing detrimental to the treated water. Most activated carbons are made from raw materials such as nut shells, wood, coal and petroleum.

Carbon filtering is a method of filtering that uses a bed of activated carbon to remove contaminant sand impurities, using chemical adsorption. Each particle/granule of carbon provides a large surface area/pore structure, allowing contaminants the maximum possible exposure to the active sites within the filter media.

The dimension of Activated Carbon Filter is 2.6m@x2.5m height (3 Numbers).



Fig5.4: Activated Carbon Filter

## 5.7.18 TREATED WATER TANK

The treated water is finally fed in to the treated water tank having a capacity of 176.40 m<sup>3</sup>. Treated water from Activated Carbon filter is pumped in to the treated water tank of dimension 6.6x6.6x3.35m. Hydraulic retention time of 60 minutes is given in the treated water tank.

## 5.7.19 CHORINE CONTACT TANK

No separate Chlorine contact tank is proposed. Filter feed water tank is proposed as chlorine contact tank itself.

## 5.7.20 EFFLUENT CHANNEL

Effluent Conveyance System called as Effluent Channel is provided to carry treated effluent from STP to the stream which leads to water body.

## **5.7.20 OUT FALL**

The disinfected clear effluent shall be let out to the stream through a RCC covered channel of adequate slope.

#### 5.8 DETAILED DESIGN

Detailed design of the Sewage Treatment Plant with MBBR Technology is provided in the annexure

# **5.9 POWER REQUIREMENT**

The total running power requirement is 163HP/136KW and the installed capacity is 350HP/260KW. The single largest motor capacity is 46HP (Air blower). An Indoor type transformer and a Generator is proposed with the following capacities.

a. Transformer : 250KVAb. Generator : 250KVA

#### 5.10 OTHER FACILITIES

Following provisions are also included in the proposal

- 5.7.21 Comfort room cum office in the laboratory
- 5.7.22 Internal Roads
- 5.7.23 Storm Water Drain
- 5.7.24 Providing Lawns
- 5.7.25 Planting trees
- 5.7.26 Bye-passing Arrangements
- 5.7.27 Walk ways for all major elevated units
- 5.7.28 Walkways/ground pavements
- 5.7.29 Water Supply and sanitation arrangements
- 5.7.30 Laboratory

## 5.11PLAN FOR REUSE OF RECYCLED SEWAGE

In the planning and implementation of water reclamation and reuse, the reclaimed water application will usually govern the wastewater treatment needed to protect public health and the environment, and the degree of reliability required for the treatment processes and operation (Metcalf and Eddy). The major waste water reuse categories are as follows:

- a] agricultural irrigation, crop irrigation and commercial nurseries
- b] landscape irrigation
- c] industrial recycling and reuse
- d] groundwater recharge, groundwater replenishment and saltwater intrusion control
- e] recreational/environmental uses
- f] Non potable urban reuse

## 5.12 MAINTENANCE OF AN ECO-FRIENDLYSYSTEM

Since the treated water contains plant nutrients also, it will be beneficial for the environment when discharged as soil infiltration. Care has also been taken to properly treat the sludge produced during the operation It has also been decided to impart a green environment to the STP units with special methods of growing plants at the exterior of plant components and space between units. Maximum utilization of space has been taken at the planning and design stage itself and using the natural treatment properties of the soil, such decentralized systems provide good opportunities to use the natural environment. They can help reduce the level of difficulty and cost to treat pollutants, such as nutrients, and keeping them from entering lakes, rivers, and streams. The soil acts as a natural filter and provides final treatment by removing harmful bacteria, viruses, and nutrients.

**Treated Water disposal:** The treated water can be used for gardening and floor washing in Sewage Treatment Plant. Treated water can be supplied to agricultural nurseries, industrial purposes, etc on demand. Surplus water can be discharged to nearest water body.

**Sludge disposal & handling:** The washed screenings, grit etc. will be daily removed to the disposal sites. Suitable arrangements will be made for disposal of sludge. Dewatering and packing unit after making cakes is proposed in the estimate. Sludge may be used as bio-compost (Fertilizer) on demand

## 5.13PRELIMINARY STRUCTURAL DESIGN OF COMPONENTS

For the various units of the STP structural analysis and design have been performed in accordance with the stipulations of all relevant Indian Standard Codes of practice. For the reinforced concrete elements, special attention has been given to arrive at the preliminary dimensions to satisfy norms and conditions for the water retaining structures. For the metallic structures like pressure filter units, similar approach has been adopted. Since the units are constantly in contact with aggressive environment like sewage, non-corrosive coating for reinforcing steel and water proofing application for the inner side of reinforced concrete structures are recommended. These provisions are already given in the detailed estimates. During the execution stage, a detailed structural analysis of the components can be performed. However, the dimensions are expected to fall within the limits of the values obtained from the preliminary analysis. In the case of foundations, simple raft and beam-slab type raft is adopted for safety considerations. Since the soil nature is observed to be satisfactory to withstand medium loading conditions, deep foundations are not suggested. Soil analysis reports available for the locality has been examined to arrive at a decision. However, during the execution stage, detailed soil investigations can be performed. Cover for the reinforced concrete elements is to be given in accordance with the exposure conditions given in the IS 456 Code of practice.

## 5.14 LAND REQUIRED FOR STP AND WELLS

The details of land required for Sewage Treatment Plant, pumping stations and lifting stations are detailed below. Procurement of land is the sole responsibility of Municipal Authority.



Figure 5.5- Proposed site for STP

S1 No	Components	Area required in cents	Latitude and Longitude
1	Sewage Treatment Plant	120 (Survey no: 4/5, panthalayini village)Private land	75.69902,11.46771
2	Wet well and Pump house, PH 1	5	75.70904,11.44115
3	Lifting Station, LS1	2	75.67612,11.47196
4	Lifting Station, LS2	2	75.68266,11.46549
5	Lifting Station, LS3	2	75.68621,11.46764
6	Lifting Station, LS4	2	75.69150,11.46248
7	Lifting Station, LS5	2	75.66319,11.45511
8	Lifting Station, LS6	2	75.69241,11.45283
9	Lifting Station, LS7	2	75.70336,11.45253
10	Lifting Station, LS8	2	75.70491,11.44911
11	Lifting Station, LS9	2	75.70145,11.44549
12	Lifting Station, LS10	2	76.76727,11.44825
13	Lifting Station, LS11	2	75.70811,11.44953
14	Lifting Station, LS12	2	75.70948,11.44881
15	Lifting Station, LS13	2	75.71679,11.14234
16	Lifting Station, LS14	2	75.67119,11.47047

Table 5.4: Land details

# $5.16~\mathrm{SMART}$ MANAGEMENT AND ON-LINE MONITORING USING INTERNET OF THINGS (IoT)

Advancement in the field of digital technology has enabled the wastewater treatment system operators and managers to control and enhance the performance of various components of the system. Internet of things (IoT) consists of a network of physical objects using various sensors as end points to enable monitoring from a remote station.

For the sewerage treatment plant, a network of various sensors can capture the variations of values of parameters like temperature, dissolved oxygen, chemical composition, TDS etc. at different control points of the system. The continuous data obtained through IoT is used by a customized algorithm for synthesis to impart a decision-making procedure. A centralized information processing system (CIPS) can be formed for this task. In addition to this smart water flow meters can also be coupled to this digital environment. IoT in wastewater management can also be used to calculate residual chemicals after the treatment. This data can be further used to calculate the efficiency of the treatment process and ensure that water quality standards are met before it is

discharged in a waterbody.

By using real-time data gathered through different embedded sensors, performance characteristics of machines can be monitored that further increase the productivity of equipment and boost maintenance tasks. In the present study for the hospital, provision for implementing a IoT based control of the units in STP have been suggested.

## 5.17 ODOUR CONTROL METHODS

Odours are a complex combination of a wide variety of compounds; however, the certain compounds and groups of compounds that contribute specifically to sewage odours, and significantly determine the selection of the control technology. These include the following: \*Hydrogen sulphide, and

\*Ammonia.

Odor control is a complex and time-consuming challenge, often requiring a combination of methods for treating odorous gases and for removing or reducing the potential causes of the odours. If an odor problem is severe enough to affect the community, an emergency response and solution to the problem must be carried out quickly. The approach for selecting an odour control method or technology includes the following steps:

A. Identify the odour source and characteristics through sampling and analysis.

- B. List and assign priorities to controlling a specific odour problem, recognizing considerations such as cost, plant location, future upgrading of various sewage processes, severity of the odour problem, and the nature of the affected area.
- C. Select one or more odour control method or technology for implementation to meet the objectives of steps "a" and "b" taking in to consideration the advantages and disadvantage of each.
- D. Monitor odour missions from the treated air for process adjustments and for feedback to evaluate the solution's effectiveness.

Hydrogen sulphide (H2 S) is the most common odorous gas found in sewage collection and treatment systems and results from the reduction of sulphate by bacteria under an aerobic conditions. Its characteristic rotten-egg odour is well known. The gas is corrosive, toxic and soluble in sewage. Hydrogen sulphide is considered a broad-spectrum poison, meaning it can poison several different systems in the body.

## 5.18 PREVENTION OF ODOUR

Hydrogen sulphide production can be controlled by maintaining conditions that prevent the build-up of sulphides in the sewage. The presence of oxygen at concentrations of more than 1.0 mg/L in the sewage prevents sulphide build-up because sulphide produced by anaerobic bacteria is aerobically oxidized. Maintaining anaerobic environment inhibits the anaerobic degradation process, which contributes to the generation of hydrogen sulphide. A check list is given below:

- Prevent corrosion in the collection well of the facility by blowing air through the facility
- Avoid storing screenings and grit generated in the grit chamber for a long time. Dispose of screenings and grit at appropriate intervals
- Retention time of sludge in the sludge treatment facilities should be appropriate (Do not retain sludge for a long time)

• Maintain sewage at neutral pH range because most of the sulphide is present at a pH value of less than?

Following is a short checklist of operational considerations for controlling odours of primary treatment facilities: (May also apply in other facilities)

- Remove scum routinely, with increased frequency during warm weather.
- Remove sludge before it can bubble or float.
- Wash weirs and other points where floatable and slime collect. Some facilities use submerged pipes with holes rather than effluent troughs. The submerged pipes do not splash the primary effluent, thereby reducing the release of hydrogen sulphide.
- Wash down all spills and grease coatings.
- When draining a tank, immediately flush it completely. If sludge does not drain quickly, spray lime, calcium hypochlorite, or potassium permanganate on the sludge surface to reduce odours. Because even a clean tank can produce odours, flushing the tank with a chlorine solution or keeping the tank floor covered with a low concentration of chlorine solution will reduce odours.
- If the sewage is septic, add chemicals in the collection system or at the plant, as appropriate, to reduce sulphides.
- If tanks are covered for odour control, keep plates and access hatches in place.
- Routinely check any odour scrubbers or deodorizers for plugging, adequate supply of chemicals, proper pressures for demisting, and/or effectiveness of carbon.
- The splashing of primary sewage into weir troughs and effluent channels can result in the release of hydrogen sulphide. If possible, try to minimize the splashing of primary sewage in to the channel or weirs. I fit cannot be accomplished operationally, then installing submerged sewer pipes may be necessary. This will require tank modifications to verify the plant hydraulics and provide proper control to avoid fluctuations in the tank levels.
- Minimize the stripping of hydrogen sulphide from the sewage when using channel air diffuser systems. Adoption of the following regular practices will not only increase removal efficiency but will provide better working conditions for the operator:
- Regularly remove accumulations from the inlet baffles and outlet weirs with a hose or a broom with stiff bristles. Only experience will determine the necessary frequency.
- Cleans cum removal equipment regularly; otherwise, obnoxious odours and a nun sightly appearance will result.
- Keep cover plates in place except when operations or maintenance require the irremovable.
- Immediately flush and remove all sewage and sludge spills. Avoid hosing down motors and enclosed control devices.

- Establish a house keeping schedule for the primary treatment area, including galleries, stairwells, control rooms, and related buildings, and assign responsibility for each item to a specific employee.
- Re paint surfaces as necessary for surface protection and appearance.

# 5.19 CONTROLOF ODOUR BY CHEMICAL ADDITION

Chemical addition can control odours in STP by preventing anaerobic conditions or controlling the release of odorous substances.

Chemical	Effective against	
Oxidizers		
Ozone	Atmospheric hydrogen sulphide only	
Hydrogen peroxide	Hydrogen sulphide, also acts as oxygen source	
Chlorine	Hydrogen sulphide and other reduced sulphur compounds	
Sodium and calcium hypochlorite	Hydrogen sulphide and other reduced sulphur compounds	
Potassium permanganate	Hydrogen sulphide and other reduced sulphur compounds	

Table 5.5 Control of odour by chemical addition

## **CHAPTER 6**

# COST ESTIMATE, OPERATION AND MAINTENANCE CHARGES

#### 6.1 DETAILED ESTIMATE

## 6.1.1 GENERAL

The detailed estimate for the STP components and Network components is prepared in accordance with the Delhi Schedule of Rates (DSR) 2018 provisions after applying District Cost Index. For certain items, market rates are adopted. The estimate prepared in Kerala Water Authority Price software.

## 6.1.2 DETAILED ESTIMATE OF COMPONENTS

The detailed estimates have been divided into components as Raw sewage well, Receiving Chamber, Screen Chamber, Grit chamber, Equalization Tank, Aeration/MBBR Tank, Secondary Settling Tank, Filter Feed Tank, Treated Water tank, Sludge sump, Sludge Thickener, Thickened sludge Centrifuge Structure, Centrate sump, Chlorinator room, Air blower room, Administrative Building, Well and pump house, Sewer network, Control room, etc, Mechanical works, Electrical installations and instrumentation, Operation and maintenance. The total estimate amount comes to Rs. 152 Crores including O&M for 10 years. Salient features of the estimate are detailed below

- The estimate is prepared with DSR 2018 and cost index 36.44%
- RCC M30 is proposed for all concrete works
- Sulphate Resistant Cement is proposed for the structures above plinth level
- Epoxy coating is provided for reinforcement bars.
- waterproofing treatment is proposed for STP structures
- Proposed STP site is low lying area, hence earth filling is proposed
- Odour control system by Activated Carbon (re-generable type) Scrubbers is proposed (90 Lakhs provided)
- Roof top type Solar Energy System is provided
- 250KVA Diesel Generator is proposed
- SCADA in Sewage Treatment Plant is proposed
- PWD approved rates are taken for PWD/NH road reformation
- O&M for 10 years is taken for STP and Sewer network
- Electricity charges is not included

Detailed estimate is enclosed as annexure.

## 6.2 PROPOSED SEWERAGE SYSTEM O&M

On completion of the construction, the system should be commissioned in phases. Trial commissioning and operation of all the components of the project shall be carried out in phases and any defects found during the period shall be attended immediately. The following components require regular supervision, operation and maintenance.

- 1. Sewerage Network.
- 2. Pumping Stations.

## 3. Sewage Treatment Plants.

For the efficient operation and maintenance of sewerage system, proper planning, staff/labor, tools & equipment and spares are required. For estimating the O&M cost for the Sewerage system, the cost is broadly categorized into

- 1. Establishment Charges
- 2. O&M for Network maintenance cost
- 3. O&M for STP

## 6.3 SEWER NETWORK MAINTENANCE

For the purpose of maintenance, the jet rodding machine will be used along with other components for maintenance of the collection system. It can either be procured or can be hired. The staff shall be properly trained to operate the jet rodding machine.

All the new connections shall be given under the supervision of O&M staff. No unauthorized connection shall be given to the sewerage system. Sewer inspections and maintenance should be planned. The whole sewerage system should be marked on a plan and divided into sections and areas.

Quality maintenance shall be the most important step in smooth functioning of the proposed sewers. This includes the optimum use of labour, equipment and material to keep the system in good condition.

## **6.4 TYPES OF MAINTENANCE**

There are two types of maintenance of an underground sewerage system - preventive and emergency. It is necessary that preventive or routine maintenance are carried out to prevent any breakdown of the system and to avoid emergency operations to deal with clogged sewer lines or over flowing manholes or backing up of sewage into a house or structural failure of the system. Preventive maintenance is more economical and provides for reliability in operations of the sewer facilities. Emergency repairs, which would be very rare if proper maintenance is carried out will also have to be provided for proper inspection and preventive maintenance is a necessity.

The organization required for the maintenance of the sewerage system will vary with the size and type of the sewerage system and the relative age of the system. The larger the municipality, the larger and more complex will be its maintenance organization. The size of the organization will vary from a couple of employees to several hundred regular employees. The primary effort of the staff is to maintain sewers free flowing and unobstructed.

# 6.4.1 STEPS TO BE TAKEN FOR OPERATION AND MAINTENANCE OF THE SEWERAGE NETWORK DETAILED IN THIS SECTION ARE AIMED AT

- 6.4.1.1 Regular maintenance of the system for proper functioning
- 6.4.1.2 Preventing any breakdown of the system
- 6.4.1.3 Emergency operations to deal with clogged sewer lines or overflowing manholes
- 6.4.1.4 Preventing back flow of sewage into residence sand

6.4.1.5 Preventing structural failure of the system.

## 6.4.2 INSTITUTIONAL STRUCTURE

Operation and maintenance of the proposed scheme shall be carried out through the maintenance wing of KWA.

The following list gives the duties that are to be performed for proper sewer maintenance:

- 6.4.2.1 Inspection of sewers, sewer appurtenance sand Sewage Treatment Plant.
- 6.4.2.2 Cleaning of sewers and sewer appurtenances.
- 6.4.2.3 Checking manhole conditions for deposition of silt etc.
- 6.4.2.4 Replacing broken manhole covers.
- 6.4.2.5 Raising the manhole cover for the construction of culverts, resurfacing etc.
- 6.4.2.6 Approval of sewer connection applications and executing connections
- 6.4.2.7 Maintaining records of sewers and STP including:
- 6.4.2.8 Daily operation and maintenance report
- 6.4.2.9 Complaints register
- 6.4.2.10 Stock of equipment
- 6.4.2.11 Disposal of silt, garbage removed after cleanings ewer, manholes and treatment plants.
- 6.4.2.12 Removal of debris, brick bats etc. After any repair work.
- 6.4.2.13 Identifying locations where regular maintenance is needed (problem areas) in sewers and STP.
- 6.4.2.14 Ensuring work is carried out correctly and safely with due regards to health and safety regulations.
- 6.4.2.15 Adopting preventive maintenance within the sub division as a whole, conducting periodic staff meeting and record of the proceedings.

## 6.4.3 PREVENTIVE MAINTENANCE

In order to maintain the sewer system in satisfactory manner, desilting of manholes and sewers is to be done by any of the following methods suitable for the purpose.

- a) By manually by ball passing method
- b) By drag bucket machine
- c) By jet rodding machine

## 6.4.4 BREAK DOWN MAINTENANCE

The work of each sewer maintenance gang would consist of the following:

- 1) The house sewer obstruction and main sewer obstruction or any other related complaints to be attended with high priority.
- 2) There were line leaks/complaints are to be attended with high priority.
- 3) Any silt or mud removed during sewer cleaning operation shall be removed from the roads within 24 hours to approved location.

It shall be the responsibility of the O&M division to arrange for traffic control and to obtain permission from concerned agencies for traffic diversion etc. for purpose of maintenance. All necessary precautions shall be taken. After the maintenance works are completed roads, cables, utilities etc shall be restored to the original condition.

#### 6.4.5 PERFORMANCE LEVEL TO BE ACHIEVED

- a) Collection system shall be maintained without over flows from manholes/sewers on to streets or into storm water drains.
- b) Silt and trash removed from sewers during removal of block ages/routine cleaning of sewers shall be disposed of hygienically within 24hours.
- c) Preventive maintenance shall be carried out as per approved schedule.
- d) Duration of break down maintenance shall not exceed the specified norms.
- e) All safety precautions shall be taken in sewer maintenance`

# 6.5 ON COMPLETION OF MAINTENANCE WORKS RESTORE EVERYTHING TO THE ORIGINAL CONDITION. PROPOSED SEWERAGE SYSTEM O&M

On completion of the construction, the system should be commissioned in phases. Trial commissioning and operation of all the components of the project shall be carried out in phases and any defects found during the period shall be attended immediately. The following components require regular supervision, operation and maintenance.

- 6.5.1 Sewerage Network.
- 6.5.2 Pumping Stations.
- 6.5.3 Sewage Treatment Plants.

## **6.6 SAFTEY PRACTICES**

Sewer cleaning is an occupation that has an overall accident frequency rate that is relatively higher than any other industry. The employer has the responsibility of providing the worker with a safe place to work. Never the less, the worker has the overall responsibility and must ensure that it is a safe place to work. This can only be done by constantly thinking of safety and working safely. The worker has the responsibility of protecting not only himself, but also all other plant personnel or visitors by establishing safety procedures for the plant and then ensuring they are followed. He must train himself to analyze jobs, work areas and procedures from a safety stand point and learn to recognize potentiality hazardous actions or conditions. When he recognizes a hazard, he must take immediate steps to eliminate it through corrective action. If correction is not possible, guard against the hazard by proper use of warning signs and devices / by establishing and maintaining safety procedures. As an individual, the supervisor can be held liable for injuries or property damage, which results from an accident caused by his negligence.

# 6.7 O &M CHARGES

O&M Charge for STP (10 years) including GST	Rs.9,86,54,587
O&M Charge for sewer network and allied works (10 years) including GST	Rs.8,61,27,005
Electricity Charges for 10 years including GST	Rs.16,53,13,299
Total	Rs. 350094891.02 /-

# **6.8 POWER CHARGES**

Power calculation details appended separately. As per the calculation sheet attached, total electricity consumption for STP, well, pumping stations, etc for one year is 2001372 units. The total amount for electricity charges @ Rs7 per unit cost for one year comes to Rs.1,40,09,602/-. Electricity charges is not included in the detailed estimate due to the fluctuation in charges and Municipality has to bear the same.

# **CHAPTER 7**

# IMPLIMENTATION OF THE PROJECT

### 7.1 IMPLEMENTING AGENCY

Kerala Water Authority is the responsible agency in Government sector in the water supply sector and sewerage Sector for implementation of Major Projects under various funding agencies AMRUTH, NABARD, Rebuild Kerala, ADB assistance, and also STATE PLAN Works. Being high value projects Implementation of sewerage projects also requires an agency with expertise and having sufficient human resources. Implementation can be done through concerned Project Divisions of KWA.

# 7.2 STEPS TO TAKEN WHILE TENDERING.

Conditions should be incorporated in the NIT that detailed field survey and design of network shall be carried out for ascertaining the levels due to road developments if any and in order to accommodate the fact that sewer network design based on gravity flow and accurate levels with Total Station equipment along both sides of road and centre of road is required. Due to limitation of fund and time DGPS survey along one side of the road is only taken in the present proposal. Additional changes required for satisfactory completion of work additional sewer lines required with additional manholes, lifting stations required due to future developments in the scheme area shall also be included in the scope of work while implementing the project. Better and advanced technology for treatment to be considered for STP while implementing the project. Soil investigation of STP site, well sites not carried out as the land proposed are private lands. Hence detailed soil investigation is to be carried out and type of foundation of the structures to be changed accordingly.

### 7.3 INTEGRATION WITH OTHER PROJECTS

Planning and design of sewerage schemes can be combined with other water projects. This is since most of these projects are inter-related and environment sensitive. Hence the location of an STP, collection wells and coverage of sewerage networks in an area depends upon the water supply system existing in that area, proximity of irrigation canals, water bodies and flood routing structures if any. Planning shall also be done for integrating with road development projects in the scheme area so as to execute all road reformation works after laying sewerage system.

### 7.4 SUPPORT ACTIVITIES

It has been observed that in many cases of the implementation of the sewerage projects, public protests are experienced by the implementing agencies and authorities. This is because of the unawareness of the local people about the treatment process, disposal of sludge and re-use of treated sewage etc. In this regard, it is essential to educate the consumers to make them aware

of the waste management process thereby encouraging them to come up with sewerage connections. The state government is promoting the waste management concept in all the possible ways. More support is needed from the Local Self Government Departments, Suchitwa Mission Kerala, Haritha Keralam Mission Kerala and all the other departments by organizing programmers for motivation public through seminars and awareness classes.

### 7.4 IMPLIMENTATION SCHEDULE

Table 7.1: Implementation Schedule



Proposed implementation Schedule is provided above. The project is proposed to complete within a period of two years.

# 7.5 ENVIRONMENTAL IMPACT MANAGEMENT

The project area is not falling under environmental sensitive zones. There are no natural reserve forests or parks or the presence of coastal belt.

During the construction phase, the emissions from movement of vehicles used for project activity may affect the air quality due to the particulate matter generated during loading, transporting, unloading of materials during construction. Movement of heavy vehicles and concrete mixer would generate considerable noise in the surrounding environment. Hence a proper traffic management plan is recommended during the construction activities.

Sludge generated in the STP must be properly disposed off by transforming it into fertilizer products or bricks for low impact construction activities. Recycled water generated from the STP is to be used as per the guide lines already given.

Regarding the positive impacts, it is to be noted that water quality of the rivers and streams will be greatly improved along with the general environment. The large quantity of recycled water will be useful for multiple purposes including agriculture.

# **CHAPTER 8**

# CONCLUSION AND RECOMMENDATION

- The responsibility of providing sewerage systems rest with local bodies which can be facilitated by Kerala Water Authority. KWA has recently set up a Sewerage Vertical with four sewerage circles towards this. The idea and vision behind it are to visualize and materialize complete sewerage schemes for the State as it is vital for a safe environment. Moreover, there are directions from the Honourable National Green Tribunal (NGT) for ensuring the installation of Effluent Treatment Plants (ETPs), Common Effluent Treatment Plants (CETPs), Sewage Treatment Plants (STPs) and other pollution control measures. Hon. NGT has also directed to take necessary action to abate discharge of pollution into rivers (OA No. 673 of 2018).
- This proposal includes 3 MLD STP with MBBR technology at Naderi in Koyilandi Municipality, a sewer network of 46.334 km, 1791 manholes, one pumping station at Puthiya kavil road and fourteen lifting stations. Manholes at 30 m intervals and at all intersections are proposed to facilitate maintenance operations.
- Septage load from entire Koyilandi Municipality is proposed to be treated in the 4 MLD STP for Zone1 (Coastal area) where Co-treatment facility provided (DPR already prepared).
- The cost estimate of the project is excluding land cost. The fund for land has to be provided by the local bodies /Government, according to the source of funding for the scheme.
- If sufficient funds and lands are made available, the projects can be taken up by KWA and can be completed in 2 years. For efficient control of operation and maintenance a monitoring cell at institutional level is to be formed.
- For better performance of the system testing of influent samples, effluent samples after treatment from each unit is to be tested at regular intervals and modifications if any shall be made at the initial stage itself so as to ensure efficiency of individual units and effluent standards as per design.
- Better and advanced technology for treatment to be considered for STP while implementing the project.

# **APPENDICES**

APPENDIX-I-DESIGN OF STP WITH MOUNCE BED BIOF-III	ADDENDIV I DECICALOE CTD WITH	H MOVING	DED DIOI	H M DE ACT	OD AM	(DD)	
Design flow				ILM-REACT	OK (MB	вк)	
Norking hours				2120425	I DD	2120	m³/darr
Assumed peak factor			MLD				
Peak design flow				3130	KLD	130.43	m /hour
Name	1						3
Naverage Sewage (Daracteristies   130.43   130.43   130.43   130.43   130.45   130	Peak design flow	7.83	MLD	7826087	LPD		
Average sewage flow entering the STP						326.09	m³/hour
Peak flow entering the STP	Raw Sewage Characteristics	1	1 .	1			
March   Marc	Average sewage flow entering the STP	130.43					
Primary ST/ET effluent BOD	Peak flow entering the STP	326.09	m <sup>3</sup> /hour				
Thickener overflow return as fraction of plant flow   0.45   0.470   MLD   0.470   M	COD	400	mg/l				
Diskener overflow return BOD	Primary ST/ET effluent BOD	250	mg/l				
Thickener overflow return BOD	_						
Centrate from sludge dewatering as fraction of plant flow   Centrate from sludge dewatering return   O.01878   MLD							
Centrate from sludge dewatering return   0.01878   MLD			mg/l				
Centrate from sludge dewatering return BOD   380   mg/l			) (I )				
Influent BOD to aeration tank							
TSS							
Total Nitrogen (As N)			Č				
Total Phosphorous (As P)							
Faceal Coliform							
E Coliform			_	1			
Chlorides as Cl			1				
PH							
Treated Sewage Characteristics (after filtration)   So   mg/1			1115/1				
SOD	Į.I.	· ·					
BOD		50	mg/l				
Total Nitrogen (As N)   9 mg/l	BOD	10					
Total Phosphorous (As P)	TSS	10	mg/l				
E Coliform   PH	Total Nitrogen (As N)	9	mg/l				
PH   Receiving Chamber   Second Property of Flow   Second Property o		1					
Receiving Chamber	E Coliform	1000	mpn/100 m	ıl			
Average quantity of flow   130.43   m³/hour	<u> </u>	7					
Peak flow	Receiving Chamber	<u> </u>	<u> </u>	ı	<u> </u>	ı	
No.091 m <sup>3</sup> /sec   No.091 m <sup>3</sup>	Average quantity of flow	130.43					
Average Retention Time for peak flow   30   sec   offset to wall   0.3   m	Peak flow	326.09	m <sup>3</sup> /hour				
Volume of the inlet chember         2.72         m³         free board         0.5 m           Assumed depth of flow         1.5 m         total height         2 m           Area required for inlet chamber         1.81 m²         wall thickness         0.25 m           Length of the tank         2.25 m         slab thickness         0.3 m           Breadth of the tank         0.81 fix         1 m         area in m²         7.035           Mechanical Coarse Screen Channel         0.091 m³/sec		0.091	m <sup>3</sup> /sec				
Assumed depth of flow	Average Retention Time for peak flow	30		offset to wall	0.3	m	
Area required for inlet chamber   1.81   m²   wall thickness   0.25   m     Length of the tank   2.25   m   slab thickness   0.3   m     Breadth of the tank   0.81   fix   1   m   area in m²   7.035     Mechanical Coarse Screen Channel	Volume of the inlet chember	2.72	$m^3$	free board	0.5	m	
Length of the tank   2.25 m   slab thickness   0.3 m	Assumed depth of flow	1.5		total height	2	m	
Breadth of the tank   0.81   fix   1 m   area in m²   7.035	Area required for inlet chamber	1.81	$m^2$	wall thickness	0.25	m	
Mechanical Coarse Screen Channel         0.091         m³/sec                               Number of screen         1	Length of the tank	2.25	m	slab thickness	0.3	m	
Mechanical Coarse Screen Channel         0.091         m³/sec                               Number of screen         1	Breadth of the tank	0.81	fix	1	m	area in m <sup>2</sup>	7.035
Number of screen         1         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         0.091         m³/sec         0.091 <td>Mechanical Coarse Screen Channel</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Mechanical Coarse Screen Channel						
Number of screen         1         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         m³/sec         0.091         0.091         m³/sec         0.091 <td>Peak design flow</td> <td>0.091</td> <td>m<sup>3</sup>/sec</td> <td></td> <td></td> <td></td> <td></td>	Peak design flow	0.091	m <sup>3</sup> /sec				
Peak flow rate per screen         0.091         m³/sec         assumed           Velocity at peak flow         0.8         m/sec         assumed           Velocity through clean bar screen         0.86         m/sec            Length of channel U/S         1         m            Width of channel provided         0.8         m            Depth of flow         0.14         m            Area required for screen         0.113         sqm            Headloss through bar screen         0.01         m         assuming head loss coefficient = 0.7           Assumed depth of flow after inserting bar screen         0.2         m         0.15 (control value)           Width of channel required         0.57         m         fix         1           Clear bar spacing         20         mm         (20 to 50 mm)            Bar thickness         10         mm         (5 to 15 mm)		1					
Velocity at peak flow         0.8 m/sec         assumed           Velocity through clean bar screen         0.86 m/sec			m <sup>3</sup> /sec				
Velocity through clean bar screen         0.86         m/sec	1			assumed			
Length of channel U/S         1         m             Width of channel provided         0.8         m             Depth of flow         0.14         m             Area required for screen         0.113         sqm             Headloss through bar screen         0.01         m         assuming head loss coefficient = 0.7           Assumed depth of flow after inserting bar screen         0.2         m         0.15 (control value)           Width of channel required         0.57         m         fix         1         m           Clear bar spacing         20         mm         (20 to 50 mm)          Bar thickness         10         mm         (5 to 15 mm)							
Width of channel provided         0.8         m                               Depth of flow         0.14         m                               Area required for screen         0.113         sqm                               Headloss through bar screen         0.01         m         assuming head loss coefficient = 0.7           Assumed depth of flow after inserting bar screen         0.2         m         0.15 (control value)           Width of channel required         0.57         m         fix         1         m           Clear bar spacing         20         mm         (20 to 50 mm)                   Bar thickness         10         mm         (5 to 15 mm)							
Depth of flow         0.14 m	<u>c</u>						
Area required for screen         0.113         sqm   <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
Headloss through bar screen $0.01$ massuming head loss coefficient = $0.7$ Assumed depth of flow after inserting bar screen $0.2$ m $0.15$ (control value)Width of channel required $0.57$ mfix $1$ mClear bar spacing $20$ mm $(20 \text{ to } 50 \text{ mm})$ Bar thickness $10$ mm $(5 \text{ to } 15 \text{ mm})$		0.113	sqm				
Width of channel required         0.57         m         fix         1         m           Clear bar spacing         20         mm         (20 to 50 mm)         10         mm         (5 to 15 mm)         10		0.01		assuming head	loss coe	efficient = 0.7	7
Clear bar spacing         20 mm         (20 to 50 mm)           Bar thickness         10 mm         (5 to 15 mm)	Assumed depth of flow after inserting bar screen	0.2	m	0.15	(control	value)	
Bar thickness 10 mm (5 to 15 mm)	Width of channel required	0.57	m	fix	1	m	
		20	mm				
Number of bars 20			mm	(5 to 15 mm)			
	Number of bars	20					

Clear bar spacing obtained	1 42	T	OK	ı	1	
Inside width of screen (openings)	0.8	mm	UK			
Full height of channel	1	m m	fb	0.5		
Angle of inclination	60	degree	1.05			
Actual velocity at peak flow	0.76	U	0.60 m/sec and 0		(a)	
Length of channel required D/S	1.73	m	fix	1.75	-/	2.75
Manual Coarse Screen Channel	1./3	1111	IIX	1./3	111	2.13
	0.0906	m <sup>3</sup> /sec	<u> </u>	Ι	<u> </u>	
Peak design flow Number of screen	1	m /sec	1			
		3.				
Peak flow rate per screen	0.091	m <sup>3</sup> /sec	ļ			
Velocity at peak flow	0.8	m/sec	assumed			
Velocity through clean bar screen	0.90	m/sec				
Length of channel U/S	1	m	wall thickness	0.25		
Width of channel provided	0.8	m	offset to wall	0.25		
Depth of flow	0.14	m	slab thickness	0.30	m	
Area required for screen	0.113	sqm	. 7		<u></u>	,
Headloss through bar screen	0.01	m	assuming head			
Assumed depth of flow after inserting bar screen	0.2	m		(control		
Width of channel required	0.57	m	fix (20 to 50 mm)	1	m	
Clear bar spacing Bar thickness	20	mm	(20 to 30 mm) (5 to 15 mm)			
Number of bars	10 25	mm	(3 to 13 mm)			
	31		OK			
Clear bar spacing obtained		mm	UK		. 2	
Inside width of screen (openings)	0.75	m	_		area in m <sup>2</sup>	5.5
Full height of channel	1	m	fb	0.3		
Angle of inclination	60	degree	1.05		<u> </u>	
Actual velocity at peak flow	0.78	+ '	0.60 m/sec and (			
Length of channel required D/S	1.73	m	fix	1.75	m	
Mechanical Fine Screen Channel		1 2		ı		
Peak design flow	0.091	m <sup>3</sup> /sec				
Number of screen	1					
Peak flow rate per screen	0.091	m <sup>3</sup> /sec				
Velocity at peak flow	0.8	m/sec	assumed			
Velocity through clean bar screen	1.10	m/sec				
Length of channel U/S	1.75	m	wall thickness	0.25		
Width of channel provided	0.6	m	offset to wall	0.25	m	
Depth of flow	0.19	m	slab thickness	0.30	m	
Area required for screen	0.11	sqm				
Headloss through bar screen	0.04	m	assuming head			'
Assumed depth of flow after inserting bar screen	0.25	m		(control		
Width of channel required	0.45	m	fix	1	m	
Clear bar spacing	6	mm	(up to 6 mm)			
Bar thickness	10	mm	(5 to 15 mm)			
Number of bars	65					
Clear bar spacing obtained	5.5	mm				
Inside width of screen (openings)	0.35	m	1			
Full height of channel	1	m	fb	0.5		
Angle of inclination	45	degree	0.79		<u> </u>	
Actual velocity at peak flow	1.12	+	0.60 m/sec and			
Length of channel required D/S	1.00	m	fix	1	m	2.75
Daily screening quantity		3	1	ı		
Daily sewage quantity	3130	m <sup>3</sup> /day				
Rate of screening quantity	0.015	m <sup>3</sup> /1000 m	13			
Daily screening quantity	0.0470	m <sup>3</sup> /day				
Grit Separator Chamber						
Number of grit units	1	SB	1			
Peak flow	0.0906	m <sup>3</sup> /sec				
Flow in one unit	0.0906	m <sup>3</sup> /sec				
Grit particle size	0.0900					
	90	mm	(15 to 00 ac-	tunical C	0)	
HRT	90	sec	(45 to 90 sec,	іурісаі б	<i>u)</i>	

		1 2	1			
Volume of grit chamber	8.15	m <sup>3</sup>				
SOR	900		(empirical, fro	m observ	vations)	
	0.010	m <sup>3</sup> /m <sup>2</sup> /sec				
Area required	8.70	$m^2$	wall thickness	0.25	m	
SWD	2.00	m	slab thickness	0.30		
Side of square channel	2.95	m	offset to wall	0.3	m	
Fix length	3	m	freeboard	0.5		
Fix width	3	m	area given	9	m <sup>2</sup>	OK
Shape factor	0.85		volume given	18.00		OK
Specific gravity of liquid	2.65		volume given	16.00	111	OK
Kinematic viscosity	1.003E-06	m <sup>2</sup> /saa				
,	0.036		apply Stoke's l		tomain al mal	
V <sub>p</sub> in m/sec	6			uw io gei I	lerminai veid	icity vp
N <sub>r</sub>	-	арріу Newi	ton's equation			
assumed velocity in m/sec	0.0146				. 2	
Nr	2				area in m <sup>2</sup>	16.81
drag coefficient Cd	11.95					
vp in m/sec	0.019	,		<u> </u>		
Critical displacement velocity, Vc	0.0190	m/sec		R <sub>t</sub>	1.50	
Horizontal velocity of flow, Vh	0.0151	m/sec	OK	$R_v$	1.26	
Equalisation Tank		I	1	Г	l	
Number of units	1	2				
Average design flow	130.43	m <sup>3</sup> /hour				
Volume of tank required	789.00	$m^3$	from detailed	analysis		
HRT	6.05	hours	free board	0.50		
SWD	4	m	offset to wall	0.45	m	
Area required for each tank	197.25	m <sup>2</sup>	wall thickness	0.3	m	
Diameter of circular tank	15.85	m	fix	16		
Side if square tank	14.04	m	fix length	14.5		
Thickness of foundation slab	0.45	m	fix breadth	14.5	m	
Actual capacity provided	804.2	m <sup>3</sup>	circular	OK		
	841.00	$m^3$	rectangular	OK	area in m <sup>2</sup>	256.00
Moving Bed Bio-Reactor (MBBR)-Single Stage						
Number of tanks proposed	1					
Average design flow/tank	3130.43	m <sup>3</sup> /day				
Number of streams	1					
BOD of incoming sewage	283.11	mg/l				
TSS of incoming sewage	400	mg/l				
BOD expected after treatment	10	mg/l				
BOD to be removed	273.11	mg/l				
BOD removal % expected	96.47					
BOD loading rate/volume	4	kg/m³/day	4-7 kg/m <sup>3</sup> /day	v as per N	1&E	
Actual BOD loading rate	886.27	kg/day				
Quantity of BOD to be removed per day	854.97	kg/day				
Volume of reactor required	221.57	m <sup>3</sup>				
Surface area loading rate (SALR) for BOD removal	7.50	g/m <sup>2</sup> /day				
Required carrier surface area	118169.40	$m^2$				
Specific surface area of carrier	450.00	$m^2/m^3$				
Required carrier volume	262.60	m <sup>3</sup>				
Volume of media required	40%					
1	88.63	m <sup>3</sup>	depth of base	0.9	m	
Volume of tank required-BOD loading rate/volume method		m <sup>3</sup>	slab thickness	0.35		
Volume of tank required- SALR method	656.50	m <sup>3</sup>	offset to wall	0.33		
<u> </u>		m <sup>3</sup>				
Volume of each tank SWD	656.50		total height wall thickness	4.50 0.30		
מאסן				00	1111	ı
	164.12	m 2			i	
Area of each tank	164.12	m <sup>2</sup>	fix dia	14.8	m	
Area of each tank Diameter of circular tank Side of square tank					m m	

	(00.14	m <sup>3</sup>	OW	ı		l
Actual capacity provided-circular	688.14	<b>+</b>	OK			
Actual capacity provided-rectangular	696.96	m <sup>3</sup>	OK			
Fix capacity	688.14	m <sup>3</sup>				
Actual volume of media obtained	275.26	m <sup>3</sup>				
Actual carrier surface area	123865.20					
Volume of liquid in the tank	578.04	$m^3$				
Hydraulic Retension Time at design average flow	4.43	hours	265.9	minutes		
Hydraulic Retension Time at peak flow	1.77	hours	106.4	minutes		
SARR for the given SALR	6.94	g/m <sup>2</sup> /day			area in m <sup>2</sup>	216.09
Estimated BOD removal rate	859.31	kg/day				
Actual BOD removal rate %	96.96	BOD of ef	fluent	8.61	mg/l	ok
Moving Bed Bio-Reactor (MBBR)-Single Stage Nitrifi					1	1
Number of tanks proposed	1	2				
Average design flow/tank	3130.43	m <sup>3</sup> /day				
Number of streams	1					
BOD of incoming sewage	10.00	mg/l				
NH <sub>4</sub> -N of incoming sewage	40.00	mg/l				
Alkalinity as CaCO <sub>3</sub>	140.00	mg/l				
Target effluent NH <sub>3</sub> -N	3.30	mg/l	% removal	91.75		
DL level to be maintained in tank	2.00	mg/l				
Design minimum waste water temperature	20.00	°C				
SARR <sub>max</sub>	0.61		SARR temp co		1.058	
Minimum NH <sub>3</sub> -N at SARR <sub>max</sub>	0.50		$SARR_T$	0.81	g/m <sup>2</sup> /day	
Design value of SALR	0.88	g/m <sup>2</sup> /day				
NH <sub>3</sub> -N loading rate	125.22	kg/day				
Required carrier surface area	142073.33	m <sup>2</sup> /day				
Specific surface area of carrier	600.00	$m^2/m^3$				
Required carrier volume	236.79	m³/day	depth of base	0.65	m	
Volume of media required	40%	III /uay	slab thickness	0.05		
Volume of tank required- SALR method	591.97	m <sup>3</sup>	offset to wall	0.33		
•	591.97	m <sup>3</sup>				
Volume of each tank SWD	4		total height wall thickness	3.50 0.30		
	147.99	m m <sup>2</sup>				
Area of each tank  Diameter of circular tank	_	1	fix dia	13.8		
Side of square tank	13.73	m m	fix length fix breadth	12.2		
-	598.29	m <sup>3</sup>		12.2	111	
Actual capacity provided-circular	_	m m <sup>2</sup>	OK			
Actual capacity provided-rectangular	595.36		OK			
Fix capacity	598.29	m <sup>3</sup>				
Actual volume of media obtained	239.32	m <sup>3</sup>				
Actual carrier surface area	143589.60	$m^2$			area in m <sup>2</sup>	187.69
Volume of liquid in the tank	502.56	$m^3$				
Hydraulic Retension Time at design average flow	3.85	hours	231.18	minutes		
Hydraulic Retension Time at peak flow	1.54	hours	92.47	minutes		
Estimated NH <sub>3</sub> -N removal rate	116.11	kg/day				
NH <sub>3</sub> -N of effluent	2.91	mg/l				
BOD SALR	0.22	g/m <sup>2</sup> /day	should be < 0.	5 to achi	eve good niti	rification
Using the equivalent weight of CaCO <sub>3</sub> as 50, the equivalent	lent weight of					
CaCO <sub>3</sub> /g NH <sub>3</sub> -N and the target effluent alkalinity as 80 m						
CaCO <sub>3</sub> .	- ,	-		- 1		J
Influent alkalinity	140.00	mg/l				
Target effluent alkalinity	80.00	mg/l				
Alkalinity used for Nitrification	7.14	g CaCO <sub>3</sub> /g	NH <sub>3</sub> -N			
Alkalinity to be added	202.04	mg/l				
Rate of alkalinity addition needed as CaCO <sub>3</sub>	632.47	kg/day				
Equiv wt. of CaCO <sub>3</sub>	50.00	g/equivaler	nt			
Equiv wt. of NaHCO <sub>3</sub>	84.00	g/equivaler	nt			

Daily NaHCO <sub>3</sub> requirement	1062.54	Ira/day NaII	CO			I
Blower air requirement	1062.54	kg/day NaH	CO <sub>3</sub>			
BOD loading/tank	886.27	kg/day				
NH <sub>3</sub> -N loading rate/tank	125.22	kg/day kg/day				
Oxygen uptake ratio-BOD	1.50	kg of O <sub>2</sub> /kg	of BOD			
Oxygen uptake ratio-NH <sub>3</sub> -N	4.35	$kg \text{ of } O_2/kg$				
Oxygen required for BOD loading	1329.41	kg/day	01 11113-11			
Oxygen required for NH <sub>3</sub> -N loading	544.70	kg/day kg/day				
Percentage of O <sub>2</sub> in air	21.00	Kg/day				
Weight of air required-BOD loading	6330.50	kg/day				
Weight of air required-NH <sub>3</sub> -N loading	2593.79	kg/day				
Density of air	1.225	kg/m <sup>3</sup>				
<u>-</u>	5167.76					
Volume of air-BOD loading	_	m <sup>3</sup> /day				
Volume of air-NH <sub>3</sub> -N loading	2117.38	m³/day				
Air transfer efficiency of diffuser	0.100	2				
Quantity of air required-BOD loading		m <sup>3</sup> /day				
Quantity of air required-NH <sub>3</sub> -N loading	21173.79	m <sup>3</sup> /day				
Factor of saftey	1.10					
Volume of air required-BOD loading	2368.56	m <sup>3</sup> /hour				
Volume of air required-NH <sub>3</sub> -N loading	970.47	m <sup>3</sup> /hour				
Volume of equalisation tank	789.00	m <sup>3</sup>				
Normal inflow	0.036	m <sup>3</sup> /sec				
Air requirement for equalisation tank	1.25	m <sup>3</sup> /m <sup>3</sup> /hour				
	3.00	m <sup>3</sup> /m <sup>3</sup> /hour				
Air requirement for sludge tank						
Volume of ET	789.00	m <sup>3</sup>				
Volume of air required for ET	986.25	m <sup>3</sup> /hour				
Volume of air required for ST	16.81	m <sup>3</sup>				
Total air required	4342.08	m <sup>3</sup> /hour				
Capacity of blower	4342.00	m <sup>3</sup> /hour				
Number of blowers working	3.00	SB	1			
Air required per blower	1447.33	m <sup>3</sup> /hour				
Pressure given	0.60	kg/cm <sup>2</sup>	5.89	m		
Volumetric efficiency	70%	8	2.07			
Power required for blower motor	45.39	HP		kw		
Fix power of blower motor	46.00	HP				
Energy/tank	2437.94	kwh				
Alum solution tank						
number of units	1					
dosage of alum	50	ppm				
requirement for 8 hours	52.170	kg				
volume of solution at 10% strength/unit	0.470	m <sup>3</sup>				
length of tank	1	m				
breadth of tank	1	m				
liquid depth	0.47	m				
total depth	0.75	m 3 u				
solution flow rate	0.0588	m <sup>3</sup> /hour				
Lime solution tank	1					1
number of units dosage of lime	35	nnm				
requirement for 8 hours	36.52	ppm kg				
volume of solution at 10% strength/unit	0.34	m3				
length of tank	1	m				
breadth of tank	1	m				
liquid depth	0.34	m				
total depth	0.6	m				
solution flow rate	0.04250	m <sup>3</sup> /hour				
Secondary Clarifier	<u> </u>					
No. of Tanks	1					
		-				

	I	2	ı			
Average Flow in each tank	3130.43	m <sup>3</sup> /day				
SOR	25.00	m³/m²/day				
SWD	2.80	m				
Solid conc. In settled sludge -% Withdrawal frequency - continuous	0.8 to 0.9	%				
	125.22	2				
Area Required for the Tank	125.22	m <sup>2</sup>				
Diametre Required for Secondary Settling Tank Assumed Detention Period	12.63	m				
Volume	3.10 404.35	hrs m <sup>3</sup>		ED	0.5	
Depth of the Clarifier assumed	2.80			FB	0.5	
		m m <sup>2</sup>				
Area of the Clarifier	144.41					
Provide Secondary Clarifier of Diametrer		m				
Surface Loading Rate	21.68	m <sup>3</sup> /m <sup>2</sup> /day		OK		
Check for Peak flow	48.77	m <sup>3</sup> /m <sup>2</sup> /day		OK		
Sludge Sump		•	ı			
Number of units	1	2				
Average flow/tank	3130.43	m <sup>3</sup> /day				
TSS	400	mg/l				
BOD	283.11	mg/l				
Assumed TSS Sludge	30%					
Assumed BOD Sludge	35%	1 /4-				
Sludge generated POD	375.7	kg/day				
Sludge generated-BOD Total sludge	310.2 685.85	kg/day kg/day				
% sludge with 1.02 specific gravity	10%	Kg/uay				
Sludge volume per day/tank	67.24	m <sup>3</sup> /day				
Studge volume per day/tank	2.80	m <sup>3</sup> /hour				
Assumed HRT	2.80	m /nour hours	freeboard	0.35		
	5.60	m <sup>3</sup>				
Volume of tank Assumed SWD	2	m m	slab thickness offset to wall	0.3		
	2.80	m <sup>2</sup>				
Area of the tank  Diameter of circular tank	1.89	m m	wall thickness fix	0.25		
	5.67	m <sup>3</sup>	IIX	1.9	area in m <sup>2</sup>	2.00
Actual capacity provided  Pump for Sludge transfer to Thickner	3.07	III			area in in	3.00
Number of pumps	1.00	W	1	SB		
Specific gravity of liquid	1.03	**		SB.		
Tipe of pump set	fugal sewag	e transfer-no	n clog			
Working hours	5.00	hours				
Discharge required	13.45	m <sup>3</sup> /hour	0.003736	m <sup>3</sup> /sec		
Required head	15.00	m	0.000750			
Velocity in sludge transfer pipe adopted	0.70					
Pipe diameter required	0.70	m/sec				
	82.43	m/sec mm	fix	100	mm	
Efficiency			fix	100	mm	
<u> </u>	82.43		fix fix	2.00		
Efficiency Power required Energy	82.43 <b>50%</b>	mm				
Efficiency Power required Energy Sludge Thickener	82.43 <b>50%</b> 1.49 5.57	mm HP				
Efficiency Power required Energy Sludge Thickener Number of units	82.43 <b>50%</b> 1.49 5.57	mm HP kwh				
Efficiency Power required Energy Sludge Thickener Number of units Total sludge	82.43 50% 1.49 5.57 1 685.85	mm HP kwh				
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate	82.43 50% 1.49 5.57 1 685.85 40	mm  HP kwh  kg/day kg/m²/day				
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required	82.43 50% 1.49 5.57 1 685.85 40 17.15	mm HP kwh kg/day kg/m²/day m²				
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate	82.43 50% 1.49 5.57 1 685.85 40 17.15	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day				
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required	82.43 50% 1.49 5.57 1 685.85 40 17.15	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m²			НР	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate	82.43 50% 1.49 5.57 1 685.85 40 17.15	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day	fix	2.00 0.35 0.35	HP m m	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate Thickening area required	82.43 50% 1.49 5.57 1 685.85 40 17.15 12 5.60	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m² m²	fix	2.00	HP m m	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate Thickening area required Maximum area Area of distribution chamber Total area required	82.43 50% 1.49 5.57 1 685.85 40 17.15 12 5.60 17.15	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m²	fix freeboard slab thickness	0.35 0.35 0.35	M m m	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate Thickening area required Maximum area Area of distribution chamber	82.43 50% 1.49 5.57 1 685.85 40 17.15 12 5.60 17.15 20%	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m² m²	freeboard slab thickness offset to wall	0.35 0.35 0.35	m m m	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate Thickening area required Maximum area Area of distribution chamber Total area required	82.43 50% 1.49 5.57 1 685.85 40 17.15 12 5.60 17.15 20% 20.58	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m² m²	freeboard slab thickness offset to wall wall thickness	0.35 0.35 0.35 0.35	m m m	
Efficiency Power required Energy Sludge Thickener Number of units Total sludge Solids Loading Rate Thickening area required Surface Loading Rate Thickening area required Maximum area Area of distribution chamber Total area required Diameter of circular tank	82.43 50% 1.49 5.57 1 685.85 40 17.15 12 5.60 17.15 20% 20.58 5.12	mm  HP kwh  kg/day kg/m²/day m² m³/m²/day m² m²	freeboard slab thickness offset to wall wall thickness	0.35 0.35 0.35 0.35	m m m	

Thickened sludge consistency	3%	of total slue	dge volume			
Thickened sludge volume	20.58	m <sup>3</sup> /day			area in m <sup>2</sup>	6.50
Pump for Sludge transfer to Centrifuge	20.00	iii /ddy			area in in	0.50
Type of pump set	Screw pump	,				
Number of pumps	1.00	W	1	SB		
Volume of thickened sludge to be pumped	20.58	m <sup>3</sup> /day				
Working hours of centrifuge	5.00	hours				
Discharge required	4.12	m <sup>3</sup> /hour	1.1E-03	m <sup>3</sup> /sec		
Head required	15.00	m				
Efficiency	50%					
Power required	0.46	fix	1.00	HP		
Energy	1.705	kwh				
Sludge Centrifuge and Dosing Tanks				<u> </u>		
Number of centrifuges	1	SB	1			
Capacity of centrifuge	0.25	m <sup>3</sup> /hour				
Poly electrolyte dozing for centrifuge & thickener	10%					
Sludge volume	685.85	kg/day				
Dose Quantity of Poly Electrolyte	1.37	kg/1000 kg	<u> </u>			
Concentration	0.1	kg/day				
	1.37	m <sup>3</sup>				
Volume of tanks @ 24 hour	1371.69	m litres				
Volume	57.15	litres/hour				
Volume required for 8 hours	0.46	m <sup>3</sup>				
Liquid depth of tank	1	m				
Area required	0.46	m <sup>2</sup>				
<u> </u>	0.68		<u> </u>	0.6	2	0.72
side of square tank	0.08	m	fix	0.6	area in m <sup>2</sup>	0.72
HRT	30	minutes	offset to wall	0.3	m	
Average flow	130.43	m³/hour	wall thickness	0.25		
	65.22	m <sup>3</sup>				
Volume of tank Assumed liquid depth			slab thickness freeboard	0.35		
<del> </del>	2.5 26.09	m m <sup>2</sup>	freeboard	0.35	area in m <sup>2</sup>	20.00
Area of the tank side of square tank	5.11		fix	4.2		28.09
Filter feed tank	3.11	m	IIIX	4.2	III	
HRT	20	minutes	offset to wall	0.3	m	
Average flow	130.43	m³/hour	wall thickness	0.25		
	43.48	m <sup>3</sup>				
Volume of tank Assumed liquid depth	2.5	m m	slab thickness freeboard	0.35		
	17.39	m <sup>2</sup>	necooaid	0.55	111	
Area of the tank side of square tank	4.17	m m	fix length	4.2		
side of square tank	4.17	111	fix breadth	4.2		
Volume provided	44.10	OK	IIX Orcadiii	7,2	area in m <sup>2</sup>	28.09
Pressure Sand Filter	11110	OK			arca in in	20.09
Number of units	3					
Average flow/filter	1043.48	m³/day				
Filter operating hours	20	hours				
Operating flow/filter	52.17	m³/hour				
Filter Loading Rate	12	m <sup>3</sup> /m <sup>2</sup> /hour	l r			
	4.35	m <sup>2</sup>				
Area of the filter required  Area of each filter	4.35					
Diameter of filter required	2.35	sqm m	fix	2.4	m	
Height of the filter	2.5	m	offset to wall	0.5		
Operating pressure	3.5	Bar	-11000 10 11411	0.0		
Filter media	Sand				area in m <sup>2</sup>	34.68
Activated Carbon Filter						34.00
Number of units	3					
Average flow/filter	1043.48	m <sup>3</sup> /day				
<i>6</i> ···					·	

Filter operating hours	20	hours				
Operating flow/filter	52.17	m³/hour				
Filter Loading Rate	10	m <sup>3</sup> /m <sup>2</sup> /hour	r			
Area of the filter required	5.22	m <sup>2</sup>				
Area of each filter	5.22	sqm				
Diameter of filter required	2.58	m	fix	2.6	m	
Height of the filter	2.5	m	offset to wall	0.5	m	
Operating pressure	3.5	Bar				
Filter media	tivated Carl	oon			area in m <sup>2</sup>	38.88
Pump for clarified water to PSF and ACF						
Type of pump set	CF					
Number of pumps	2.00	W	1	SB		
Discharge of clarified water required/pum set	65.22	m <sup>3</sup> /hour				
Working hours of pumps	20.00	hours				
Discharge required/pump set	78.26	m <sup>3</sup> /hour	2.2E-02	m <sup>3</sup> /sec		
Head required	40.00	m				
Efficiency	60%					
Power required	19.32	fix	20.00	HP		
Energy	288.31	kwh				
Treated Water Tank						
HRT	60	minutes	offset to wall	0.3	m	
Average flow	130.43	m <sup>3</sup> /hour	wall thickness	0.3	m	
Volume of the tank	130.4	$m^3$	slab thickness	0.35	m	
Assumed liquid depth	3	m	freeboard	0.35	m	
Area of the tank	43.48	m <sup>2</sup>				
Number of tanks	1		fix length	6.6	m	
Area of one tank	43.48	m <sup>2</sup>	fix breadth	6.6	m	
Side of square tank	6.59	m				
Volume provided	130.68	m <sup>3</sup>	OK			

APPENDIX-II-Eqalization tank				
Anaerobic Zone				
Vlume	789.00	m <sup>3</sup>		
Detention time	6.05			
HRT of Anerobic Zone	1 hr			
Volume	130.4348	131		
Area	37.42857			
Segment width	2.339286	4	circular	
Anoxic Zone				
NH4-N influent	40	mg/l		
NH4-N effluent	5	mg/l		
Influent nitrogen loading	160	Kg		
operating temperature	25°c			
5 % Nitrogen Assimilated in BOD removal	12	mg/l		
NH3-N to be Nitrified	23	mg/l		
NO3-N Generated @75% Nitrification of NH3-N	17.25	mg/l		
NO3-N effluent	4	mg/l		
NO3-N to be Dentirified	13.25	mg/l		
MLVSS/MLSS	0.72	assumed		
Specific denitrification rate, Udn	0.04	/d	.04 to .42	
Dissolved oxygen	0.5	mg/l		
Overall denitrification rate	0.030772			
MLSS in aeration tank	4000	mg/l		
Anoxic Retentioin time HRTdn	0.134556	per day		
	3.229347	hr		
Volume required	421.2191	m <sup>3</sup>		
Volume available in Equalization tank for anoxic region	658.57	m <sup>3</sup>		
So ok				
RAS Recycle ratio Assumed	0.5			
Internal recycle ratio (Nitrate recycle)	4.1			
Total quantity of sewage to be pumped to next unit	886.941			
Capacity of each pump				

# General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY -PHASE 2-CONSTRUCTION OF 3 MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NET WORK TO ZONE 2 OF KOYILANDY MUNICIPALITY

SI No	Heading Description		Amount
	į .		
1	PART-A1- STP1- ESTIMATE NO: 2022/2718(WITHOUT GST)		33093324.83
2	PART-A2- STP2- ESTIMATE NO: 2022/2719(WITHOUT GST)		36328474.40
3	PART-A3- ELECTRO MECHANICAL- ESTIMATE NO: 2022/2720(WITHOUT GST)		43720111.80
4	PART-B- NETWORK- ESTIMATE NO: 2022/2721(WITHOUT GST)		755530350.23
5	PART- C- O&M ESTIMATE NO: 2022/2698(WITHOUT GST)		296690585.61
6	PART-D- CENTAGE CHARGES @10%OF (A B C)		116536284.70
7	PART-E- GST@18% OF (A B C)		209765312.40
8	PART-F- DPR PREPERATION CHARGES@2.5% OF (A B)	4.3	21716806.53
9	PART-G-UNFORESEEN ITEMS	81	6618749.50
		Total	1520000000.00
	C	entage @	0.0%
	Centaç	ge Amount	0.00
	Kera Provision for GST payments	s (in %) @	0.0%
	Amount reserved for GST		0.00
	Total 8	& Centage	1520000000.00
	Lumpsum fo	r round off	0.00
	GRAND 1	OTAL Rs	1520000000.00
		Rounded Gr	and Total Rs 1,52,00,00,00
	Ruj	pees One Hu	ndred Fifty Two Crore Onl

# General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART A- STP1

			Grand Total Rs 3,90,50,
	GRAND TO		39050123.30
	Lumpsum for	round off	0.00
	Total &	Centage	39050123.30
	Amount reserved for GST p	ayments	5956798.47
	Provision for GST payments	(in %) @	18.0%
	Centage	Amount	0.00
	Kerala Water Authorit	ntage @	0.0%
		Total	33093324.83
11	Centrate Sump		341163.43
10	TREATED WATER TANK	1643792.46	
9	FILTER FEED TANK	794747.58	
8	THICKENED SLUDGE SUMP	5.1	511126.53
7	SLUDGE THICKNER		1080387.65
6	SLUDGE SUMP		274703.05
5	SECONDARY CLARIFIER		3963530.54
4	MBBR 1 & amp; 2		9219828.74
3	INLET CHEMBER/SCREEN CHANEL/GRIT CHEMBER/PARSHALLFLUME  EQUALISATION TANK		3824911.70 5790183.07
1	RAW SEWAGE RECEIVING CHAMBER CUM WELL		5648950.08
SI No	Heading Description		Amount

# General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART B- STP2

SI No	Heading Description		Amount
1	Site Preperation		3850416.60
2	Administrative/Laboratory/Chemical House / Control Room Building		4782474.92
3	Security Cabin		320279.13
4	Air Blower Building		2834146.05
5	Chlorination Building		2456623.55
6	Compound Wall		2145551.14
7	Internal Roads	1.1	2048864.99
8	Storm Water Drains	1 2	551910.65
9	Transformer Building	13/1	628364.03
10	DG Room		534866.07
11	Centrifuge Building		3285165.34
12	PSF/ACF Foundation		534973.21
13	Sludge Shed a Water Author	ty	654838.72
14	Landscaping, green belt formation and re-use of treated water		400000.00
15	Odour Control system		8800000.00
16	Providing Solar energy system		2500000.00
		Total	36328474.40
	C	entage @	0.0%
	Centag	je Amount	0.00
	Provision for GST payments	s (in %) @	18.0%
	Amount reserved for GST	payments	6539125.39
	Total 8	& Centage	42867599.79
	Lumpsum fo	r round off	0.00
	GRAND 1	OTAL Rs	42867599.79
		Rounde	ed Grand Total Rs 4,28,67,600
	Rupees Four Crore Twenty Eight Lakh S	ixty Seven	Thousand Six Hundred Only

# General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY -PHASE 2-CONSTRUCTION OF 3 MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NET WORK TO ZONE 2 OF KOYILANDY MUNICIPALITY-PART- C- ELECTRO-MECHANICAL-2

SI No	Heading Description		Amount	
1	MECHANICAL WORKS		21935912.82	
2	ELECTRICAL WORKS	10084198.98		
3	Charges for Power allocation to KSEB and power extension by cable	900000.00 200000.00		
4	Tools and Plants			
5	Providing SCADA system		2500000.00	
	- F. P. MIL & 25-	Total	43720111.80	
	Ce	entage @	0.0%	
	Centago	e Amount	0.00	
	Provision for GST payments	(in %) @	18.0%	
	Amount reserved for GST	payments	7869620.12	
	Total &	Centage	51589731.92	
	Kerala Water Lumpsum for	round off	0.00	
	GRAND TO	OTAL Rs	51589731.92	
	PRIC	Rounded G	Grand Total Rs 5,15,89,7	
	Rupees Five Crore Fifteen Lakh Eighty Nine Thousar	nd Seven Hun	dred and Thirty Two On	

# General Abstract

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART D- NETWORK

(Dsor year: 2018)

SI No	Heading Description		Amount		
1	Laying of sewer network		271190262.03		
2	Road Restoration work of laying of sewers and pumping main.		49308544.64		
3	Construction of Pumping stations		1851220.18		
4	Compound wall with gate for Pumping stations		3339050.48		
5	Construction of screen chamber and Valve chamber		1660910.15		
6	Construction of Valve chamber	No.	255472.28		
7	Construction of Control room and Generator Room	10	1363783.85		
8	Providing Cable Trenches	180779.77			
9	Bath cum Toilets	357701.44			
10	Mechanical, Electrical - Pumpsets, grit chamber screen, generator, transformer & mp;amp; allied works complete		4678495.52		
11	Pumping mains	11887473.58			
12	Laying PE pipes via HDD Method above 3m depth	4	63123751.14		
13	Construction of Man holes	lly	190839433.57		
14	Road Restoration - to PWD/NH		119907382.13		
15	Lifting Stations and Allied work		33386089.45		
16	Water Supply and Sanatory arrangements, Electrical wiring in pumping stations		800000.00		
17	Line extension , Deposit to KSEB, etc		1400000.00		
		Total	755530350.23		
	C	entage @	0.0%		
	Centag	ge Amount	0.00		
	Provision for GST payments	s (in %) @	18.0%		
	Amount reserved for GST	payments	135995463.04		
	Total 8	& Centage	891525813.27		
	Lumpsum fo	r round off	0.00		
	GRAND 1	TOTAL Rs	891525813.27		
		Rounded	Grand Total Rs 89,15,25,813		

Rupees Eighty Nine Crore Fifteen Lakh Twenty Five Thousand Eight Hundred and Thirteen Only

### **General Abstract**

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART E- O&M

SI No	Heading Description		Amount		
1	STP-Providing skilled and experienced personnals for the monitoring of the day to day operation and maintenance of the all systems for STP		4765399.85		
2	STP-Periodical cleaning STP units		7435.00		
3	STP-Upkeep of Civil structures, maintaining Landscaping etc.		133765.68		
4	STP-Annual Chemicals charges	415975.75			
5	STP-Major repairs and maintenance of Electro Mechanical work (Break down maintanence).	60000.00			
6	STP-Others	764893.00			
7	STP-Annual Operation and Maintenance for 9 years (2nd year to 10th year)	77458113.05			
8	SEWER- O&M OF WET WELLS AND CONNECTED WORKS	2248943.85			
9	SEWER- O&M OF CIVIL, ELECTRICAL, MECHANICAL WORKS, O&M OF LIFTING STATIONS, ETC	1174278.40			
10	SEWER-O&M OF SEWER LINE	1943615.05			
11	SEWER-O&M for 2nd year to 10th Year	67622149.98			
12	Electricity Charges for 10 years @ Rs14009601.6/year		140096016.00		
		Total	296690585.61		
	Ce	entage @	0.0%		
	Centago	e Amount	0.00		
	Provision for GST payments	(in %) @	18.0%		
	Amount reserved for GST	payments	53404305.41		
	Total &	Centage	350094891.02		
	Lumpsum for	round off	0.00		
	GRAND TO	OTAL Rs	350094891.02		
		Rounded	Grand Total Rs 35,00,94,8		
	Rupees Thirty Five Crore Ninety Four Thousa	nd Fight H	undred and Ninety One Or		

# **Detailed Estimate**

# SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART A- STP1

SI No	Description	No	L	В	D	CF	Quantity	Remark				
	1RAW SEWAGE	RECEIVIN	G CHAMBE	R CUM WE	LL (Cos	st Index:36.	44 %)					
1	2.1.1 Earth work in surface e sqm on plan including levelled and neatly dre	disposal of	excavated		•	_						
		1	10.000	10.000			100.000					
		1 1500	L SIN		То	tal Quantity	100.000 sq	m				
		101	LKa.	T	otal Deduct	otal Deducted Quantity 0.000 sqm						
		TOP			Net To	tal Quantity	100.000 sqr	m				
			sa ala Wat		sqm @ Rs 1	09.63 / sqm	Rs 109	63.00				
	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire	t exceeding	1.5 m in w m, includir	ridth or 10 s	sqm on plar out the exca	n), including	dressing of	sides and				
		1	3.140/4	8.000*8	1.500		75.360					
					То	tal Quantity	75.360 cun	n				
				Т	Total Deduct	ed Quantity	0.000 cum					
					Net To	tal Quantity	75.360 cum	1				
			S	Say 75.360 c	cum @ Rs 2	98.80 / cum	Rs 225	517.57				
3	od328597/2021_2022 Earth work in excavation by mechanical means ( Hydraulic excavator)/manual means over areas exceeding 30cm in depth,150cm in width as well as 10 sqm on plan) including disposal of excavate earth disposed earth to be levelled and neatly dressed for Manhole 2nd depth 1.5m to 3m											
		1	3.140/4	8*8	1.500		75.360					
					То	tal Quantity	75.360 cun	n				
				Т	Total Deduct	ed Quantity	0.000 cum					
							1					

			Sa	ay 75.360 d	cum @ Rs 3	22.41 / cum	Rs 24	296.82			
4	od328598/2021_2022 Fabricating MS Kerb of welded to the kerb and side of the steel work wunder coat of primer er	conveyand	ce charges of r more coat d	MS plate,a leluxe mult	all fabricatior ti surface pa	n charges, chaint to give a	harges of pa an even sha	ainting out ade over			
	For Kerb	1	3.140	7.700		3 1 2 2	24.178				
	1 of Refu	<u> </u>	3.140	7.700		tal Ouantitu		stro			
	Total Quantity 24.178 metre  Total Deducted Quantity 0.000 metre										
	Total Deducted Quantity 0.000 metre  Net Total Quantity 24.178 metre										
		9.86 / metre		6911.84							
5	5.7		Ouy 2	1.170 111011	0 @ 110 0 10	0.007 1110110	110 101	7011104			
	Reinforced cement con and reinforcement, with mm nominal size)				P. C. Communication of the Com		•	•			
	For Kerb	1	3.140*7.7	0.500	0.300		3.627				
		1*1/2	3.14*7.7	0.500	0.500	1	3.023				
	For steining up to ground	1	3.14*7.7	0.350	7.350		62.198				
		Ker	ala Wate	er Autl	ority To	tal Quantity	68.848 cui	m			
				_	Total Deduct	ed Quantity	0.000 cum				
			$R \mid$		Net To	tal Quantity	68.848 cun	n			
			Sa	y 68.848 cu	um @ Rs 86	11.41 / cum	Rs 592	2878.36			
6	Say 68.848 cum @ Rs 8611.41 / cum Rs 592878.36  od328600/2021_2022  Sinking wells (third depth) 7.00 m inside below spring level in all classes of soil to lines and levels a plumb by scooping out earth from inside and below the steining using necessary appliances including hire and labour for the same including dumping the spoil beyond the initial lead of 50 m etc. complete Total depth 3 to 4.5m (vide KWA SoR KW.5.4)										
		1			1.500		1.500				
					To	tal Quantity	1.500 met	re			
					Total Deduct	ed Quantity	0.000 metr	e			
					Net To	tal Quantity	1.500 metr	e			
			Sav 1.	.500 metre	@ Rs 4295	1.76 / metre	Rs 64	427.64			
7	od328601/2021_2022 Sinking wells (4th depth plumb by scooping out hire and labour for the Total depth 4.5 to 6.0m	earth fror same incl	n inside and uding dumpin	below the	steining usi	ng necessai	ry appliance	es includi			

		1			1.500		1.500	
					То	tal Quantity	1.500 met	re
				T	Total Deduct	ed Quantity	0.000 metr	е
					Net To	tal Quantity	1.500 metr	е
			Say 1	.500 metre	@ Rs 68382	2.01 / metre	Rs 102	2573.01
8	od328602/2021_2022 Sinking wells (5th dept plumb by scooping ou hire complete. Total depth	t earth from or the same	n inside and e including	below the s	steining using steining using the spoil be	ng necessa	ry appliance	es includin
		1	0	65	1.350		1.350	
			JAS		То	tal Quantity	1.350 met	re
			6.2		Total Deduct	ed Quantity	0.000 metr	е
		6	K 2	5. 7	Net To	tal Quantity	1.350 metr	е
			Say 1	.350 metre	@ Rs 72489	9.71 / metre	Rs 97	861.11
9	4.1.8 Providing and laying in shuttering - All work u					•		•
9		p to plinth l	evel:1:4:8 (	1 cement :	4 coarse sa	•		•
9	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1	p to plinth I	evel:1:4:8 (** ala Wat 0.166*3.1	1 cement : er Auth (3*16)+0.3	4 coarse sa	•	ed stone aç	gregate 4
9	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1	p to plinth I	evel:1:4:8 (** ala Wat 0.166*3.1	er Auth (3*16)+0.3	4 coarse sa	nd : 8 grad	15.125 cu	gregate 4
9	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1	p to plinth I	evel:1:4:8 (** ala Wat 0.166*3.1	er Auth (3*16)+0.3	4 coarse sa	nd : 8 grad	15.125 15.125 cui	ggregate 4
9	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1	p to plinth I	ala Wat 0.166*3.1 4*0.6	1 cement : 4 er Auth (3*16)+0.3 6	4 coarse sa	nd: 8 grad	15.125 cur 0.000 cum	ggregate 4
9	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1	y to plinth I	ala Wat 0.166*3.1 4*0.6  Sa	1 cement : 4 er Auth (3*16)+0.3 6	To Total Deduct Net Tour @ Rs 68	tal Quantity ed Quantity tal Quantity tal Quantity 57.61 / cum	15.125 cur 0.000 cum 15.125 cun Rs 103	n m 3721.35
	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1 4*0.6(3*16)+0.36  4.1.3  Providing and laying in shuttering - All work up	y to plinth I	ala Wat 0.166*3.1 4*0.6  Sa	1 cement : 4 er Auth (3*16)+0.3 6	To Total Deduct Net Tour @ Rs 68	tal Quantity ed Quantity tal Quantity tal Quantity 57.61 / cum	15.125 cur 0.000 cum 15.125 cun Rs 103	m n 3721.35
	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1 4*0.6(3*16)+0.36  4.1.3  Providing and laying in shuttering - All work upominal size)	p to plinth I	evel:1:4:8 (**  ala Wat  0.166*3.1  4*0.6  Sa  ement concrevel:1:2:4 (ce	er Auth (3*16)+0.3 6	Total Deduct Net Tour @ Rs 68.  ified grade exparse sand :  0.200	tal Quantity ed Quantity tal Quantity tal Quantity 57.61 / cum	15.125 cur  15.125 cur  0.000 cum  15.125 cur  Rs 103  e cost of cestone aggres  7.694	m n 3721.35 ntering an
	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1 4*0.6(3*16)+0.36  4.1.3  Providing and laying in shuttering - All work upominal size)	p to plinth I	evel:1:4:8 (**  ala Wat  0.166*3.1  4*0.6  Sa  ement concrevel:1:2:4 (ce	1 cement : 4 er Auth (3*16)+0.3 6	Total Deduct Net Tour @ Rs 68.  ified grade exparse sand :  0.200	nd: 8 grad	15.125 cur  15.125 cur  0.000 cum  15.125 cur  Rs 103  e cost of cestone aggres  7.694  7.694 cur	m n 3721.35 ntering an
	Providing and laying in shuttering - All work unominal size)  bottom portion like cap of hemisphere0.166*3.1 4*0.6(3*16)+0.36  4.1.3  Providing and laying in shuttering - All work upominal size)	p to plinth I	evel:1:4:8 (**  ala Wat  0.166*3.1  4*0.6  Sa  ement concrevel:1:2:4 (ce	1 cement : 4 er Auth (3*16)+0.3 6	Total Deduct  Net Tour @ Rs 68  ified grade exparse sand :  0.200  Total Deduct	nd: 8 grad	15.125 cur 0.000 cum 15.125 cur Rs 103 e cost of cestone aggres 7.694 7.694 cum 0.000 cum	m n 3721.35 ntering and

11	5.1.2										
	Providing and laying in centering, shuttering, fini sand :3 graded stone age	shing and	reinforceme	ent - All work			•				
	well base	1	3.14/4	7*7	0.300		11.540				
					To	otal Quantity	11.540 cur	n			
				Т	Total Deduc	ted Quantity	0.000 cum				
		Net To	otal Quantity	11.540 cum	]						
			Sa	ay 11.540 cu	ım @ Rs 91	42.09 / cum	Rs 105	499.72			
12	4.15 Extra for laying concrete water and removing slumultiplying the depth mesoil water level with quar gravity shall be reconed ignored.	sh etc. co asured fro ntity of cor	omplete. Not om the sub-s ncrete in cun	te for item Noil water lev	No. 4.15 : - rel upto cen under the su	The quantite of gravity	ty will be ca of concrete . The depth	lculated under s of centre			
	Top portionTop portion	4	3.14/4	7.7*7.7	0.300		13.963				
	bottom portion like c a p o f hemisphere10.166*3. 14*0.60(3*16)+0.36	1 Ker	0.166*3.1 4*0.60 ala Wat	(3*16)+0.3 er Åuth	ority		15.125				
	pcc For bottom plugging		3.14/4	7*7	0.200	E	7.694				
					To	otal Quantity	36.782 cum				
		0.000 cum									
		36.782 cum	1								
			S	Say 36.782 c	cum @ Rs 9	941.23 / cum	Rs 34	620.32			
13	5.22.4 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position arbinding all complete upto plinth levelHot rolled deformed bars										
	(68.848+11.54+8.368) @120kg/m3	1	88.756		120.000		10650.720				
					To	otal Quantity	10650.720	kilogran			
				Т	Total Deduc	ted Quantity	0.000 kilogi	am			
					Net To	otal Quantity	10650.720	kilogram			
			Say 10650.7	720 kilogram	n @ Rs 98.9	02 / kilogram	Rs 105	3569.22			
14	5.3										

	Reinforced cement corbalconies, shelves, chafive level excluding the 1.5 coarse sand (Zone	jjas, lintels, cost of cen	bands, pla tering, shut	in window si tering, finish	lls, staircasoning and rein	es and spira nforcement,	ıl stair cases	up to floo		
	bottom across the well for providing guide pipe of pump set and chain	1	7.700	0.300	0.600		1.386			
	Slab for working plat form over the well and beam	1	3.14/4	7.7*7.7	0.150		6.982			
					То	tal Quantity	8.368 cum			
		Total Deducted Quantit								
			1.0		Net To	tal Quantity	8.368 cum			
		-	Sa	ay 8.368 cun	n @ Rs 115	64.93 / cum	Rs 967	775.33		
15	od328605/2021_2022 Centering and shuttericircular works	ng includir	ng strutting	propping et	c and remo	oval of form	etc. Well S	Steining fo		
	outer of kerb	1	3.14*7.7		0.800		19.343			
	inner of kerb	1	3.14*7	1 1 1 1 1 1	0.800		17.584			
	steining up to ground	Kera	ala W at 3.14*7.7_	er Auth	7.350		177.709			
	level outer					7	177.700			
	steining up to ground level inner		3.14*7		7.350		161.553			
	steining up to ground	P <sub>1</sub> ]	3.14*7		7.350	tal Quantity		ım		
	steining up to ground	P <sub>1</sub> ]	3.14*7		7.350		161.553 376.189 sq	ım		
	steining up to ground	P <sub>1</sub> ]	3.14*7		7.350 To	ed Quantity	161.553 376.189 sq			
	steining up to ground	P <sub>1</sub> ]		T ay 376.189 s	7.350  To  Total Deduct  Net To	ed Quantity tal Quantity	161.553 376.189 sq 0.000 sqm 376.189 sqi	m		
16	steining up to ground	ng including	Sa g strutting,	ay 376.189 s	7.350  To otal Deduct  Net To oqm @ Rs 3	ed Quantity tal Quantity 01.51 / sqm	161.553 376.189 sq 0.000 sqm 376.189 sqi Rs 113	m <b>424.75</b>		
16	steining up to ground level inner  5.9.5 Centering and shuttering	ng including	Sa g strutting,	ay 376.189 s	7.350  To otal Deduct  Net To oqm @ Rs 3	ed Quantity tal Quantity 01.51 / sqm	161.553 376.189 sq 0.000 sqm 376.189 sqi Rs 113	m <b>424.75</b>		
16	steining up to ground level inner  5.9.5 Centering and shuttering girders bressumers and	ng including	Sag strutting, ors	ay 376.189 s etc. and rem 0.300+0.6	7.350  To otal Deduct  Net To oqm @ Rs 3	ed Quantity tal Quantity 01.51 / sqm	161.553 376.189 sq 0.000 sqm 376.189 sqi Rs 113 , beams, pli	m <b>424.75</b> nth beam		
16	steining up to ground level inner  5.9.5 Centering and shuttering girders bressumers and	ng including	Sag strutting, ors	ay 376.189 s etc. and rem 0.300+0.6 *2	7.350  To otal Deduct  Net To oqm @ Rs 3	ed Quantity tal Quantity 01.51 / sqm n for:Lintels tal Quantity	161.553 376.189 sq 0.000 sqm 376.189 sqi Rs 113 , beams, pli 11.550	m <b>424.75</b> nth beam		
16	steining up to ground level inner  5.9.5 Centering and shuttering girders bressumers and	ng including	Sag strutting, ors	ay 376.189 s etc. and rem 0.300+0.6 *2	7.350  To otal Deduct Net To otal Office of Too otal Deduct To otal Deduct	ed Quantity tal Quantity 01.51 / sqm n for:Lintels tal Quantity ed Quantity	161.553 376.189 sq 0.000 sqm 376.189 sqi Rs 113 , beams, pli 11.550	m <b>424.75</b> nth beam		

	5.9.3 Centering and shutteri landings, balconies an	•	-	ı, etc. and ı	removal of	form for:Su	spended flo	oors, roofs	
	slab for working plat form over the well and beam	1	3.14/4	7.7*7.7			46.543		
					То	tal Quantity	46.543 sqr	n	
				7	otal Deduct	ed Quantity	0.000 sqm		
		Net Total Quantity 46.543 sqm							
			5	Say 46.543 s	qm @ Rs 82	20.89 / sqm	Rs 382	206.68	
	12 mm dia steeel bar co all minimum length 263 having 2 mm tread on to projections on tail length chemical resistance test be visible even after fixing 1 cement: 3 coarse sand	mm and wop surface non 138 m tas per sp	idth as 165 by ribbing m as per sta ecifications ng fixing in r	mm with mi or chequerir andard draw and having manholes wi	nimum 112 ng besides n ing and suita manufacture th 30x20x15	mm space becessary and able to with sees permaned of the community of the	petween pro nd adequate stand the be nt identificat t concrete b	truded legate anchoring and test and test and ion mark to lock 1:3:6	
	steps	1	4*14	at of Sale			56.000		
			V Table		•	•			
		Vor	olo Wot	or Auth	To	tal Quantity	56.000 No		
		Ker	ala Wat	er Auth	To OTILY otal Deduct				
		Ker	ala Wat	ter Auth	otal Deduct		0.000 No		
		Kera	Rala Wat		otal Deduct	ed Quantity	0.000 No 56.000 No	711.52	
19	14.72 Providing and fixing dou made with 40 mm dia. No system with M.S. tubes, working platform etc. are and removing it there are with the building etc who features for the working elevational area of the sonce irrespective of during the system.	M.S. tube 1 M.S. tube and maintair fter. The so aerever rec en etc. co scaffolding ration of so	5 m centre challies, M ning it in a scaffolding syluired for in mplete as particular shall be maffolding. N	Say 56.00  In (cup lock ty to centre, ho I.S. clamps a rerviceable of ystem shall l spection of oer direction easured for lote:- This its	Net To Net To No @ Rs  To No @	ed Quantity tal Quantity 548.42 / No exterior side ertical tubes ricase syste the require with bracing uired locatio oval of Engurpose. The	0.000 No  56.000 No  Rs 307  , upto seven  joining with  m in the sca  d duration a  gs, runners,  on with esse  gineer- in C  payment w	story high cup & lock affolding fo s approved connection intial safety harge. The ill be made	
19	Providing and fixing dour made with 40 mm dia. It system with M.S. tubes, working platform etc. are and removing it there at with the building etc where the statutes for the working elevational area of the	M.S. tube 1 M.S. tube and maintair fter. The so herever receiven etc. co scaffolding ration of so r scaffoldir	5 m centre challies, M ning it in a scaffolding syluired for in mplete as plants shall be maraffolding. Note that the exit of	Say 56.00  (cup lock ty to centre, he .S. clamps a erviceable cystem shall I spection of per direction easured for lote:- This it sting item to	otal Deduct  Net To  Net To  No @ Rs  To  O No & Rs  To  O No @ Rs	ed Quantity tal Quantity 548.42 / No exterior side ertical tubes ricase syste the require with bracing uired locatio oval of Engurpose. The	0.000 No  56.000 No  Rs 307  , upto seven  joining with  in the sca  duration a  gs, runners,  in with esse  gineer- in C  payment w  tenance wor	story high cup & lock affolding fo s approved connection intial safety harge. The ill be made	
19	Providing and fixing dour made with 40 mm dia. It system with M.S. tubes, working platform etc. are and removing it there are with the building etc who features for the working elevational area of the once irrespective of during made with the system.	M.S. tube 1 M.S. tube and maintair fter. The so aerever rec en etc. co scaffolding ration of so	5 m centre challies, M ning it in a scaffolding syluired for in mplete as particular shall be maffolding. N	Say 56.00  In (cup lock ty to centre, ho I.S. clamps a rerviceable of ystem shall l spection of oer direction easured for lote:- This its	rpe) on the endition for the stiffened work at requirement payment puem to be used to be done.	ed Quantity tal Quantity 548.42 / No exterior side ertical tubes ricase syste the require with bracing uired locatio roval of Engurpose. The ed for main	0.000 No  56.000 No  Rs 307  , upto seven s joining with m in the sca d duration a gs, runners, n with esse gineer- in C payment w tenance wor	story high cup & lock affolding for s approved connection ntial safety harge. The ill be made k judicially	
19	Providing and fixing dour made with 40 mm dia. It system with M.S. tubes, working platform etc. are and removing it there are with the building etc who features for the working elevational area of the once irrespective of during made with the system.	M.S. tube 1 M.S. tube and maintair fter. The so herever receiven etc. co scaffolding ration of so r scaffoldir	5 m centre challies, M ning it in a scaffolding syluired for in mplete as plants shall be maraffolding. Note that the exit of	Say 56.00  (cup lock ty to centre, he .S. clamps a erviceable cystem shall I spection of per direction easured for lote:- This it sting item to 7.700	rpe) on the end of the stiffened work at requirements and appropriate to be used to be done.	ed Quantity tal Quantity 548.42 / No exterior side ertical tubes ricase syste the require with bracing uired location roval of Engurpose. The ed for main	0.000 No  Rs 307  , upto seven  joining with  m in the sca  duration a  gs, runners,  n with esse  gineer- in C  payment w  tenance wor  186.171	story high cup & loc affolding for s approved connection ntial safet harge. The ill be made k judicially	
19	Providing and fixing dour made with 40 mm dia. It system with M.S. tubes, working platform etc. are and removing it there are with the building etc who features for the working elevational area of the once irrespective of during made with the system.	M.S. tube 1 M.S. tube and maintair fter. The so herever receiven etc. co scaffolding ration of so r scaffoldir	5 m centre challies, M ning it in a scaffolding syluired for in mplete as plants shall be maraffolding. Note that the exit of	Say 56.00  (cup lock ty to centre, he .S. clamps a erviceable cystem shall I spection of per direction easured for lote:- This it sting item to 7.700	rpe) on the expression of the strict of the	ed Quantity tal Quantity 548.42 / No exterior side ertical tubes ricase syste the require with bracing uired locatio oval of Eng urpose. The ed for main tal Quantity ed Quantity	0.000 No  Rs 307  , upto seven  joining with  m in the sca  duration a  gs, runners,  n with esse  gineer- in C  payment w  tenance wor  186.171	story high cup & lock affolding for s approved connection that safety harge. The ill be made k judicially	

			Sa	ıy 186.171 s	sqm @ Rs 3	05.56 / sqm	Rs 56	886.41			
20	13.7.1  12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 ( 1 cement : 3 fine sand)										
	Bottom of well	1	3.14/4	7*7			38.465				
	inside of steining	1	3.14*7		7.350		161.553				
	working plat form under side	1	3.14/4	7*7			38.465				
	working platform top	1	3.14/4	7.7*7.7			46.543				
	face of beam	1	7.700	0.300	0.6*2		2.772				
					To	tal Quantity	287.798 so	m			
		0.000 sqm									
			1/1		Net To	otal Quantity	287.798 sq	m			
			Sa	y 287.798 s	sqm @ Rs 4	03.73 / sqm	Rs 116	192.69			
	manufacturer's specification concrete work  Bottom of well	ations inclu		riate primino	y coat, prepa	aration of Su	38.465	ompiete			
	Bottom of well	1	3.14/4	7*7	/		38.465				
			V And	1 100							
	inside of steining	Ker	3.14*7 ala Wat	er Autl	7.350 1011ty		161.553				
	inside of steining working plat form under side	Ker D <sup>1</sup>	3.14*7 ala Wat 3.14/4	er Auth	7.350						
	working plat form	Ker D <sup>1</sup>	'ala wat	er Auth 7*7 7.7*7.7	7.350 Offity		161.553				
	working plat form under side		3.14/4		7.350 Offity 0.6*2		161.553 38.465				
	working plat form under side working platform top	1	3.14/4 3.14/4	7.7*7.7	0.6*2	otal Quantity	161.553 38.465 46.543 2.772	mp			
	working plat form under side working platform top	1	3.14/4 3.14/4	7.7*7.7	0.6*2		161.553 38.465 46.543 2.772 287.798 so	mp			
	working plat form under side working platform top	1	3.14/4 3.14/4	7.7*7.7	0.6*2 Total Deduct	ed Quantity	161.553 38.465 46.543 2.772 287.798 so	•			
	working plat form under side working platform top	1	3.14/4 3.14/4 7.700	7.7*7.7	0.6*2 Total Deduct	ed Quantity	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq				
22	working plat form under side working platform top	1	3.14/4 3.14/4 7.700	7.7*7.7 0.300	0.6*2  Total Deduct  Net Total Seqm @ Rs 2	ted Quantity otal Quantity 24.31 / sqm	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq	m			
22	working plat form under side working platform top face of beam  od328606/2021_2022	1	3.14/4 3.14/4 7.700	7.7*7.7 0.300	0.6*2  Total Deduct  Net Total Seqm @ Rs 2	ted Quantity otal Quantity 24.31 / sqm	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq	m			
22	working plat form under side working platform top face of beam  od328606/2021_2022	1 1	3.14/4 3.14/4 7.700 Sa	7.7*7.7 0.300	0.6*2 Total Deduct Net Total Sqm @ Rs 2	ted Quantity otal Quantity 24.31 / sqm	161.553 38.465 46.543 2.772 287.798 sc 0.000 sqm 287.798 sq Rs 64	m 555.97			
22	working plat form under side working platform top face of beam  od328606/2021_2022	1 1	3.14/4 3.14/4 7.700 Sa	7.7*7.7 0.300 ay 287.798 s	0.6*2 Total Deduct Net Total Sqm @ Rs 2	ted Quantity otal Quantity 24.31 / sqm  Km s  otal Quantity	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq Rs 64:	m 555.97			
22	working plat form under side working platform top face of beam  od328606/2021_2022	1 1	3.14/4 3.14/4 7.700 Sa	7.7*7.7 0.300 ay 287.798 s	O.6*2  Total Deduct  Net Total Sqm @ Rs 2  Horry up to 51  Total Deduct	ted Quantity otal Quantity 24.31 / sqm  Km s  otal Quantity	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq Rs 64:	m 555.97 um			
22	working plat form under side working platform top face of beam  od328606/2021_2022	1 1	3.14/4 3.14/4 7.700 Saearth and deb	7.7*7.7 0.300 ay 287.798 s	O.6*2  Total Deduct  Net Total Sqm @ Rs 2  Horry up to 51  Total Deduct	ted Quantity otal Quantity 24.31 / sqm  Km s  otal Quantity ted Quantity otal Quantity	161.553 38.465 46.543 2.772 287.798 sq 0.000 sqm 287.798 sq Rs 64:  100.000 100.000 cu 0.000 cum 100.000 cu	m 555.97 um			

	and taking back of complete.	origino and	pamp, coor	or raor rabi	roaming on	and other c	noroo pay c	or otall o
	NEW DATA (Prepare	ed based on I	PHED SDB -	Item No.107	70			
		1	5*0.746	60.000	8.000		1790.400	
					To	otal Quantity	1790.400 F	Kwh
		ted Quantity	0.000 Kwh					
	Net Total Quantity 1790.400 K							
	Say 1790.400 Kwh @ Rs 37.18 / Kwh							567.07
	Bailing out water wi errection, dismantling pay of staff etc. con NEW DATA (Prepare	ng and taking nplete.	back of engi	ine and pun	np, cost of	ū	•	
		1	10*0.746	60.000	8.000		3580.800	
		18	中区级		To	otal Quantity	3580.800 F	Kwh
		151		1600r	otal Deduc	ted Quantity	0.000 Kwh	
		4300			Net To	otal Quantity	3580.800 K	(wh
			Sa	y 3580.800	Kwh @ Rs	18.56 / Kwh	Rs 66	459.65
25	100.98.1008 Engaging Coolie	Ker	rala Wat	er Auth	ority			
		1	50.000		\  -	4	50.000	
					To	otal Quantity	50.000 Day	y
				Т	otal Deduc	ted Quantity	0.000 Day	
					Net To	otal Quantity	50.000 Day	,
			5	Say 50.000 l	Day @ Rs 8	384.27 / Day	Rs 442	213.50
26	100.1.1 Excavating trenched dressing of sides, rathen returning the sedeposited layer by relead of 50 m: All kinds of soil	amming of bo	ttoms, depth d, in layers n	up to 1.5 m ot exceedin	n, including g 20 cm in	getting out t	the excavate ding consoli	ed soil, a datingea
	(Ref. Item No. 2.10.1	Lof DSR)						
	(Ref. Item No. 2.10.	,	10.000	E 000	1 500		7F 000	
	(Ref. Item No. 2.10.	1 of DSR)	10.000	5.000	1.500	otal Quantity	75.000 75.000 cur	m

					Net To	otal Quantity	75.000 cun	n
			S	ay 75.000 c	um @ Rs 5	58.99 / cum	Rs 41	924.25
27	100.1.2 Excavating trenches dressing of sides, rar out the excavated so including consolidat excavated soil as di All kinds of soil (Ref. Item No. 2.11 of	mming of bot bil, and then r ing each de irected, with	toms, depth returning the posited laye	exceeding soil as req or by ramm	1.5m but nouired, in laying, wateri	ot exceeding yers not exc ng, etc. and	g 3 m, inclu eeding 20 c	ding gettin cm in dept
		1	10.000	5.000	1.500		75.000	
			-0	100	To	otal Quantity	75.000 cui	m
			JAN	(A)\T	otal Deduc	ted Quantity	0.000 cum	
			611		Net To	otal Quantity	75.000 cun	n
		6.1	S	ay 75.000 c	um @ Rs 6	66.03 / cum	Rs 49	952.25
	All kinds of soil (Ref. Item No. 2.12 of	f DSR)	10.000	5.000	1.500		75.000	
						otal Quantity	75.000 cui	m
				Т	otal Deduc	ted Quantity	75.000 cui 0.000 cum	
			S		otal Deduc	ted Quantity	75.000 cun 0.000 cum 75.000 cun	n
29	100.1.4 Excavating trenches dressing of sides, rar getting out the excav depth, including consexcavated soil as directly All kinds of soil. (Ref. Item No. 2.12 of	mming of bott rated soil, and solidating ead ected, within	width for p toms, depth d then return ch deposited	ipes, cable exceeding 4 hing the soil layer by rar	Net To sum @ Rs 7 s, etc inclu l.5m in dep as required mming, wat	ted Quantity otal Quantity 73.07 / cum uding excav th but not ex	75.000 cum 0.000 cum 75.000 cun Rs 57 ation for so	980.25 ockets, am, including 20 cm
29	Excavating trenches dressing of sides, rar getting out the excav depth, including consexcavated soil as directions.	mming of bott rated soil, and solidating each ected, within	width for p toms, depth d then return th deposited a lead of 50	ipes, cable exceeding 4 hing the soil layer by rarm: 4.5m to	Net To Net To sum @ Rs 7 s, etc inclu 1.5m in dep as required mming, wat 0 6.0m	ted Quantity otal Quantity 73.07 / cum uding excav th but not ex	75.000 cum 75.000 cum 75.000 cum Rs 57 ation for so acceeding 6 r not exceeding and disposing	980.25 ockets, arm, including 20 cm
29	Excavating trenches dressing of sides, rar getting out the excav depth, including consecutated soil as directly and soil.	mming of bott rated soil, and solidating ead ected, within	width for p toms, depth d then return ch deposited	ipes, cable exceeding 4 hing the soil layer by rar	Net To sum @ Rs 7 s, etc inclu 1.5m in dep as required mming, wat 6.0m	ted Quantity otal Quantity 73.07 / cum uding excav th but not ex	75.000 cum 75.000 cum 75.000 cum Rs 57 ation for so sceeding 6 r not exceeding disposing	n 980.25 ockets, al m, includi ng 20 cm g of surpl

					Net To	otal Quantity	75.000 cur	n	
			S	Say 75.000 d	cum @ Rs 8	80.11 / cum	Rs 66	008.25	
30	100.1.5  Excavating trenches of required width for pipes, cables, etc including excavation for sockets, an dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, an then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidatingead deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within lead of 50 m:"  Ordinary Rock.								
	(Ref. Item No. 2.1	1	10.000	5.000	1.100		55.001		
			.0.000	530	ı	⊥ otal Quantity		m	
			JAN	- / ASS		ted Quantity			
			271		Net To	otal Quantity	55.001 cur	n	
			S	Say 55.001 d	cum @ Rs 8	311.82 / cum	Rs 44	650.91	
	equipments and a 0.5 M above grou	accessories to a and level suitably	maximum de y braced by h	pth of 0.50 orizontal wa	M below the alling pieces	at 75 x 150	th suitable ne proposed ) mm x 8 mi	d excavat m angles	
	equipments and a	accessories to a and level suitably rvals not exceed shoring till the use including all	maximum de y braced by h ding 1.50M ai pipes are lai	pth of 0.50 orizontal wand horizontal id and worl	M below the alling pieces al screw jac ks are com	e bottom of the s at 75 x 150 k type struts pleted, disn	th suitable ne proposed mm x 8 mm s at 1.50M in mantling, cl	pile driving excavate angles angles eaning a	
	equipments and a 0.5 M above grou either side at inte maintaining the srestacking for reu	accessories to a and level suitably rvals not exceed shoring till the use including all complete.	maximum de y braced by h ding 1.50M at pipes are lat labour, hire d	pth of 0.50 orizontal wand horizontal id and worl	M below the alling pieces al screw jac ks are com d conveyant 6.500	e bottom of the s at 75 x 150 k type struts pleted, disn	th suitable ne proposed mm x 8 mm s at 1.50M in mantling, claments, tools	pile driving pile driving angles antervals a eaning a s and plan	
	equipments and a 0.5 M above grou either side at inte maintaining the srestacking for reu	accessories to a and level suitably rvals not exceed shoring till the use including all complete.	maximum de y braced by h ding 1.50M at pipes are lat labour, hire d	pth of 0.50 orizontal wand horizontal id and worl charges and	M below the alling pieces at screw jac ks are comed conveyant 6.500	e bottom of the sat 75 x 150 k type struts pleted, disnote for equipage	th suitable ne proposed mm x 8 mm s at 1.50M in mantling, cluments, tools	pile drivid excavate mangles ntervals a eaning a s and pla	
	equipments and a 0.5 M above grou either side at inte maintaining the srestacking for reu	accessories to a and level suitably rvals not exceed shoring till the use including all complete.	maximum de y braced by h ding 1.50M at pipes are lat labour, hire d	pth of 0.50 orizontal wand horizontal id and worl charges and	M below the alling pieces al screw jac ks are come disconveyand 6.500	e bottom of the sat 75 x 150 k type struts pleted, disruce for equiportal Quantity	th suitable ne proposed mm x 8 mm s at 1.50M in mantling, cl ments, tools  195.000  195.000 s  0.000 sqm	pile drivid excavate mangles antervals a eaning a sand pla	
	equipments and a 0.5 M above grou either side at inte maintaining the srestacking for reu	accessories to a and level suitably rvals not exceed shoring till the use including all complete.	maximum de y braced by h ding 1.50M ar pipes are la labour, hire o	pth of 0.50 orizontal wand horizontal id and work charges and	M below the alling pieces al screw jac ks are come disconveyand 6.500  Total Deduc	e bottom of the sat 75 x 150 k type struts pleted, disruce for equiportal Quantity ted Quantity	th suitable ne proposed mm x 8 mm at 1.50M in mantling, cl ments, tools  195.000  195.000 s  0.000 sqm	pile driv d excavat m angles ntervals a eaning a s and pla	
32	equipments and a 0.5 M above grou either side at inte maintaining the srestacking for reu	ring in position of	maximum de y braced by h ding 1.50M ar pipes are la labour, hire de la labour, hire de la labour lab	pth of 0.50 orizontal wand horizontal wand horizontal did and world charges and any 195.000 settle of specific	M below the alling pieces al screw jac ks are comed conveyant 6.500  Total Deduction Net Total Comed Rs 7 diffed grade	e bottom of the sat 75 x 150 k type struts pleted, disruce for equiportal Quantity ted Quantity otal Quantity otal Quantity otal Quantity excluding the excluding the sat 75 x 150 cm.	th suitable ne proposed mm x 8 mi s at 1.50M in mantling, cl ments, tools  195.000  195.000 sqm  195.000 sc  Rs 140  e cost of ce	pile drivid excavation angles intervals a eaning a sand pland	
32	equipments and a 0.5 M above grou either side at intermaintaining the strestacking for reurand sundries etc.  4.1.5  Providing and lay shuttering - All words	ring in position of	maximum de y braced by h ding 1.50M ar pipes are la labour, hire de la labour, hire de la labour lab	pth of 0.50 orizontal wand horizontal wand horizontal did and world charges and any 195.000 settle of specific	M below the alling pieces al screw jac ks are comed conveyant 6.500  Total Deduction Net Total Comed Rs 7 diffed grade	e bottom of the sat 75 x 150 k type struts pleted, disruce for equiportal Quantity ted Quantity otal Quantity otal Quantity otal Quantity excluding the excluding the sat 75 x 150 cm.	th suitable ne proposed mm x 8 mi s at 1.50M in mantling, cl ments, tools  195.000  195.000 sqm  195.000 sc  Rs 140  e cost of ce	pile drivid excavate mangles and plass and pla	
32	equipments and a 0.5 M above grou either side at intermaintaining the strestacking for reurand sundries etc.  4.1.5  Providing and lay shuttering - All words	rvals not exceeds shoring till the use including all complete.  1	maximum de y braced by h ding 1.50M an pipes are lai labour, hire of 10*2+5*2  Sacrement concrevel:1:3:6 (1 of 10)	pth of 0.50 orizontal wand horizontal wand horizontal did and world charges and any 195.000 seete of spectoement : 3 comments : 3 comme	M below the alling pieces al screw jac ks are come disconveyant 6.500  Total Deduction Net Total Deduction Res 7 difference and 0.300	e bottom of the sat 75 x 150 k type struts pleted, disruce for equiportal Quantity ted Quantity otal Quantity otal Quantity otal Quantity excluding the excluding the sat 75 x 150 cm.	th suitable ne proposed mm x 8 mi s at 1.50M in mantling, cl ments, tools  195.000  195.000 sqm  195.000 sc  Rs 140  e cost of cestone aggre  6.931	pile drivid excavate mangles ntervals a eaning a sand pla qm  qm  6996.85  entering a gate 20 m	
32	equipments and a 0.5 M above grou either side at intermaintaining the strestacking for reurand sundries etc.  4.1.5  Providing and lay shuttering - All words	rvals not exceeds shoring till the use including all complete.  1	maximum de y braced by h ding 1.50M an pipes are lai labour, hire of 10*2+5*2  Sacrement concrevel:1:3:6 (1 of 10)	pth of 0.50 orizontal wand horizontal wand horizontal wand and world charges and any 195.000 seete of spectoement: 3 company 1.000	M below the alling pieces al screw jac ks are come disconveyant 6.500  To Total Deduction Net To sqm @ Rs 7 diffed grade coarse sand 0.300  To Total Deduction	e bottom of the stat 75 x 150 k type struts pleted, disruce for equiportal Quantity otal Quantity ot	th suitable ne proposed mm x 8 mi s at 1.50M in mantling, cl ments, tools  195.000 s  0.000 sqm  195.000 sc  Rs 140  e cost of ce stone aggre  6.931  6.931 cum	pile drivid excavation angles intervals a eaning a sand plan in many and in ma	
32	equipments and a 0.5 M above grou either side at intermaintaining the strestacking for reurand sundries etc.  4.1.5  Providing and lay shuttering - All words	rvals not exceeds shoring till the use including all complete.  1	maximum de y braced by h ding 1.50M an pipes are lai labour, hire of 10*2+5*2  Sacrement concrevel:1:3:6 (1 of 10)	pth of 0.50 orizontal wand horizontal wand horizontal wand and world charges and any 195.000 seete of spectoement: 3 company 1.000	M below the alling pieces al screw jac ks are come disconveyant 6.500  Total Deduction Res 7  iffied grade coarse sand 0.300  Total Deduction Res 7  Total Deduction Res 7  Total Deduction Res 7	e bottom of the stat 75 x 150 k type struts pleted, disruce for equiportal Quantity otal Quantity otal Quantity otal Quantity otal Quantity excluding the control of the state	th suitable ne proposed mm x 8 mi s at 1.50M in mantling, cl ments, tools  195.000 s  0.000 sqm  195.000 sc  Rs 140  e cost of ce stone aggre  6.931  6.931 cum  0.000 cum	pile driv d excavat m angles ntervals a eaning a s and pla  qm  6996.85 entering a gate 20 r	

			S	Say 6.931 cu	m @ Rs 74	13.74 / cum	Rs 513	384.63			
33	5.37.1  Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work using cement content as per approved design mix, manufactured in fully automatic batching plant are transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforceme including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting concrete, improve workability without impairing strength and durability as per direction of the Engineercharge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement used a per design mix is payable/recoverable separately.All wiork upto plinth level										
	Base slab	1	7.900	2.350	0.300		5.570				
	side wall	2	7.900	0.300	6.800		32.232				
		3	2.3500	0.300	6.800		14.382				
	innerwall	1	5.000	0.300	6.800		10.200				
	roof slab	1	7.900	2.3500	0.100		1.857				
		1/2	THE		То	tal Quantity	64.241 cun	n			
	Total Deducted Quantity 0.000 cum										
	Net Total Quantity 64.241 cum										
	Say 64.241 cum @ Rs 9947.98 / cum Rs 639068.18										
34	4.12 Extra for providing cement as per ma		ater proofing	material in		ncrete work	c in doses b	y weight o			
	Base slab	1	7.900	2.350	0.300	330.0	1837.936				
	side wall	2	7.900	0.300	6.800	330.0	10636.560				
		3	2.3500	0.300	6.800	330.0	4746.060				
	innerwall	1	5.000	0.300	6.800	330.0	3366.000				
	roof slab	1	7.900	2.350	0.100	330.0	612.646				
	roof slab	1	7.900	2.350		330.0 tal Quantity		kg			
	roof slab	1	7.900			tal Quantity	21199.202	kg			
	roof slab	1	7.900		To otal Deduct	tal Quantity	21199.202				
	roof slab	1	7.900	Т	To otal Deduct	tal Quantity ed Quantity tal Quantity	21199.202 0.000 kg 21199.202	kg			
35	5.22.6 Steel reinforcement binding all comple	nt for R.C.C w	ork including	Say 21199	To Total Deduct Net To 0.202 kg @ F ing, cutting	tal Quantity ed Quantity tal Quantity Rs 1.36 / kg	21199.202 0.000 kg 21199.202 Rs 288	kg 330.91 osition ar			

Total Deducted Quantity 0.000 kilogram

						.,,	3	-			
					Net Total	Quantity	7708.920 k	ilogram			
			Say 7708.9	20 kilogram	n @ Rs 98.92 /	kilogram	Rs 762	566.37			
36	5.9.1 Centering and shu columns, etc for n	-	g strutting, et	c. and remo	oval of form for	:Foundat	ions, footing	s, bases of			
	Base slab	1	21.000		0.300		6.300				
	side wall	4	7.900		6.800		214.880				
		6	2.350		6.800		95.880				
	innerwall	2	5.000		6.800		68.000				
	roof slab	1	7.900	2.350			18.565				
	PCC	1	22.000		0.300		6.600				
			23 6	8 5	Total	Quantity	410.225 sc	mµ			
		61	The	\$1/0	Total Deducted	Quantity	0.000 sqm				
		1/2	1034		Net Total	Quantity	410.225 sq	m			
			Sa	y 410.225 s	sqm @ Rs 337	42 / sqm	Rs 138	418.12			
	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) including attached pilasters, butteresses, plinth and string courses etc.										
	side wall	4	7.900		6.800						
	Side Wall	1	7.000		0.800		214.880				
	Side Wall	4	2.3500		6.800	7	63.920				
	innerwall					7					
		4	2.3500	2.350	6.800	-	63.920				
	innerwall	4 2	2.3500	2.350	6.800	Quantity	63.920 68.000	qm			
	innerwall	4 2	2.3500		6.800	-	63.920 68.000 18.565 365.365 so	mp			
	innerwall	4 2	2.3500		6.800  6.800  Total  Total Deducted	Quantity	63.920 68.000 18.565 365.365 so				
	innerwall	4 2	2.3500 5.000 7.900	7	6.800  6.800  Total  Total Deducted	Quantity Quantity	63.920 68.000 18.565 365.365 sc 0.000 sqm 365.365 sq				

	specification and the di		_	_	•	•	-	/ guarante		
	for 10 years against an	yleakage.F 4	7.900	urrace two o	6.800	) kg per sqn	n 214.880			
		4	2.350		6.800		63.920			
	innerwall	2	5.000		6.800		68.000			
					То	tal Quantity	346.800 sc	mp		
				Т	otal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	346.800 sq	m		
			Sa	ay 346.800 s	qm @ Rs 5	73.87 / sqm	Rs 199	018.12		
	& water treatment plans partsintegral crystalline slurry: 1 part water) for help of synthetic fiber is i.e by reducingpermeat 1048 and resistant to 1 of self-healing of crace specification and the differ 10 years against and Base slab	e slurry: 2 r horizonta brush. The bility of cor 6 bar hydro ks up to a rection of t	parts water) I surfaces and materialshate nerete by metatic press width of 0.5 he engineer	for vertical applying applying the formula of the following the followin	surfaces and thesame from the equirements of the compare tive side. The workshall be the product of the coat @1.  O.300  To otal Deduct	and 3: 1 (3 pm negative is as specific d with contine crystalline is carried of performance to kg per so tal Quantity ed Quantity	coartsintegra (internal) s ed in ACI-2 <sup>2</sup> rol concrete eslurry shall ut all comp e shall carry qm. 6.300 18.565 24.865 sqr 0.000 sqm	I crystallir ide with the second of the capabolete as perform guarante m		
	Net Total Quantity 24.865 sqm									
0.11	2			Say 24.865 s	·	•		997.04		
SI No 2IN	Description	No I CHANFI	GRIT CHEN	B BER/PARS	□ □ SHΔIIFIIIN	OF (Cos	Quantity	Remark		
1	2.6.1 Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over area (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavate earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.All kinds of soil									
	Reciving chamber footing	4	1.600	1.600	1.500		15.361			

	Grit chamber Footing	6	2.200	2.200	1.500		43.561			
	Parshalflume and Distribution chamber	6	1.900	1.900	1.500		32.491			
	Staircase column footing	3	1.600	1.600	1.500		11.521			
					То	tal Quantity	135.425 cı	um		
				7	Total Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	135.425 cu	m		
			Sa	ay 135.425 d	cum @ Rs 2	15.37 / cum	Rs 29	166.48		
2	4.1.5 Providing and laying in p shuttering - All work up to nominal size)				•	•		•		
	Reciving chamber footing	4	1.600	1.600	0.200	la c	2.049			
	Reciving and Distribution chamber footing	6	1.900	1.900	0.200		4.332			
	Grit chamber Footing	6	2.200	2.200	0.200		5.809			
	Parshalflume and Distribution chamber	Ker	ala.900at	er1.900 th	010.200		4.332			
	Staircase column footing	3	1.600	1.600	0.200		1.537			
	Total Quantity 18.059 cum									
		0.000 cum								
		18.059 cun	า							
	Say 18.059 cum @ Rs 7413.74 / cum Rs 133884.73									
3	5.37.1  Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete wo using cement content as per approved design mix, manufactured in fully automatic batching plant at transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufacture as per mix design of specified grade for reinforced cement concrete work including pumping of R.M. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforceme including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting concrete, improve workability without impairing strength and durability as per direction of the Engineer -									

Reciving n chamber footing Size	4	1.200	1.200	0.150		0.864	
 1.2 x 1.2 x 0.9 m	<del></del>	1.200	1.200	0.130		0.004	
	4	0.700	0.700	0.750		1.470	
Reciving and Distribution chamber footing Size 1.5x1.5x0.9 m	6	1.500	1.500	0.150		2.025	
	6	0.900	0.900	0.750		3.646	
 Grit chamber Footing Size1.8x1.8x0.9m	6	1.800	1.800	0.150		2.916	
	6	1.100	1.100	0.750		5.446	
Parshalflume and Distribution chamber footing Size 1.5x1.5x0.9m	6	1.500	0.150	0.150		0.203	
	6	0.900	0.900	0.750		3.646	
Staircase column footing Size 1.2 x 1.2 x 0.9 m	3	1.200	1.200	0.150		0.648	
	Ker	al 20.700 at	er0,700	0.750		1.103	
Pedastral column- Reciving chamber	4	0.250	0.400	0.400	7	0.161	
Pedastral column- Reciving and Distribution chamber	6	0.250	0.450	0.400		0.270	
Pedastral column- staircase	3	0.200	0.400	0.400		0.097	
Pedastral column- Gritchamber	6	0.250	0.500	0.400		0.301	
Pedastral column- Parshalflume and Distribution chamber	6	0.250	0.450	0.400		0.270	
				Tot	al Quantity	23.066 cum	1
			7	Total Deducte	ed Quantity	0.000 cum	
				Net Tot	al Quantity	23.066 cum	
		Sa	ay 23.066 cu	ım @ Rs 994	17.98 / cum	Rs 2294	160.1

Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in -charge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement used as per design mix is payable/recoverable separately.All work above plinth level upto floor V level

	SUPPORTING STRUCTURE									
Plinth level beam	1	83.000	0.250	0.450	9.338					
Reciving chamber column 250x400	4	0.250	0.400	2.550	1.020					
Reciving and Distribution chamber column 250x450	6	0.250	0.450	3.550	2.397					
Grit chamber Column250x500	6	0.250	0.500	2.000	1.500					
Parshalflume and Distribution chamber column250x450	6	0.250	0.450	3.550	2.397					
Staircase column 200x400	Kera	ala Wat	er Auth <sub>0.400</sub>	1.500	0.121					
Staircase column 200x400	1	0.200	0.400	3.000	0.241					
Staircase column 200x400	1	0.200	0.400	5.000	0.401					
		FLO	OR STRUC	TURE						
Reciving chamber base slab	1	2.750	1.500	0.200	0.826					
Reciving chamber side wall	1	2.750	0.250	2.000	1.375					
	2	1.000	0.250	2.000	1.000					
	1	2.750	0.250	1.000	0.688					
Coarse and fine screen chamber base slab	1	7.250	2.750	0.200	3.988					

	Coarse and fine screen chamber side wall	2	7.250	0.250	1.000		3.625	
	Coarse and fine screen chamber side wall	1	6.250	0.250	1.000		1.563	
	Coarse and fine screen chamber shorter wall	4	2.000	0.250	1.000		2.000	
	Distribution chamber base slab	1	1.250	2.750	0.200		0.688	
	Grit chamber base slab -side portion	2	4.600	1.000	0.200		1.840	
	Grit chamber -side portion wall	4	2.600	0.250	1.000		2.600	
	Grit chamber base slab -Centre portion	1	7.000	1.000	0.200		1.401	
	Grit chamber base slab -Extra concrete	16*0.5	1.500	1.500	0.150	L	2.700	
	Grit Chamber sidewall	2	7.000	0.250	2.300		8.050	
	Grit Chamber sidewall	Kera	3.000at	er0,250†h	2.300		5.175	
	parshelflume and distribution chamber base slab	P <sub>1</sub>	5.750	2.750	0.200		3.163	
	parshelflume and distribution chamber side wall	2	5.750	0.250	0.800		2.301	
	parshalflume and distribution chamber short wall	1	2.000	0.250	0.800		0.400	
	Allround Platform slab	1	58.000	1.000	0.150		8.700	
	Platform beam	15	1.000	0.250	0.400		1.500	
	Staircase -steps	18	1.000	0.300	0.150		0.810	
	Stair slab	2	6.000	1.000	0.150		1.800	
	Staircase -landing	1	1.000	1.000	0.150		0.150	
		1	1.700	1.000	0.150		0.255	
	For openings	18	1.000	0.700	0.250		-3.150	
					То	tal Quantity	74.013 cur	m
_								

				7	Total Deduct	ted Quantity	-3.150 cum	
					Net To	otal Quantity	70.863 cum	1
			Say	70.863 cur	n @ Rs 116	10.43 / cum	Rs 822	749.90
5	4.12 Extra for providing and cement as per manufa			ı material ir	n cement co	oncrete work	in doses b	y weight of
			FLO	OR STRUC	TURE	1		
	Reciving chamber base slab	1	2.750	1.500	0.200	330.0	272.250	
	Reciving chamber side wall	1	2.750	0.250	2.000	330.0	453.750	
		2	1.000	0.250	2.000	330.0	330.000	
		1	2.750	0.250	1.000	330.0	226.875	
	Coarse and fine screen chamber base slab	1	7.250	2.750	0.200	330.0	1315.875	
	Coarse and fine screen chamber side wall	2	7.250	0.250	1.000	330.0	1196.250	
	Coarse and fine screen chamber side wall	Kera	ala Wat 6.250	er Auth 0.250	ority 1.000	330.0	515.625	
	Coarse and fine screen chamber shorter wall	4	2.000	0.250	0.300	330.0	198.000	
	Distribution chamber base slab	1	1.250	2.750	0.200	330.0	226.875	
	Grit chamber base slab -side portion	2	4.600	1.000	0.200	330.0	607.200	
	Grit chamber -side portion wall	4	2.600	0.250	1.000	330.0	858.000	
	Grit chamber base slab -Centre portion	1	7.000	1.000	0.200	330.0	462.001	
	Grit chamber base slab -Extra concrete	16*0.5	1.500	1.500	0.150	330.0	891.000	
	Grit Chamber sidewall	2	7.000	0.250	2.300	330.0	2656.500	
	Grit Chamber sidewall	3	3.000	0.250	2.300	330.0	1707.750	

	parshelflume and distribution chamber base slab	1	5.750	2.750	0.200	330.0	1043.625	
	parshelflume and distribution chamber side wall	2	5.750	0.250	0.800	330.0	759.001	
	parshalflume and distribution chamber short wall	1	2.000	0.250	0.800	330.0	132.000	
					То	tal Quantity	13852.577	kg
				Т	otal Deduct	ed Quantity	0.000 kg	
			n.	-60	Net To	tal Quantity	13852.577	kg
			J/M	Say 13852	2.577 kg @ I	Rs 1.36 / kg	Rs 18	839.50
6	5.22.6 Steel reinforcement for binding all complete up							
	From item no 3 @120 kg/m3	1	kä		23.066	120.0	2767.920	
	From item no 4 @120 kg/m3	1		1 2 2/	73.000	120.0	8760.000	
		Ker	ala Wat	er Auth	ority to	tal Quantity	11527.920	kilogram
					1		0.000 kilog	
					Net To	tal Quantity	11527.920	kilogram
			Say 11527.9	920 kilogram	n @ Rs 98.9	— 2 / kilogram	Rs 114	0341.85
7	od328596/2021_2022 Extra for providing sulph	nate resista	int cement fo	or the structu	ures above p	olinth level.		
	ITEM 3&4	1	96.060				96.060	
			•		То	tal Quantity	96.060 cur	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	96.060 cum	1
			Sa	ay 96.060 cu	ım @ Rs 18	99.47 / cum	Rs 182	463.09
8	5.9.1 Centering and shutterin columns, etc for mass of		strutting, e	tc. and remo	oval of form	for:Foundat	ions, footing	ıs, bases of
	Reciving n chamber footing Size 1.2x1.2x0.15 m	4	4.800		0.150		2.880	

RecEiving n chamber footing Size	4	2.800	0.75	50	8.400	
Reciving and Distribution chamber footing Size	6	6.000	0.18	50	5.400	
Reciving and Distribution chamber footing Size 1x1.1x0.75m	6	4.000	0.75	50	18.000	
Grit chamber Footing Size1.8x1.8x0.15m	6	7.200	0.18	50	6.480	
Grit chamber Footing Size1.4x1.4x0.75m	6	5.600	0.75	50	25.200	
Parshalflume and Distribution chamber footing Size 1.5x1.5x0.9m	6	6.000	0.18	50	5.400	
Parshalflume and Distribution chamber footing Size 1.5 x 1.5 x 0.9 m	6 Kera	1.000 ala Wat	er Authority	50 V	4.500	
Staircase column footing Size 1.2x1.2x0.9m		4.800	0.18	50	2.160	
Staircase column footing Size 1.2x1.2x0.75m	3	2.800	0.78	50	6.300	
Pedastral column- Reciving chamber	4	1.300	0.40	00	2.080	
Pedastral column- Reciving and Distribution chamber	6	1.400	0.40	00	3.360	
Pedastral column- staircase	3	1.200	0.40	00	1.440	
Pedastral column- Gritchamber	6	1.500	0.40	00	3.601	
Pedastral column- Parshalflume and Distribution chamber	6	1.400	0.40	00	3.360	

					To	tal Quantity	98.561 sqn	n
				7	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	98.561 sqm	1
			5	Say 98.561 s	sqm @ Rs 3	37.42 / sqm	Rs 332	256.45
9	5.9.2 Centering and shutterin attached pilasters, butte		_			for:Walls (a	iny thickness	s) includ
			FLO	OR STRUC	TURE	T	ı	
	Reciving chamber side wall	2	2.750		2.000		11.000	
		4	1.000	6	2.000		8.000	
		2	2.750	197	0.425		2.338	
	Coarse and fine screen chamber side wall	4	7.250		1.000		29.000	
	Coarse and fine screen chamber side wall	2	6.250		1.000	Ž.	12.500	
	Coarse and fine screen chamber shorter wall	<b>%</b> er	ala <sup>2.000</sup> at	er Auth	0.425 1011ty		6.800	
	Grit chamber -side portion wall	8	2.600		1.000		20.800	
	Grit Chamber sidewall	4	7.000		2.300		64.400	
	Grit Chamber sidewall	6	3.000		2.300		41.400	
	parshelflume and distribution chamber side wall	4	5.750		1.000		23.000	
	parshalflume and distribution chamber short wall	2	2.000		1.000		4.000	
	parshalflume and distribution chamber short wall	4	2.250		0.425		3.825	
					To	tal Quantity	227.063 sc	lm
				٦	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	227.063 sq	m
			Sa	ay 227.063 s	sqm @ Rs 7	21.70 / sam	Rs 163	871.37

10	5.9.3 Centering and shutter landings, balconies ar	_		, etc. and	removal of f	form for:Su	spended flo	ors, ro
	Reciving chamber base slab	1	2.250	1.000			2.250	
	Coarse and fine screen chamber base slab	2	10.000	1.000			20.000	
	Grit chamber base slab -side portion	2	7.730				15.460	
	Grit chamber base slab -Centre portion	2	10.890	300			21.780	
	parshelfume and distribution chamber base slab	1	5.750	2.500			14.375	
		16	FLO	OR STRUC	TURE			
	Reciving chamber base slab	1	2.750	1.500			4.125	
	Coarse and fine screen chamber base slab	1 Ker	7.250 ala Wat	2.750 er Auth	lority		19.938	
	Distribution chamber base slab		1.250	2.750	7 [	7	3.438	
	Grit chamber base slab -side portion	2	4.600	1.000			9.200	
	Grit chamber base slab -Centre portion	1	7.000	1.000			7.000	
	Grit chamber base slab -Extra concrete	16*0.5	1.500	1.500			18.000	
	parshelflume and distribution chamber base slab	1	5.750	2.750			15.813	
					To	tal Quantity	151.379 sq	m
				٦	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	151.379 sqr	n
			Sa	ıy 151.379 s	sqm @ Rs 82	20.89 / sqm	Rs 124	265.51
11	5.9.5 Centering and shuttering	ng includin	g strutting, e	etc. and ren	noval of form	n for:Lintels	, beams, plii	nth bea

	girders bressumers and	cantilever	S					
	Allround verandha slab	1	58.000	1.150			66.700	
	PLINTH BEAM (GL)	1	83.000	1.150			95.450	
	verandha beam	15	1.000	1.050			15.750	
	Staircase -steps	18	1.000	1.150			20.700	
	Staircase -landing	1	1.000	1.000			1.000	
		1	1.700	1.000			1.700	
					To	otal Quantity	201.300 sc	ηm
				_	Total Deduc	ted Quantity	0.000 sqm	
			160	165	Net To	otal Quantity	201.300 sq	m
			Sa	y 201.300 s	sqm @ Rs 6	53.89 / sqm	Rs 131	628.06
12	5.9.6 Centering and shutter Abutments, Posts and		ing strutting	, etc. and	removal of	form for:C	olumns, Pil	lars, P
	Reciving chamber column 250x400	4	0.250*2+0 .4*2		2.550	lar.	13.260	
	Dooiving and							
	Reciving and Distribution chamber column 250x450	Ker	0.250*2+0 ala4 <b>5</b> *2at	er Auth	3.550 1011ty		29.820	
	Distribution chamber	Ker D <sub>6</sub>		er Auth	3.550 ority 2.000		29.820 18.000	
	Distribution chamber column 250x450  Grit chamber		ala45*2at	er Auth	lority			
	Distribution chamber column 250x450  Grit chamber Column 250x500  Parshalflume and Distribution chamber	<b>D</b> <sub>6</sub>	0.250*2+0 .5*2 0.250*2+0	er Auth	2.000		18.000	
	Distribution chamber column 250x450  Grit chamber Column250x500  Parshalflume and Distribution chamber column250x450  Staircase column	6	0.250*2+0 .5*2 0.250*2+0 .45*2	er Auth	2.000 3.550		18.000	
	Distribution chamber column 250x450  Grit chamber Column 250x500  Parshalflume and Distribution chamber column250x450  Staircase column 200x400  Staircase column	6	0.250*2+0 .5*2 0.250*2+0 .45*2 1.300	er Auth	2.000 3.550 1.500		18.000 29.820 1.951	
	Distribution chamber column 250x450  Grit chamber Column250x500  Parshalflume and Distribution chamber column250x450  Staircase column 200x400  Staircase column 200x400  Staircase column 200x400	6 1 1	0.250*2+0 .5*2 0.250*2+0 .45*2 1.300	er Auth	2.000 3.550 1.500 3.000	otal Quantity	18.000 29.820 1.951 3.901 6.500	mp
	Distribution chamber column 250x450  Grit chamber Column250x500  Parshalflume and Distribution chamber column250x450  Staircase column 200x400  Staircase column 200x400  Staircase column 200x400	6 1 1	0.250*2+0 .5*2 0.250*2+0 .45*2 1.300		2.000 3.550 1.500 3.000	otal Quantity	18.000 29.820 1.951 3.901 6.500	m
	Distribution chamber column 250x450  Grit chamber Column250x500  Parshalflume and Distribution chamber column250x450  Staircase column 200x400  Staircase column 200x400  Staircase column 200x400	6 1 1	0.250*2+0 .5*2 0.250*2+0 .45*2 1.300		2.000 3.550 1.500 3.000 5.000		18.000 29.820 1.951 3.901 6.500 103.252 sc	•

Plinth level beam	1	83.000	1.400		116.200
Reciving chamber column 250x400	4	1.300		2.550	13.260
Reciving and Distribution chamber column 250x450	6	1.400		3.550	29.820
Grit chamber Column250x500	6	1.500		2.050	18.450
Parshalflume and Distribution chamber column250x450	6	1.400		3.550	29.820
Staircase column 200x400	1	1.200	A	1.500	1.800
Staircase column 200x400	1-7	1.200		3.000	3.600
Staircase column 200x400	1	1.200		5.000	6.000
Reciving chamber base slab- top and bottom	2	2.250	1.000		4.500
Reciving chamber side wall out side	Kera	112.7%at	er Auth	012.200	12.650
Reciving chamber side wall inside		5.250		2.200	11.550
Coarse and fine screen chamber base slab-top and bottom	2	8.500	2.375		40.375
Coarse and fine screen chamber side wall	6	8.250		1.000	49.500
Grit chamber base slab -side portion -top and bottom	4	4.600	1.000		18.400
Grit chamber base slab -Centre portion - top and botom	4	6.000	3.000		72.000
Grit Chamber sidewall-inside and out side	4	7.000		2.500	70.000

		6	3.500		2.500		52.500	
	parshallflume and distribution chamber base slab-top and bottom	2	5.000	2.000			20.000	
	parshelfume and distribution chamber side wall-inside and out side	4	5.750		1.000		23.000	
	Allround verandha slab-top and bottom	2	58.000	1.150			133.400	
	verandha -edge	1	58.000	0.150			8.700	
	verandha beam	15	1.000	1.050			15.750	
	Staircase -steps	18	1.000	1.150	-		20.700	
	Staircase -waist slab bottom	1	15.000	1.000			15.000	
	Staircase -landing -top only	1	1.000	1.000		Ž.	1.000	
		1	1.700	1.000	38		1.700	
	For openings in wall	18	1.000	0.700			-12.600	
		Ker	ara wat	el Auu	То	tal Quantity	789.675 sc	ηm
					Total Deduct	ed Quantity	-12.600 sq	m
					Net To	tal Quantity	777.075 sq	m
			Sa	y 777.075 s	sqm @ Rs 4	03.73 / sqm	Rs 313	728.49
14	13.52.2 Finishing with Epoxy manufacturer's specifications concrete work			•				
	Qty same as item no-	1	789.675				789.675	
					То	tal Quantity	789.675 sc	mp
					Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	789.675 sq	m
			Sa	y 789.675 s	sqm @ Rs 2	24.31 / sqm	Rs 177	132.00
15	22.23.1 Providing and applying i RCC structures like reta & water treatment plant	ining walls	s of the base	ment,wate	r tanks, roof	slabs, podi	ums, reserv	ior, sewa

partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with the help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perDIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capable of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as per specification and the direction of the engineerin-charge. The product performance shall carry guarantee for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm Reciving chamber 1 5.250 2.200 11.550 side wall inside Coarse and fine screen chamber side 2 7.500 1.000 15.000 wall Coarse and fine screen chamber side 2.750 4 1.000 11.000 wall-middle Coarse and fine screen chamber-cross 9 2.250 0.425 8.607 wall Grit Chamber receiving portion -2 11.700 1.000 23,400 inside 12.000 2.500 Grit Chamber -inside 60.000 parshelfume and 5.000 distribution chamber 2 1.000 10.000 side wall-inside parshelfume and distribution chamber 1 5.000 1.000 5.000 cross wall-inside 18 1.000 0.700 For openings -12.600 **Total Quantity** 144.557 sqm Total Deducted Quantity -12.600 sqm Net Total Quantity 131.957 sqm Say 131.957 sqm @ Rs 573.87 / sqm Rs 75726.16 16 22.23.2 Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:2 (5 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with the

help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2010 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perDIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capable of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as per specification and the direction of the engineerin-charge. The product performance shall carry guarantee for 10 years against anyleakage. For horizontal surface one coat @1.10 kg per sqm. Reciving chamber 1 2.250 1.000 2.250 base slab- top Coarse and fine screen chamber base 2.250 1 7.500 16.875 slab-top Grit chamber base 2 4.600 1.000 9.200 slab -side portion -top Grit chamber base slab -Centre portion -2 3.000 3.000 18.000 top parshallflume and distribution chamber 5.000 10.000 2.000 base slab-top and bottom Total Quantity 56.325 sqm Kerala Water Aut Total Deducted Quantity 0.000 sqm Net Total Quantity 56.325 sqm Say 56.325 sgm @ Rs 442.27 / sgm Rs 24910.86 17 50.10.1 Steel work in built up G I tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete 700.000 700.000 All round verandha 1 **Total Quantity** 700.000 kg Total Deducted Quantity 0.000 kg Net Total Quantity 700.000 kg Say 700.000 kg @ Rs 191.08 / kg Rs 133756.00 Quantity Remark SI No Description **3EQUALISATION TANK** (Cost Index:36.44 %)

	2.6.1 Earth work in exca (exceeding 30 cm in earth, lead up to 50 soil	n depth, 1.5 m	in width as	well as 10	sqm on pla	n) including	disposal of	excavate			
		3.14/4	17.800	17.800	0.500		124.360				
					To	otal Quantity	124.360 ct	ım			
				Т		ted Quantity					
				v 124 360 c		otal Quantity 15.37 / cum		m <b>783.41</b>			
	Providing and laying shuttering - All work nominal size)  For PCC	• .		SCHOOL T	•	_		-			
		10	N. W.		To	otal Quantity	49.744 cur	n			
		151		Sept.	otal Deduc	ted Quantity	0.000 cum				
		Net Total Quantity 49.744 cum									
			Sa	y 49.744 cu	ım @ Rs 74	13.74 / cum	Rs 368	789.08			
3	5.37.1  Providing and laying using cement context transported to site of as per mix design of from transit mixer to including cost of additional and transit mixer to the context of the context of the cost of additional and transit mixer to the cost of the co	g in position reent as per approf of work in trans of specified gra o site of laying,	roved design sit mixer for ade for reinfo excluding th	M-25 grade In mix, manu all leads, ha proced ceme the cost of ce	concrete for ufactured in aving continut nt concrete entering, sh	fully automous uous agitate work includ	atic batchin ed mixer, ma ling pumpin	g plant a anufactur			
	concrete, improve w -charge. Note:- Cer per design mix is pa	orkability withonent content co	out impairing onsidered ir	strength an this item is	d durability @330 kg/	as per direc cum. Excess	elerate/ retaition of the E	nforcement of setting ongineer			
	concrete, improve w	orkability withonent content co	out impairing onsidered ir	strength an this item is	d durability @330 kg/	as per direc cum. Excess	elerate/ retaition of the E	nforcement of setting ongineer			
	concrete, improve w -charge. Note:- Cer per design mix is pa	vorkability withoment content coayable/recover	out impairing onsidered ir able separa	strength an this item is tely.All wior	d durability s @330 kg/ k upto plin	as per direc cum. Excess	elerate/ retail tion of the E s /less ceme 72.122	nforcement setting ingineer ent used			
	concrete, improve w -charge. Note:- Cer per design mix is pa	vorkability withoment content coayable/recover	out impairing onsidered ir able separa	strength an this item is tely.All wior 8.750	od durability s @330 kg/ k upto plini 0.300	as per direc cum. Excess th level	elerate/ retail tion of the E s /less ceme 72.122 72.122 cur	nforcement setting ingineer ent used			
	concrete, improve w -charge. Note:- Cer per design mix is pa	vorkability withoment content coayable/recover	out impairing onsidered ir able separa	strength an this item is tely.All wior 8.750	od durability s @330 kg/ k upto plini 0.300  To  Total Deduc	as per direc cum. Excess th level tal Quantity	retarte/ retartion of the Es /less ceme  72.122  72.122 cur  0.000 cum	nforcement setting ingineer - ent used			
	concrete, improve w -charge. Note:- Cer per design mix is pa	vorkability withoment content coayable/recover	out impairing onsidered ir able separa 8.750	strength an this item is tely.All wior 8.750	od durability  s @ 330 kg/ k upto plini  0.300  Total Deduc	as per direction. Excess the level otal Quantity ted Quantity	retarte/ retartion of the Es /less ceme  72.122  72.122 cur  0.000 cum  72.122 cur	nforcement setting			

	concrete, improve wor -charge. Note:- Ceme	nt content of	considered i	n this item is	@330 kg/c	um. Excess	s /less ceme	ent used		
	per design mix is paya					h level upt		/el		
	c/c	3.14	16.300	4.000	0.300		61.419			
	Baffle wall	1	10.600	4.000	0.100		4.240			
	Walkway	3.14	17.600	1.000	0.100		5.527			
	cantilever beams	8	1.000	0.250	0.250		0.500			
	Stair-step	29	1.000	0.50*0.30* 0.15			0.653			
	Stair - Landing	11	1.000	1.000	0.120		1.320			
	Stair- Waist	11	6.300	1.000	0.120		8.316			
	Walkway to MBBR	11	2.000	1.200	0.120		3.168			
		61	M	$20/\lambda$	Tot	al Quantity	85.143 cur	n		
	Total Deducted Quantity 0.000 cum									
	Net Total Quantity 85.143 cum									
		125	Sa	y 85.143 cum	n @ Rs 1161	0.43 / cum	Rs 988	546.84		
5	5.34.1	T.7	1 777	A .1	• ,					
5	5.34.1 Extra for providing ricl content used is payab BMC/RMC. (Note:- Celltem No. 3&4	her mixes a ble/ recover	able separa	tely.Providing ed in M-30 is	g M-30 grad	e concrete	-			
5	Extra for providing rick content used is payab BMC/RMC. (Note:- Ce	her mixes a ble/ recover ement conte	at all floor levable separatent consider	tely.Providing ed in M-30 is	g M-30 grad s @ 340 kg/	e concrete	157.265	M-25 gra		
5	Extra for providing rick content used is payab BMC/RMC. (Note:- Ce	her mixes a ble/ recover ement conte	at all floor levable separatent consider	tely.Providing	g M-30 grad s @ 340 kg/	e concrete cum).	157.265 ct	M-25 gra		
5	Extra for providing rick content used is payab BMC/RMC. (Note:- Ce	her mixes a ble/ recover ement conte	at all floor levable separatent consider	tely.Providing	g M-30 grad s @ 340 kg/ Total Deducte	e concrete cum). al Quantity	157.265 ct	M-25 gra		
5	Extra for providing rick content used is payab BMC/RMC. (Note:- Ce	her mixes a ble/ recover ement conte	able separatent consider 72.122+85	tely.Providing	g M-30 grad s @ 340 kg/ Total Total Deducte	e concrete cum). al Quantity ad Quantity	157.265 cu	M-25 gra		
6	Extra for providing rick content used is payab BMC/RMC. (Note:- Ce	her mixes a ple/ recover ement conte	at all floor levable separatent consider 72.122+85 .143	tely.Providing ed in M-30 is T	g M-30 grad s @ 340 kg/  Total  Total Deducte  Net Total  cum @ Rs 8	e concrete cum). al Quantity ad Quantity al Quantity 2.61 / cum	157.265 cu 0.000 cum 157.265 cu Rs 12	M-25 gra um m 991.66		
	Extra for providing rick content used is payab BMC/RMC. (Note:- Cell Item No. 3&4	her mixes a ple/ recover ement conte	at all floor levable separatent consider 72.122+85 .143	tely.Providing ed in M-30 is T	g M-30 grad s @ 340 kg/  Total  Total Deducte  Net Total  cum @ Rs 8	e concrete cum). al Quantity ad Quantity al Quantity 2.61 / cum	157.265 cu 0.000 cum 157.265 cu Rs 12	M-25 gra um m 991.66		
	Extra for providing rick content used is payab BMC/RMC. (Note:- Cell Item No. 3&4	her mixes a ple/ recover ement conte  1	ater proofing	tely.Providing ed in M-30 is T	g M-30 grad s @ 340 kg/  Total  Total Deducte  Net Total  cum @ Rs 8  cement cor  330.000	e concrete cum). al Quantity ad Quantity al Quantity 2.61 / cum	157.265 cu 0.000 cum 157.265 cu Rs 129	M-25 gra um m 991.66 y weight		
	Extra for providing rick content used is payab BMC/RMC. (Note:- Cell Item No. 3&4	her mixes a ple/ recover ement conte  1	ater proofing	tely.Providing ed in M-30 is T	g M-30 grad s @ 340 kg/  Total  Total Deducte  Net Total  cum @ Rs 8  cement cor  330.000	e concrete cum).  al Quantity al Quantity 2.61 / cum	157.265 cu 0.000 cum 157.265 cu Rs 129	m 991.0		
	Extra for providing rick content used is payab BMC/RMC. (Note:- Cell Item No. 3&4	her mixes a ple/ recover ement conte  1	ater proofing	tely.Providing ed in M-30 is T	g M-30 grad s @ 340 kg/  Total Cotal Deducte  Net Total cum @ Rs 8  cement cor  330.000  Total Cotal Deducte	e concrete cum).  al Quantity al Quantity 2.61 / cum acrete work al Quantity	157.265 cu 0.000 cum 157.265 cu Rs 129 in doses b 51897.450	M-25 gr um  991.66  y weigh		

7	od328596/2021_202 Extra for providing s		ant coment fo	or the etructi	ires ahove i	olinth level		
	Item no 3&4	1	157.265	i ille silucii	lies above p	Jiiiiii level.	157.265	
		<u>'</u>			To	tal Quantity	157.265 cı	ım
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	157.265 cu	m
			Say	157.265 cu	ım @ Rs 18	99.47 / cum	Rs 298	3720.15
8	5.22.6 Steel reinforcemen binding all complete		_	•	-			
	@120kg/m3	1	157.265	65	120.000		18871.800	
			JAB	199	То	tal Quantity	18871.800	kilogran
		0.000 kilog	ram					
		619	X Z	5. N	Net To	tal Quantity	18871.800	kilogram
		18	Say 18871.8	00 kilogram	n @ Rs 98.9	2 / kilogram	Rs 186	6798.46
9	od328599/2021_202 Extra for providing e		or reinforcem	nent bars.				
	@120kg/m3	1	157.265	HE PET	120.000		18871.800	
		Ker	ala Wat	er Auth	ority To	tal Quantity	18871.800	kg
					otal Deduct	ed Quantity	0.000 kg	
		P	K		Net To	tal Quantity	18871.800	kg
				Say 18871	.800 kg @ l	Rs 2.32 / kg	Rs 43	782.58
10	5.9.1 Centering and shutt columns, etc for ma	-	g strutting, et	c. and remo	oval of form	for:Foundat	ions, footing	gs, bases
	Floor Slab Side	3.14	17.500	0.300			16.485	
					To	tal Quantity	16.485 sqı	m
				Т		tal Quantity ed Quantity		m
				Т	otal Deduct		0.000 sqm	
			S		otal Deduct	ed Quantity	0.000 sqm 16.485 sqn	
11	5.9.2 Centering and shutt attached pilasters, b		g strutting, et	ay 16.485 s c. and remo	Net To sqm @ Rs 3	ed Quantity tal Quantity 37.42 / sqm	0.000 sqm 16.485 sqn Rs 55	n 5 <b>62.37</b>
11	Centering and shutt		g strutting, et	ay 16.485 s c. and remo	Net To sqm @ Rs 3	ed Quantity tal Quantity 37.42 / sqm	0.000 sqm 16.485 sqn Rs 55	n 5 <b>62.37</b>

	Baffle wall	2	10.600	4.000			84.800						
					To	tal Quantity	524.966 sc	mp					
				Т	otal Deduct	ed Quantity	0.000 sqm						
					Net To	tal Quantity	524.966 sq	m					
			Sa	ay 524.966 s	qm @ Rs 72	21.70 / sqm	Rs 378	867.96					
12	5.9.3 Centering and shutte landings, balconies a	ŭ		յ, etc. and r	emoval of f	orm for:Su	spended flo	oors, ro					
	Walkway	3.14	17.600	1.000			55.265						
	Stair- Landing	1	1.000	1.000			1.000						
	Stair- Waist	1	6.300	1.000			6.300						
	Stair- Step	29	1.000	0.150	3		4.350						
	Walkway to MBBR	1	2.000	1.000			2.000						
		FI	The state of	57/1	To	tal Quantity	68.915 sqr	n					
		1 12		THE T	otal Deduct	ed Quantity	0.000 sqm						
		·											
		104	Ma	957	Net Total Quantit								
40	5.0.5	106		Say 68.915 s			-						
13	5.9.5 Centering and shutter girders bressumers ar		g strutting,	4 100	qm @ Rs 82	20.89 / sqm	Rs 56	571.63					
13	Centering and shutter	nd cantileve	g strutting, ors	etc. and rem	qm @ Rs 82	20.89 / sqm	Rs 56.	571.63					
13	Centering and shutter	nd cantileve	g strutting, ors	etc. and rem	qm @ Rs 82	20.89 / sqm n for:Lintels	Rs 56. , beams, pl 6.000 6.000 sqm	571.63					
13	Centering and shutter	nd cantileve	g strutting, ors	etc. and rem	oval of form  To:  Total Deducte	20.89 / sqm  n for:Lintels  tal Quantity ed Quantity	Rs 56. , beams, pl 6.000 6.000 sqm	571.63					
13	Centering and shutter	nd cantileve	g strutting, ors	0.750	oval of form  To:  Total Deducte	20.89 / sqm  for:Lintels  tal Quantity ed Quantity tal Quantity	Rs 56. , beams, pl 6.000 6.000 sqm 0.000 sqm 6.000 sqm	571.63					
13	Centering and shutter	8	g strutting, ors	0.750 T Say 6.000 s	oqm @ Rs 82  noval of form  To:  Total Deducte  Net To:  qm @ Rs 65	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  6.000 sqm  Rs 39	571.63 inth bea					
	Centering and shutter girders bressumers ar	8	g strutting, ors	0.750 T Say 6.000 s	oqm @ Rs 82  noval of form  To:  Total Deducte  Net To:  qm @ Rs 65	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  6.000 sqm  Rs 39	571.63 inth bea					
	Centering and shutter girders bressumers ar  13.7.1 12 mm cement plaster	finished wit	g strutting, ors 1.000	0.750  T  Say 6.000 s  coat of neat of	oqm @ Rs 82  noval of form  To:  Total Deducte  Net To:  qm @ Rs 65	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  Rs 39	571.63 inth bea					
	Centering and shutter girders bressumers ar  13.7.1 12 mm cement plaster  Qty vide Item No:10	finished wit	g strutting, ors 1.000  th a floating of 1.000	0.750  T  Say 6.000 s  coat of neat 6	Too Total Deductor Met Too agm @ Rs 65	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  Rs 39  ement : 3 fine	571.63 inth bea					
	Centering and shutter girders bressumers are 13.7.1 12 mm cement plaster Qty vide Item No:10 For base floor	finished wit	th a floating of 1.000	0.750  T  Say 6.000 s  coat of neat 6  16.485  8.000	Too Total Deductor Net Too oqm @ Rs 65 cement of m	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  Rs 39  ement : 3 fine  16.485  200.960	571.63 inth bea					
	Centering and shutter girders bressumers are summers are summers are summers are summers. It is a summer su	finished wit	g strutting, ors 1.000 1.000 1.000 3.140 3.140	0.750  T  Say 6.000 s  coat of neat 6  16.485  8.000  17.300	Too Total Deductor Net Too oqm @ Rs 65 cement of m	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  Rs 39  ement : 3 fine  16.485  200.960  70.619	571.63 inth bea					
	Centering and shutter girders bressumers are sirely and shutter are sirely as a summer of the second state. The second state of the second state o	finished wit	g strutting, ors 1.000 1.000 3.140 3.140 1.000	0.750  T  Say 6.000 s  coat of neat 6  16.485  8.000  17.300  524.966	Too Total Deductor Net Too oqm @ Rs 65 cement of m	20.89 / sqm  In for:Lintels  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity  Ital Quantity	Rs 56  , beams, pl  6.000  6.000 sqm  0.000 sqm  Rs 39  ement : 3 fine  16.485  200.960  70.619  524.966	571.63 inth be					

				Т	otal Deduct	ed Quantity	0 000 sam	
				•		<u>-</u>	887.945 sq	m
			Sa	ıy 887.945 s	qm @ Rs 40		-	490.03
15	13.52.2 Finishing with Epot manufacturer's specificoncrete work			•				•
	Tank	1	3.140	16.600	4.300		224.134	
	Walkway	1	3.140	17.300	1.000		54.322	
	Beams	8	1.000	0.750			6.000	
			n.	-62	То	tal Quantity	284.456 sc	ım
			1/10	£9\∟ т	otal Deduct	ed Quantity	0.000 sqm	
		-	£2 1		Net To	tal Quantity	284.456 sq	m
		613	Sa	y 284.456 s	qm @ Rs 22	24.31 / sqm	Rs 63	306.33
	help of synthetic fiber i.e by reducingpermed 1048 and resistant to of self-healing of craspecification and the for 10 years against a	eability of cor 16 bar hydro acks up to a direction of the	ncrete by mostatic pressounce of 0.5 me engineer	ore than 90 ure on nega 50mm. The in-charge. T	% compare tive side. Th workshall b he product	d with control of the crystalling of carried of the	ol concrete eslurry shall ut all comp e shall carry	as perDIN be capable lete as per
	Tank	3.14	16.000	4.200	0000 00.70	ng por oqu	211.008	
	Baffle	1	10.600	4.000			42.400	
		· ·	1 .3.555		Tο	tal Quantity		ım
				Т	otal Deduct			<u> </u>
							253.408 sq	m
			Sa	ny 253.408 s	qm @ Rs 5	<u>-</u>	-	
17	22.23.2 Providing and applyin					•	•	

	1048 and resistant to of self-healing of cr	-	•	_		-	•	•	
	specification and the	•					•		
	for 10 years against	anyleakage.F	or horizonta	al surface or	ne coat @1.	10 kg per so	qm.	T	
	For Base floor	3.14/4	16.000	16.000			200.960		
					To	tal Quantity	200.960 sc	mp	
				٦	otal Deduct	ed Quantity	0.000 sqm		
		Net Total Quantity 200.960 se							
			Sa	ay 200.960 s	qm @ Rs 4	42.27 / sqm	Rs 88	878.58	
18	100.36.1		e 30						
	Filling water with 500	00 litre tankers	fited in lorry	and conve	ying water f	rom a distan	ce of 5 km (	average)	
	the reservoir site an				_		•		
	engine pump set, h "(Ref. No. 000, Tech			nd other ap	pliences an	d cost of wa	iter etc. com	plete.	
	(1761. 170. 000, 1661)	3.14	8.000	8.000	4.300		864.128		
		3.14	8.000	8.000	175	tal Ouantitu		ilo litro	
		101			1	tal Quantity			
		ALC: NO			10%		0.000 Kilo I		
			A STORY	HILLS AND			864.128 Kil		
		Kera	Say 864.1	28 Kilo litre	@ Rs 185.6	67 / Kilo litre	Rs 160	442.65	
	50.10.1  Steel work in built up G I tubular ( round, square or rectangular hollow tubes etc.) trusses etc., includi								
19	Steel work in built up				-		•		
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying	a priming c	-		•		
19	Steel work in built up	g in position a	nd applying shers etc. c	a priming c	-		rimer, includ		
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying	a priming c	oat of appro	oved steel pr	700.000	ing weld	
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying shers etc. c	a priming complete	oat of appro	oved steel produced s	700.000 700.000 kg	ing weld	
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying shers etc. c	a priming complete	oat of appro	oved steel protection of the p	700.000 700.000 kg	ing weld	
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying shers etc. c	a priming complete	oat of appro	oved steel protection of the p	700.000 700.000 kg	ing weld	
19	Steel work in built up cutting, hoisting,fixing	g in position a	nd applying shers etc. c	a priming complete	To Total Deduct	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg	ing weld	
19 Si No	Steel work in built up cutting, hoisting,fixing	ng in position a cial shaped wa	nd applying shers etc. c 700.000	a priming complete  Say 700.0	To Total Deduction Net To Total De Res	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg	ing weld	
	Steel work in built up cutting, hoisting, fixing and bolted with spec	ng in position a cial shaped wa	nd applying shers etc. c 700.000	a priming complete  Say 700.0	To Total Deduct Net To	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg Rs 133	3 3 3 3 7 <b>56.00</b>	
	Steel work in built up cutting, hoisting, fixing and bolted with special distribution and bolted with special distribution.  Description  2.6.1	ng in position a cial shaped was 1  No  4MBBR 1	nd applying shers etc. c 700.000	a priming complete  Say 700.0  B  (Cost Inde	To Total Deduct Net To 00 kg @ Rs	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg Rs 133	3 3 3 756.00 Remark	
SI No	Steel work in built up cutting, hoisting, fixing and bolted with special distribution.  Description  2.6.1 Earth work in exca	ng in position a cial shaped was a shaped wa	nd applying shers etc. c 700.000	a priming complete  Say 700.0  B  (Cost Inde	To Total Deduct Net To Total Deduct Net To Total Deduct Net Total Deduct Net Total Deduct Net Total Deduct Total Deduct Total Deduct Net Total Deduct To	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg Rs 133 Quantity	7756.00  Remark	
SI No	Steel work in built up cutting, hoisting, fixing and bolted with special distribution and bolted with special distribution.  Description  2.6.1	ng in position a cial shaped wa 1  No  4MBBR 1 decrease a cial shaped was a shaped	nd applying shers etc. c 700.000  L & 2  chanical m in width as	Say 700.0  B  (Cost Index eans (Hydrawell as 10	Total Deduct Net To 00 kg @ Rs  p ex:36.44 %) raulic exca sqm on pla	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg Rs 133 Quantity	3 8756.00 Remark	
SI No	Description  2.6.1 Earth work in built up cutting, hoisting, fixing and bolted with special sp	ng in position a cial shaped wa 1  No  4MBBR 1 decrease a cial shaped was a shaped	nd applying shers etc. c 700.000  L & 2  chanical m in width as	Say 700.0  B  (Cost Index eans (Hydrawell as 10	Total Deduct Net To 00 kg @ Rs  p ex:36.44 %) raulic exca sqm on pla	oved steel protection of the p	700.000 700.000 kg 0.000 kg 700.000 kg Rs 133 Quantity	3756.00 Remark	

	tank 2	3.14	7.650	7.650	0.550		101.069	
					To	tal Quantity	215.781 cu	ım
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	215.781 cu	m
			Sa	ay 215.781 c	um @ Rs 2	15.37 / cum	Rs 46	472.75
2	4.1.5 Providing and laying i shuttering - All work u nominal size)	•		•	•	J		•
	tank 1	3.14	8.150	8.150	0.200		41.714	
	tank 2	3.14	7.650	7.650	0.200		36.753	
			JAN	109	To	tal Quantity	78.467 cur	n
			E. L. W.	M & J	otal Deduct	ed Quantity	0.000 cum	
		613	X Z	5. N	Net To	tal Quantity	78.467 cum	1
		1 6 3	Sa	nv 78 467 cu	m @ Rs 74	13.74 / cum	Rs 581	733.94
3	5.37.1  Providing and laying i using cement content transported to site of as per mix design of site.	as per appr work in trans	eady mixed Noved designates the contract of th	M-25 grade n mix, manu all leads, ha	concrete fo factured in wing contin	r reinforced fully autom uous agitate	cement cor atic batchin ed mixer, ma	g plant a anufactu
3	Providing and laying in using cement content transported to site of the as per mix design of the sincluding cost of admit concrete, improve word-charge. Note:- Ceme	as per appr work in trans specified gra ite of laying, xtures in rec kability without ent content c	eady mixed for sit mixer for ade for reinfor excluding the commended out impairing onsidered in	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength an n this item is	concrete for ifactured in aving conting int concrete entering, sho as per IS: 9 d durability s @330 kg/o	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per directum. Excess	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E	g plant anufacture of R.M. Inforcement of setting ingeneral control of the contro
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per appr work in trans specified gra ite of laying, xtures in rec kability without able/recover	eady mixed for oved design sit mixer for excluding the commended out impairing onsidered in table separa	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is	concrete for ifactured in aving conting int concrete entering, sho as per IS: 9 d durability 6 @330 kg/o k upto plint	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per directum. Excess	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E	g plant anufacture of R.M. Inforcement of setting ingeneral control of the contro
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per approver work in transspecified graite of laying, extures in reckability without content content cable/recover	eady mixed for oved design sit mixer for excluding the commended out impairing onsidered in table separates	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is ntely.All wion	concrete for a contract concrete contract concrete contering, should be contered as per IS: 9 d durability a @330 kg/c with contract contents as per IS: 9 d durability a @330 kg/c with contract contrac	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per directum. Excess	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme	g plant anufacture of R.M. Inforcement of setting ingeneral control of the contro
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per appr work in trans specified gra ite of laying, xtures in rec kability without able/recover	eady mixed for oved design sit mixer for excluding the commended out impairing onsidered in table separa	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is	concrete for a factured in a concrete entering, she as per IS: 9 d durability 6 @ 330 kg/c k upto plint 0.350	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direct cum. Excess h level	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme	g plant anufacturg of R.M. Inforcement setting
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per approver work in transspecified graite of laying, extures in reckability without content content cable/recover	eady mixed for oved design sit mixer for excluding the commended out impairing onsidered in table separates	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is ntely.All wior 8.150 7.650	concrete for a factured in a concrete entering, she as per IS: 9 d durability 6 @ 330 kg/c k upto plint 0.350 0.350	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direct cum. Excess h level	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme 72.999 64.317	g plant anufactu g of R.M nforcem d settin ingineer ent used
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per approver work in transspecified graite of laying, extures in reckability without content content cable/recover	eady mixed for oved design sit mixer for excluding the commended out impairing onsidered in table separates	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is ntely.All wior 8.150 7.650	concrete for a factured in a concrete entering, she as per IS: 9 d durability 6 @ 330 kg/c k upto plint 0.350	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direct cum. Excess h level  otal Quantity	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme 72.999 64.317 137.316 cu	g plant anufactu g of R.M nforcem d settin ingineer ent used
3	Providing and laying in using cement content transported to site of the as per mix design of a from transit mixer to sincluding cost of admit concrete, improve word-charge. Note:- Cementer Cementer of the content of	as per approver work in transspecified graite of laying, extures in reckability without content content cable/recover	eady mixed for oved designate for reinforexcluding the ommended out impairing onsidered in able separate 8.150  7.650	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is ntely.All wior 8.150 7.650	concrete for a factured in a ving continuity concrete entering, she as per IS: 9 d durability 6 @ 330 kg/o k upto plint 0.350  0.350  Total Deduct Net To	r reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direct cum. Excess h level  otal Quantity ted Quantity	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme 72.999 64.317 137.316 cu	g plant and anufactured setting in the control of t

	concrete, improve works -charge. Note:- Cemen per design mix is payal	t content c	onsidered in	this item is	@330 kg/d	cum. Excess	s /less ceme	ent used as	
	FOR WALLS(TANK 1)	3.14	15.100	0.300	4.500		64.009		
	FOR WALLS (TANK 2)	3.14	14.100	0.300	4.500		59.770		
	Walkway(1)	1	16.400	1.000	0.100		1.640		
	WALKWAY(2)	1	15.400	1.000	0.100		1.540		
	Cantilever beams	10	1.000	0.250	0.250		0.625		
					То	tal Quantity	127.584 cu	ım	
	Total Deducted Quantity 0.000 cum								
			M		Net To	tal Quantity	127.584 cu	m	
		-	Say 1	27.584 cun	n @ Rs 116	10.43 / cum	Rs 148	1305.10	
	Extra for providing riche content used is payable BMC/RMC. (Note:- Cer	e/ recovera	able separate ent considere	ely.Providin	g M-30 grad	de concrete	instead of		
	Qty vide item 3&4	1	264.900		3%		264.900		
		Ker	ala Wate	ar Auth	ority	tal Quantity		ım	
		IXCI	ara wan	Auu	otal Deduct	ed Quantity	0.000 cum		
			R		Net To	tal Quantity	264.900 cu	m	
	J		S	ay 264.900	cum @ Rs	32.61 / cum	Rs 21	383.39	
6	4.12 Extra for providing and cement as per manufa	_		material in	cement co	ncrete work	in doses b	y weight of	
	ITEM No 3&4	1	264.900		330.000		87417.000		
					То	tal Quantity	87417.000	kg	
				Т	To otal Deduct			kg	
				T	otal Deduct	ed Quantity			
					otal Deduct	ed Quantity tal Quantity	0.000 kg 87417.000	kg	
7	od328596/2021_2022 Extra for providing sulph	nate resista	ant cement fo	Say 87417	otal Deduct Net To '.000 kg @ F	ed Quantity tal Quantity Rs 1.36 / kg	0.000 kg 87417.000	kg	
7		nate resista	ant cement fo	Say 87417	otal Deduct Net To '.000 kg @ F	ed Quantity tal Quantity Rs 1.36 / kg	0.000 kg 87417.000	kg	
7				Say 87417	Net To '.000 kg @ F	ed Quantity tal Quantity Rs 1.36 / kg	0.000 kg 87417.000 <b>Rs 118</b> 264.900	kg 887.12	
7				Say 87417	Net To '.000 kg @ F	ed Quantity tal Quantity Rs 1.36 / kg plinth level. tal Quantity	0.000 kg 87417.000 <b>Rs 118</b> 264.900	kg 887.12	

			Say	264.900 cu	ım @ Rs 18	99.47 / cum	Rs 503	169.60		
8	5.22.6 Steel reinforcement for binding all complete up		_		<u> </u>					
	@120kg/m3	1	264.900	120.000			31788.000			
					То	tal Quantity	31788.000	kilogram		
		Total Deducted Quantity								
		31788.000	kilogram							
			Say 31788.0	00 kilogram	n @ Rs 98.9	2 / kilogram	Rs 314	4468.96		
9	od328599/2021_2022 Extra for providing epox	y coating f	or reinforcem	nent bars.						
	@120kg/m3	1	264.900	120.000			31788.000			
		-	£3 W		То	tal Quantity	31788.000	kg		
		61	N PZ	SN /Y	otal Deduct	ed Quantity	0.000 kg			
		1 15-	TIME		Net To	tal Quantity	31788.000	kg		
	Net Total Quantity 31788.000 kg									
10	5.9.1			Say 31788	3.000 kg @ I	Rs 2.32 / kg	Rs 737	748.16		
10	5.9.1 Centering and shutterin columns, etc for mass of	•		c. and remo	oval of form	_				
10	Centering and shuttering	•		c. and remo	oval of form	_				
10	Centering and shutterin columns, etc for mass of	concrete	ala Wat	c. and remo	oval of form	_	ions, footing			
10	Centering and shuttering columns, etc for mass of For tank 1	concrete 1	ala Wat 3.14*16	c. and remo	0.350 0.350 To	for:Foundat	17.584 16.485 34.069 sqr	s, bases o		
10	Centering and shuttering columns, etc for mass of For tank 1	concrete 1	ala Wat 3.14*16	c. and remo	0.350 0.350 To	for:Foundat tal Quantity ed Quantity	17.584 16.485 34.069 sqr 0.000 sqm	ns, bases o		
10	Centering and shuttering columns, etc for mass of For tank 1	concrete 1	ala Wat 3.14*16 3.14*15	c. and remo	0.350 0.350 To Total Deduct	for:Foundat tal Quantity ed Quantity tal Quantity	17.584 16.485 34.069 sqr 0.000 sqm 34.069 sqm	ns, bases o		
	Centering and shuttering columns, etc for mass of For tank 1  For tank 2	concrete 1	ala Wat 3.14*16 3.14*15	c. and remo	0.350 0.350 To	for:Foundat tal Quantity ed Quantity tal Quantity	17.584 16.485 34.069 sqr 0.000 sqm 34.069 sqm	ns, bases o		
11	Centering and shuttering columns, etc for mass of For tank 1	toncrete 1	3.14*16 3.14*15 S	c. and remo	0.350 0.350 To Total Deduct Net To sqm @ Rs 3	for:Foundat tal Quantity ed Quantity tal Quantity 37.42 / sqm	17.584 16.485 34.069 sqr 0.000 sqm 34.069 sqm Rs 114	n 195.56		
	Centering and shuttering columns, etc for mass of For tank 1  For tank 2  5.9.2  Centering and shuttering and shuttering and shuttering columns.	toncrete 1	3.14*16 3.14*15 S	c. and remo	0.350 0.350 To Total Deduct Net To sqm @ Rs 3	for:Foundat tal Quantity ed Quantity tal Quantity 37.42 / sqm	17.584 16.485 34.069 sqr 0.000 sqm 34.069 sqm Rs 114	n 195.56		
	Centering and shuttering columns, etc for mass of For tank 1  For tank 2  5.9.2  Centering and shuttering attached pilasters, butter for tank (1) walls	g including	3.14*16 3.14*15  S g strutting, et inth and strir	c. and remo	0.350 0.350 To Total Deduct Net To sqm @ Rs 3	for:Foundat tal Quantity ed Quantity tal Quantity 37.42 / sqm	17.584 16.485 34.069 sqm 0.000 sqm 34.069 sqm Rs 114	n 195.56		
	Centering and shuttering columns, etc for mass of For tank 1  For tank 2  5.9.2  Centering and shuttering attached pilasters, butter for tank (1) walls outside	og including eresses, pl	3.14*16 3.14*15 Sg strutting, et inth and strir 3.14*15.4	ay 34.069 s c. and remo	0.350 0.350 To Total Deduct Net To sqm @ Rs 3	for:Foundat tal Quantity ed Quantity tal Quantity 37.42 / sqm	17.584 16.485 34.069 sqm 0.000 sqm 34.069 sqm Rs 114 any thickness	n 195.56		
	Centering and shuttering columns, etc for mass of For tank 1  For tank 2  5.9.2  Centering and shuttering attached pilasters, butter for tank (1) walls outside  Wall outside  For tank (2) wall	g including eresses, pl	3.14*16 3.14*15 Sg strutting, et inth and strir 3.14*15.4 3.14*14.8	ay 34.069 s c. and remo	0.350 0.350 To Total Deduct Net To sqm @ Rs 3	for:Foundat tal Quantity ed Quantity tal Quantity 37.42 / sqm	17.584 16.485 34.069 sqr 0.000 sqm 34.069 sqr Rs 114 any thickness 217.602 209.124	n 195.56		

				7	Total Deduc	ted Quantity	0.000 sam	
				<u>'</u>		otal Quantity	-	m
			Sa	y 825.192 s		21.70 / sqm		5541.07
12	5.9.3 Centering and shuttlandings, balconies		ing strutting	-	•	•		oors, roofs
	Walkway	1	16.400		0.100		1.640	
		1	15.400		0.100		1.540	
					To	otal Quantity	3.180 sqm	
				Т	Total Deduc	ted Quantity	0.000 sqm	
			100	B.	Net To	otal Quantity	3.180 sqm	
				Say 3.180 s	sqm @ Rs 8	20.89 / sqm	Rs 26	610.43
	Centering and shutte girders bressumers	and cantileve	ers		noval of form	m for:Lintels		inth beams
	Cantilever beam	10	1.000	0.750		سلب	7.500	
					To	stal Quantity	7.500 sqm	
			100 C C C C C C C C C C C C C C C C C C			nai Quariity	7.000 3411	
			THE STATE OF THE S		Total Deduc	ted Quantity	0.000 sqm	
		Ker	ala Wat	er Auth	Total Deduc	ted Quantity	0.000 sqm 7.500 sqm	
		Ker	ara i ar	er Auth	Total Deduc	ted Quantity	0.000 sqm 7.500 sqm	004.18
14	13.7.1 12 mm cement plaste	P	R	er Auth	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49	004.18
14	_	P	R	er Auth	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49	004.18
14	12 mm cement plaste	er finished wit	th a floating c	er Auth	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49	004.18
14	12 mm cement plaste Item No:10	er finished wit	th a floating c	er Auth	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49 ment : 3 fine	004.18
14	12 mm cement plaste Item No:10 Item No:11	er finished wit	34.069 825.192	er Auth	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49 ment : 3 fine 34.069 825.192	004.18
14	12 mm cement plaste Item No:10 Item No:11 Item No:12	er finished wit	34.069 825.192 3.180	er Auth	Total Deduction Net Total	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49 ment : 3 fin 34.069 825.192 3.180 7.500	904.18 e sand)
14	12 mm cement plaste Item No:10 Item No:11 Item No:12	er finished wit	34.069 825.192 3.180	er Auth Say 7.500 s	Total Deduction Net To	ted Quantity otal Quantity 53.89 / sqm	0.000 sqm 7.500 sqm Rs 49 ment : 3 fin 34.069 825.192 3.180 7.500 869.941 sc	904.18 e sand)
14	12 mm cement plaste Item No:10 Item No:11 Item No:12	er finished wit	34.069 825.192 3.180	er Auth Say 7.500 s	Total Deduction Net Total Deduction	ted Quantity otal Quantity 53.89 / sqm nix:1:3 ( 1 ce	0.000 sqm 7.500 sqm Rs 49 ment : 3 fine 34.069 825.192 3.180 7.500 869.941 sc 0.000 sqm	904.18 e sand)
14	12 mm cement plaste Item No:10 Item No:11 Item No:12	er finished wit	34.069 825.192 3.180 7.500	er Auth Say 7.500 s oat of neat	Total Deduction Net Total Deduction	ted Quantity otal Quantity 53.89 / sqm nix:1:3 ( 1 ce	0.000 sqm 7.500 sqm Rs 49 ment : 3 fine 34.069 825.192 3.180 7.500 869.941 sq 0.000 sqm 869.941 sq	904.18 e sand) qm
14	12 mm cement plaste Item No:10 Item No:11 Item No:12	er finished with 1 1 1 1 1 1 1 1 1 2 2 2 2 2 2 2 2 2 2	34.069 825.192 3.180 7.500	oat of neat  y 869.941 s  coats) at	Total Deduction  Net Total Res 6  Cement of n  Total Deduction  Net Total Cappa @ Rs 4  all location	ted Quantity  53.89 / sqm  nix:1:3 ( 1 ce  ptal Quantity  ted Quantity  ted Quantity  ted Quantity  otal Quantity  otal Quantity  otal Quantity  otal Quantity	0.000 sqm 7.500 sqm Rs 49 ment : 3 fine 34.069 825.192 3.180 7.500 869.941 sq 0.000 sqm 869.941 sq Rs 351	m 221.28 ied as pe

Walkway 1 1 15.400 1.000 15.40		Tank2	1	3.14*14.4	4.500			203.472		
Beams 3 1.000 0.250 0.750 Total Quantity 453.624 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 453.624 sqm  Rs 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sew 8 water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5: 2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3: 1 (3 partsintegral crystallistury: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-21, i.e. by reducingpermeability of concrete by more than 90% compared with control concrete as per 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be cape of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  For tank 1 inside 3;14, 14,800 4,500 209.125  For tank 2 inside 3,14 13,800 4,500 209.125  For tank 2 inside 3,14 13,800 4,500 209.125  For tank 2 inside 3,14 13,800 4,500 209.125  For tank 3 inside 3,14 13,800 4,500 209.125  For tank 4 inside 3,14 13,800 4,500 209.125  For tank 5 inside 8,14 13,800 8,14 13,8		Walkway	1	16.400	1.000			16.400		
Total Quantity 453.624 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 453.624 sqm  Say 453.624 sqm @ Rs 224.31 / sqm  Rs 101752.40  16  22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sew: & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallisury : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e. by reducing permeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be caps of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  For tank 1 inside 3.14 13.800 4.500 194.994  Fotal Quantity 404.119 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 404.119 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 194.994  Fotal Quantity 194.994  Total Quantity 194.994  Total Quantity 194.994  Fotal Quantity 194.994  Total Quantity 194.994  Fotal Quantity 194.994  Total Qu			1	15.400	1.000			15.400		
Total Deducted Quantity 0.000 sqm  Net Total Quantity 453.624 sqm  Say 453.624 sqm @ Rs 224.31 / sqm  Rs 101752.40  22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallistury : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be caps of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  For tank 1 inside 314 14.800		Beams	3	1.000	0.250			0.750		
Say 453.624 sqm @ Rs 224.31 / sqm  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 3 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i. e by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capa of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  For tank 1 inside 3144 13.800 4.500 209.125  For tank 2 inside 3.14 13.800 4.500 194.994  Total Quantity  Net Total Quantity  Total Quantity  Adv4.119 sqm  Say 404.119 sqm @ Rs 573.87 / sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallise slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i. e by reducingpermeabi						То	tal Quantity	453.624 sc	m	
Say 453.624 sqm @ Rs 224.31 / sqm  Rs 101752.40  22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sews & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e. by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capa of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @ 0.70 kg per sqm  For tank 1 inside 3.14 13.800 4.500 203.125  For tank 2 inside 3.14 13.800 4.500 194.994  Total Deducted Quantity 404.119 sqm  Total Deducted Quantity 404.119 sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallines slurry : 2 parts water) for vertical surfaces and 6 : 1 (3 partsintegral crystallines slurry : 2 parts water) for vertical surfaces and 6 : 1 (3 partsintegral crystallines slurry : 2 parts water) for vertical surfaces and 6 : 1 (3 partsintegral crystallines slurry : 2 par					Т	otal Deduct	ed Quantity	0.000 sqm		
Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sews & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallistury : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e. by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be cape of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @ 0.70 kg per sqm  For tank 1 inside 3.14 13.800 4.500 20.91.25  For tank 2 inside 3.14 13.800 4.500 194.994  Total Quantity 404.119 sqm  Res 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sews & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystallisely surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e. by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be cape of self-he						Net To	tal Quantity	453.624 sq	m	
Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sews & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capa of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaran for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  For tank 1 inside 3.14 13.800 4.500 209.125  For tank 2 inside 3.14 13.800 4.500 194.994  Total Deducted Quantity 404.119 sqm  Total Deducted Quantity 404.119 sqm  Say 404.119 sqm @ Rs 573.87 / sqm Rs 231911.77  17 22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-2(i.e by reducingpermeability of concrete by more than 90% compared with control concrete as performa										
For tank 1 inside  3,14 13.800 4.500 194.994  Total Quantity 404.119 sqm  Total Deducted Quantity 404.119 sqm  Net Total Quantity 404.119 sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perf 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capa of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant		slurry: 1 part water) f help of synthetic fiber i.e by reducingperme 1048 and resistant to of self-healing of cra specification and the	or horizontal brush. The ability of cor 16 bar hydro cks up to a direction of the	surfaces and materials halt nerete by mostatic pressure width of 0.5 he engineering	nd applying I meet the rore than 90 ure on nega 00mm. The	thesame from equirement with compare tive side. The workshall be the product	om negative is as specificated with control of crystalline of carried of performance.	(internal) si ed in ACI-21 rol concrete eslurry shall out all comp e shall carry	de with the second of the seco	
For tank 2 inside  3.14  13.800  4.500  194.994  Total Quantity 404.119 sqm  Net Total Quantity 404.119 sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as performance shall carry guarant of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant.					er Auth		ng per squ			
Total Quantity 404.119 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 404.119 sqm  Say 404.119 sqm @ Rs 573.87 / sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sew & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perful 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capa of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant		For tank 2 inside	1201	TICL VV CIC		4.500		194.994		
Total Deducted Quantity 0.000 sqm  Net Total Quantity 404.119 sqm  Say 404.119 sqm @ Rs 573.87 / sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as performance shall carry shall be capator of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant.			PI	2		To	tal Quantity	404.119 sc	m	
Net Total Quantity  Say 404.119 sqm @ Rs 573.87 / sqm  Rs 231911.77  22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sews & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as performance shall carry shall be capadof self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarant.					T				•	
22.23.2  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as performance shall be capator of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guaranters.						Utal Deutici	ed Quantity	0.000 sgm		
Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystall slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as performance shall be capadof self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as specification and the direction of the engineerin-charge. The product performance shall carry guarantees.										
for 10 years against anyleakage. For horizontal surface one coat @1.10 kg per sqm.				Sa		Net To	tal Quantity	404.119 sq		
	17	Providing and applying RCC structures like real water treatment plate partsintegral crystalling slurry: 1 part water) if help of synthetic fiber i.e by reducing permed 1048 and resistant to of self-healing of crains.	etaining walls nt, tunnels/ s ne slurry : 2   for horizontal brush. The   ability of cor 16 bar hydro cks up to a	estalline slurr s of the base subway and b parts water) surfaces an materialshal ncrete by mo static pressu	y 404.119 s ement, water bridge deck for vertical ad applying I meet the r ore than 90 ure on nega	Net To	re forwaterphysiabs, poding red by mixing at 1 (3 pm) megative as specified with contine crystalline pe carried o	Rs 231 roofing treat ums, reserving in the ratio cartsintegra (internal) si ed in ACI-21 rol concrete eslurry shall out all comp	ment to to for, sewa to of 5 : 2 I crystallide with the second as perD be capallete as p	

		i i	1			1	I.	
		3.14/4	13.800	13.800			149.496	
					To	otal Quantity	321.443 sc	mp
				Т	otal Deduc	ted Quantity	0.000 sqm	
					Net To	otal Quantity	321.443 sq	m
			Sa	y 321.443 s	qm @ Rs 4	42.27 / sqm	Rs 142	164.60
18	100.36.1 Filling water with 500 the reservoir site and engine pump set, hi "(Ref. No. 000, Tech	d pumping the ire for tanker l	e water into t lorry, tools a	he reservoi	r of height r	not less than	3 m using	5 HP dies
	tank 1	3.14/4	14.8*14.8	unio.	4.500		773.759	
	tank 2	3.14/4	13.8*13.8		4.500		672.730	
			C. 1		To	otal Quantity	1446.489 I	Kilo litre
			3	S. Xi	otal Deduc	ted Quantity	0.000 Kilo I	itre
		16		723/24	Net To	otal Quantity	1446.489 K	(ilo litre
		1.34						
19	50.10.1 Steel work in built up cutting, hoisting,fixin and bolted with spec	g in position a	round, squa	ire or rectar a priming c	ngular hollo		) trusses etc	c., includin
19	Steel work in built up	g in position a	round, squa	ire or rectar a priming c	ngular hollo oat of appro	w tubes etc.) oved steel pr	) trusses etc rimer, includ	c., includin
19	Steel work in built up cutting, hoisting,fixin	g in position a	round, squa and applying ashers etc. co	are or rectar a priming complete 11h	ngular hollo oat of appro	w tubes etc.) oved steel protection	900.000 kg	c., includin
19	Steel work in built up cutting, hoisting,fixin	g in position a	round, squa and applying ashers etc. co	are or rectar a priming complete 11h	ngular hollo oat of appro Ority To	w tubes etc.)  oved steel properties  otal Quantity  ted Quantity	900.000 900.000 kg	c., includir ing weldir
19	Steel work in built up cutting, hoisting,fixin	g in position a	round, squa and applying ashers etc. co	are or rectar a priming complete 11h	ngular hollo oat of appro Ority To	w tubes etc.) oved steel protection	900.000 900.000 kg	c., includir ing weldir
	Steel work in built up cutting, hoisting, fixin and bolted with spec	ng in position a	round, squa and applying ashers etc. co	a priming complete 1th	ogular hollo oat of appro Ority  To  Total Deduc  Net To  00 kg @ Rs	w tubes etc.)  oved steel protal Quantity  ted Quantity otal Quantity  191.08 / kg	900.000 kg 900.000 kg Rs 171	e., includir ing weldir
19	Steel work in built up cutting, hoisting, fixin and bolted with spec	ng in position a	round, squa and applying ashers etc. co 900.000	a priming complete 1th	oat of appro OCTITY  To  Total Deduc  Net To  00 kg @ Rs	oved steel protect Quantity otal Quantity ot	900.000 kg	c., includir ing weldir
SI No	Steel work in built up cutting, hoisting, fixin and bolted with spec	ng in position a	round, squa and applying ashers etc. co 900.000	a priming complete 1th	ogular hollo oat of appro Ority  To  Total Deduc  Net To  00 kg @ Rs	oved steel protect Quantity otal Quantity ot	900.000 kg 900.000 kg Rs 171	e., includir ing weldir
	Steel work in built up cutting, hoisting, fixin and bolted with spec	No SSECONDAR  avation by men depth, 1.5 m	round, squa and applying ashers etc. co 900.000	Say 900.00  B  (Cost eans (Hydr well as 10	oat of appro oot of appro ootal Deduc Net To 00 kg @ Rs D Index:36.4	oved steel protection of the control	900.000 your good good good good good good good goo	972.00 Remark
SI No	Description  Description  2.6.1 Earth work in exca (exceeding 30 cm in earth, lead up to 50	No SSECONDAR  avation by men depth, 1.5 m	round, squa and applying ashers etc. co 900.000	Say 900.00  B  (Cost eans (Hydr well as 10	oat of appro oot of appro ootal Deduc Net To 00 kg @ Rs D Index:36.4	oved steel protection of the control	900.000 your good good good good good good good goo	972.00 Remark
SI No	Description  Description  2.6.1 Earth work in exca (exceeding 30 cm in earth, lead up to 50	No  SSECONDARY  avation by men depth, 1.5 mm and lift up	round, squa and applying ashers etc. co 900.000 L Y CLARIFIEF echanical man in width as to 1.5 m, dis	Say 900.00  B  Cost  Cost	ngular holloo oat of appro OOTITY  To  Total Deduc  Net To  00 kg @ Rs  Index:36.4  raulic exca sqm on pla in to be leve	oved steel protected Quantity otal Quantity otal Quantity otal Quantity of 191.08 / kg	900.000 g 900.000 kg 0.000 kg 900.000 kg Rs 171 Quantity  Jual means disposal of	972.00 Remark over area excavate All kinds
SI No	Description  Description  2.6.1 Earth work in exca (exceeding 30 cm in earth, lead up to 50	No  SSECONDARY  avation by men depth, 1.5 mm and lift up	round, squa and applying ashers etc. co 900.000 L Y CLARIFIEF echanical man in width as to 1.5 m, dis	Say 900.00  B  Cost eans (Hydrauell as 10 posed earth	ngular holloo oat of appro Total Deduc Net To 00 kg @ Rs D Index:36.4	oved steel protected Quantity otal Quantity otal Quantity otal Quantity of 191.08 / kg or cr	900.000 good on the second of	972.00 Remark over area excavate All kinds
SI No	Description  Description  2.6.1 Earth work in exca (exceeding 30 cm in earth, lead up to 50	No  SSECONDARY  avation by men depth, 1.5 mm and lift up	round, squa and applying ashers etc. co 900.000 L Y CLARIFIEF echanical man in width as to 1.5 m, dis	Say 900.00  B  Cost eans (Hydrauell as 10 posed earth	ngular holloo oat of appro OO ITY  To  Total Deduc  Net To  00 kg @ Rs  Index:36.4  raulic exca sqm on pla  to be leve  1.000  To  Total Deduc	oved steel protect Quantity otal Quantity otal Quantity otal Quantity of 191.08 / kg or creation of the creati	900.000 younderstand of the second of the se	972.00 Remark over area excavate All kinds

			Sa	ay 180.517 ci	um @ Rs 2	15.37 / cum	Rs 38	877.95	
2	4.1.5 Providing and laying in shuttering - All work up nominal size)	•		•	•	_		•	
		1	3.140	6.65*6.65	0.200		27.772		
	Total Quantity 27.772 cum								
	Total Deducted Quantity 0.000 cum								
	Net Total Quantity 27.772 cum								
			Sa	ay 27.772 cui	m @ Rs 74	13.74 / cum	Rs 205	894.39	
	Providing and laying in using cement content transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar Basement Floor	as per appr york in trans pecified gra e of laying, tures in rec cability without at content content content	roved designormal	n mix, manurall leads, har forced cemer he cost of ce proportions as strength and this item is ately. All wiorlands and the cost of the co	factured in ving continut concrete ntering, she as per IS: 9 d durability @330 kg/6 k upto plint 0.300	fully autom- uous agitate work include uttering finis 9103 to access as per direct cum. Excess th level 1.15  ptal Quantity ted Quantity	atic batchined mixer, mading pumpine hing and releferate/ retained tion of the Estables cemes 54.610  54.610 cur  0.000 cum	g plant ar anufacture g of R.M. inforcement of setting fingineer - ent used a	
	Net Total Quantity 54.610 cum  Say 54.610 cum @ Rs 9947.98 / cum								
4	5.37.2  Providing and laying in using cement content transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar Wall	as per appr york in trans pecified gra- e of laying, tures in rec- cability without ont content co- ble/recover	roved designation in the control of	n mix, manual leads, has forced cemer he cost of cemproportions as strength and nothing item is	factured in ving contin nt concrete ntering, she as per IS: 9 d durability @330 kg/o above plin 3.300	fully automouous agitate work include uttering finis 9103 to access as per direction. Excess	atic batchined mixer, mading pumpine hing and related retailtion of the Earless ceme	g plant ar anufacture g of R.M. inforceme rd setting ingineer - ent used a	
		1	1	1			1		
	chamber	3.14	12.700	0.900	0.100		3.590		
	chamber Walkway	3.14	12.700 14.800	0.900 1.200	0.100		3.590 5.577		

	RCC HOLLOW COLUMN	3.14	0.500	0.100	4.400		0.691	
					To	otal Quantity	53.668 cu	m
				Т	otal Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	53.668 cur	n
			Say	53.668 cun	n @ Rs 116	10.43 / cum	Rs 623	3108.56
5	5.34.1 Extra for providing riche content used is payable BMC/RMC. (Note:- Cer	e/ recovera	able separate	ely.Providin	g M-30 gra	de concrete	•	
	Qty Vide Item No:3 &4	1	108.278				108.278	
			/file	166	To	otal Quantity	108.278 c	um
			Z./1	T I	otal Deduc	ted Quantity	0.000 cum	
			37.3	K X	Net To	otal Quantity	108.278 cu	ım
			S	ay 108.278	cum @ Rs	82.61 / cum	Rs 89	944.85
	Extra for providing and							
	cement as per manuface  Qty Vide Item No:3	- 1. 1. 1. E	ecification .		330.000		35731.741	
	cement as per manufac	cturer's sp	ecification .	er Auth	330.000	otal Quantity	35731.741	
	cement as per manufac	cturer's sp	ecification .	er Auth	330.000 Ority <sub>To</sub>		35731.741 35731.741	
	cement as per manufac	cturer's sp	ecification .	er Auth	330.000 Ority To	otal Quantity	35731.741 35731.741 0.000 kg	kg
	cement as per manufac	cturer's sp	ecification .	er Auth	330.000 Office Total Deduction	otal Quantity	35731.741 35731.741 0.000 kg 35731.741	kg
7	cement as per manufac	turer's sp  1  Ker	108.278 ala Wat	er Auth	330.000 OTITY To Total Deduct Net To .741 kg @	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg	35731.741 35731.741 0.000 kg 35731.741	kg kg
7	Qty Vide Item No:3  od328596/2021_2022	turer's sp  1  Ker	108.278 ala Wat	er Auth	330.000 OTITY To Total Deduct Net To .741 kg @	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg	35731.741 35731.741 0.000 kg 35731.741	kg kg
7	od328596/2021_2022 Extra for providing sulph	turer's sp  1  Ker	ant cement fo	er Auth	330.000 Ority To Total Deduct Net To .741 kg @	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg	35731.741 35731.741 0.000 kg 35731.741 Rs 48	kg kg <b>595.17</b>
7	od328596/2021_2022 Extra for providing sulph	turer's sp  1  Ker	ant cement fo	er Auth Say 35731 or the structu	330.000 Ority To Total Deduct Net To .741 kg @	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg	35731.741 35731.741 0.000 kg 35731.741 Rs 48	kg kg <b>595.17</b>
7	od328596/2021_2022 Extra for providing sulph	turer's sp  1  Ker	ant cement fo	er Auth Say 35731 or the structu	330.000 Total Deduct Net Total .741 kg @  ures above Total Deduct	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg plinth level.	35731.741 35731.741 0.000 kg 35731.741 Rs 48 108.278 108.278 c 0.000 cum	kg kg <b>595.17</b>
7	od328596/2021_2022 Extra for providing sulph	turer's sp  1  Ker	ant cement for 108.278	er Auth Say 35731 or the structu	330.000 Total Deduct Net Total Total Sedential Total Deduct Total Deduct Net Total	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg plinth level. otal Quantity	35731.741 35731.741 0.000 kg 35731.741 Rs 48 108.278 108.278 c 0.000 cum 108.278 cu	kg kg <b>595.17</b>
7	od328596/2021_2022 Extra for providing sulph	turer's sp  1 Ker  nate resista  1	ant cement for 108.278  Say  Say  Ork including	er Auth Say 35731 or the structure 108.278 cur	330.000 Total Deduct Net To .741 kg @  ures above  Total Deduct Net To m @ Rs 18	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg plinth level. otal Quantity ted Quantity ted Quantity otal Quantity otal Quantity otal Quantity otal Quantity	35731.741 35731.741 0.000 kg 35731.741 Rs 48  108.278 108.278 cu 0.000 cum 108.278 cu Rs 209	kg  kg  595.17  um  6670.81
	cement as per manuface Qty Vide Item No:3  od328596/2021_2022 Extra for providing sulph Qty Vide Item No:3&4  5.22.6 Steel reinforcement for	turer's sp  1 Ker  nate resista  1	ant cement for 108.278  Say  Say  Ork including	er Auth Say 35731 or the structure 108.278 cur	330.000 Total Deduct Net To .741 kg @  ures above  Total Deduct Net To m @ Rs 18	otal Quantity ted Quantity otal Quantity Rs 1.36 / kg plinth level. otal Quantity ted Quantity ted Quantity otal Quantity otal Quantity otal Quantity otal Quantity	35731.741 35731.741 0.000 kg 35731.741 Rs 48  108.278 108.278 cu 0.000 cum 108.278 cu Rs 209	kg  595.17  um  6670.81  cosition a OD or mo

				Т	otal Deduct	ed Quantity	0.000 kilogi	ram
					Net To	tal Quantity	12993.360	kilogram
			Say 12993.3	60 kilogram	ı @ Rs 98.9	2 / kilogram	Rs 128	5303.17
9	od328599/2021_2022 Extra for providing epox	y coating fo	or reinforcem	nent bars.				
	Qty Vide Item No:3&4@120kg/m3	1	108.278	120.000			12993.360	
			•		То	tal Quantity	12993.360	kg
				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	12993.360	kg
			Bu	Say 12993	3.360 kg @ I	Rs 2.32 / kg	Rs 30	144.60
10	5.9.1 Centering and shutterin columns, etc for mass of	_	strutting, et	c. and remo	oval of form	for:Foundat	ions, footing	ıs, bases
		3.14	1.800	0.600	1-2		3.392	
		155			То	tal Quantity	3.392 sqm	
	50			S Z	otal Deduct	ed Quantity	0.000 sqm	
			PERM	HE PET	Net To	tal Quantity	3.392 sqm	
		Ker	ala Wat	Say 3.392 s	qm @ Rs 3	37.42 / sqm	Rs 11	44.53
11	5.9.2	g including	strutting, et	c. and remo	oval of form	for:Walls (a	iny thicknes	-
	Centering and shutterin attached pilasters, butter	eresses, pl	inth and strir	ng courses	etc.			s) includ
		eresses, pl	inth and strir	ng courses o	etc. 3.600		153.735	s) includ
	attached pilasters, butte			ng courses				s) includ
	Wall Inside including clear water channel Wall outside including	3.14	13.600	ng courses	3.600		153.735	s) includ
	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column	3.14	13.600 15.400	ng courses	3.600 3.600 4.600	tal Quantity	153.735 174.082 8.667	
	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column	3.14	13.600 15.400		3.600 3.600 4.600	tal Quantity	153.735 174.082 8.667 336.484 so	
	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column	3.14	13.600 15.400		3.600 3.600 4.600 To	ed Quantity	153.735 174.082 8.667 336.484 so	ηm
	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column	3.14	13.600 15.400 0.300	Т	3.600  3.600  4.600  To  Total Deduct  Net To	ed Quantity	153.735 174.082 8.667 336.484 sq 0.000 sqm 336.484 sq	ηm
12	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column	3.14	13.600 15.400 0.300	Т	3.600  3.600  4.600  To  Total Deduct  Net To	ed Quantity tal Quantity	153.735 174.082 8.667 336.484 sq 0.000 sqm 336.484 sq	ηm m
12	attached pilasters, butter Wall Inside including clear water channel Wall outside including walk way RCC Hollow column center	3.14 3.14 3.14*2	13.600 15.400 0.300 Sa	T y 336.484 s	3.600 3.600 To otal Deduct Net To oqm @ Rs 7	ed Quantity tal Quantity 21.70 / sqm	153.735 174.082 8.667 336.484 sq 0.000 sqm 336.484 sq Rs 242	дт т 2840.50

			1	T	T		ī	T			
	Walkway	3.14	15.400	1.200			58.028				
					То	tal Quantity	78.595 sqr	n			
				Т	otal Deduct	ed Quantity	0.000 sqm				
					Net To	tal Quantity	78.595 sqm	1			
			S	Say 78.595 s	sqm @ Rs 8	20.89 / sqm	Rs 64	517.85			
13	5.9.5 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth bea										
		8	1.200	0.750			7.200				
					То	tal Quantity	7.200 sqm				
			100	T Be	otal Deduct	ed Quantity	0.000 sqm				
					Net To	tal Quantity	7.200 sqm				
			43 1	Say 7.200 s	qm @ Rs 6	53.89 / sqm	Rs 47	08.01			
14	13.7.1  12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 ( 1 cement : 3 fine sand)										
	Inside floor	3.14	7.400	7.400	باولناوي	اليا	171.947				
	Wall inside	3.14	13.600	3.300			140.924				
	wall otside	3.14	14.200	3.300			147.141				
	RCC Hollow column outside	3.14	ala Wat 0.400	er Auth 4.400	ority		5.527				
	chamber	1	13.100	1.800		1,	23.580				
	walkway	1	3.140	15.400	1.200		58.028				
		547.147 so	mp								
		ed Quantity	0.000 sqm								
		547.147 sq	m								
	Say 547.147 sqm @ Rs 403.73 / sqm							899.66			
15	13.52.2 Finishing with Epoxy manufacturer's specifications concrete work			•							
	Outer wall including RCC walk way	1	3.140	5.900	15.400		285.301				
					То	tal Quantity	285.301 sc	mp			
				Т	otal Deduct	ed Quantity	0.000 sqm				
					Net To	tal Quantity	285.301 sq	m			

			Sa	y 285.301 s	sqm @ Rs 2	24.31 / sqm	Rs 63	995.87
16	22.23.1 Providing and appl RCC structures lik & water treatment partsintegral cryst slurry: 1 part water help of synthetic finities by reducing per 1048 and resistant of self-healing of specification and the for 10 years again.	e retaining walls plant, tunnels/s alline slurry: 2 per) for horizontal ber brush. The remeability of core to 16 bar hydro cracks up to a the direction of the	s of the base subway and parts water) surfaces ar materialshal acrete by ma static pressi width of 0.5 he engineer	ement, water bridge deck for vertical applying II meet the core than 90 ure on negation. The in-charge.	tanks, roof etc., prepar surfaces a thesame fro requirement % compare tive side. The workshall be the product	slabs, podiored by mixing and 3:1 (3 points as specified with continue crystalline performance	ums, reserving in the rationartsintegra (internal) seed in ACI-2 rol concreteeslurry shall out all compe shall carry	ior, sewage o of 5 : 2 (5 I crystalline ide with the 12-3R-2010 e as perDIN be capable olete as pe
	For wall	3.14/4	13.600	13.600		1.15	166.973	
	For column	3.14	0.400	5.400	_		6.783	
			37.9	R X	То	tal Quantity	173.756 sc	qm
		0.000 sqm						
	Net Total Quantity							ım
		486	Sa	y 173.756 s	sqm @ Rs 5	73.87 / sqm	Rs 99	713.36
	22.23.2		A Section	1 1100				
	Providing and appl RCC structures lik & water treatment partsintegral crysts slurry: 1 part water help of synthetic fit i.e by reducingper 1048 and resistant of self-healing of specification and to for 10 years against	e retaining walls plant, tunnels/s alline slurry: 2 er) for horizontal ber brush. The meability of cort to 16 bar hydro cracks up to a he direction of the	s of the base subway and parts water) surfaces ar materialshal acrete by ma static pressoudth of 0.5 width of 0.5 the engineer	ement, water bridge deck for vertical applying. If meet the core than 90 ure on negation. The in-charge.	tanks, roof etc., preparent surfaces a thesame from requirement % comparent tive side. The workshall to the product	slabs, podiored by mixing a 1 (3 pm negative s as specified with contine crystalline performance	ums, reserving in the rationartsintegra (internal) seed in ACI-2 rol concrete eslurry shall out all compe shall carry	ior, sewag o of 5 : 2 ( I crystallin ide with th 12-3R-201 e as perDII be capabl
	Providing and appl RCC structures lik & water treatment partsintegral crysts slurry: 1 part wate help of synthetic fi i.e by reducingper 1048 and resistant of self-healing of specification and the	e retaining walls plant, tunnels/ salline slurry: 2 er) for horizontal ber brush. The meability of cort to 16 bar hydro cracks up to a he direction of the st anyleakage.F	s of the base subway and parts water) surfaces ar materialshal ncrete by ma static presso width of 0.5 he engineer for horizonta	ement, water bridge deck for vertical applying. If meet the core than 90 ure on negation. The in-charge.	tanks, roof etc., prepar surfaces a thesame from equirement of compare tive side. The workshall be the product ne coat @1.	slabs, podiored by mixing a 1 (3 pm negative s as specified with contine crystalline performance	ums, reserving in the rationartsintegra (internal) seed in ACI-2 rol concrete eslurry shall out all compe shall carry qm.	ior, sewage o of 5 : 2 (! I crystalline ide with the 12-3R-2010 e as perDIN be capable plete as per y guarante
	Providing and appl RCC structures lik & water treatment partsintegral crysts slurry: 1 part wate help of synthetic fi i.e by reducingper 1048 and resistant of self-healing of specification and the	e retaining walls plant, tunnels/ salline slurry: 2 er) for horizontal ber brush. The meability of cort to 16 bar hydro cracks up to a he direction of the st anyleakage.F	s of the base subway and parts water) surfaces ar materialshal ncrete by ma static presso width of 0.5 he engineer for horizonta	ement, water bridge deck for vertical applying II meet the core than 90 ure on negation. The in-charge. Tall surface or	tanks, roof etc., prepar surfaces a thesame from equirement of compare tive side. The workshall be the product ne coat @1.	slabs, podiored by mixing a 1 (3 pm negative s as specified with contine crystalline performance 10 kg per so	ums, reserving in the rationartsintegra (internal) seed in ACI-2 rol concrete eslurry shall out all compe shall carry qm.  145.194	ior, sewag o of 5 : 2 ( I crystallin- ide with the 12-3R-201 e as perDII be capable blete as per y guarante
	Providing and appl RCC structures lik & water treatment partsintegral crysts slurry: 1 part wate help of synthetic fi i.e by reducingper 1048 and resistant of self-healing of specification and the	e retaining walls plant, tunnels/ salline slurry: 2 er) for horizontal ber brush. The meability of cort to 16 bar hydro cracks up to a he direction of the st anyleakage.F	s of the base subway and parts water) surfaces ar materialshal ncrete by ma static presso width of 0.5 he engineer for horizonta	ement, water bridge deck for vertical applying II meet the core than 90 ure on negation. The in-charge. Tall surface or	tanks, roof tetc., prepair surfaces a thesame from equirement workshall to the product the coat @1.	slabs, podiored by mixing a 1 (3 pm negative s as specified with contine crystalline performance 10 kg per so	ums, reserving in the rationartsintegra (internal) seed in ACI-2 rol concrete eslurry shall out all compe shall carry qm.  145.194  145.194 so	ior, sewago o of 5 : 2 (solid and several ide with the second sec
	Providing and appl RCC structures lik & water treatment partsintegral crysts slurry: 1 part wate help of synthetic fi i.e by reducingper 1048 and resistant of self-healing of specification and the	e retaining walls plant, tunnels/ salline slurry: 2 er) for horizontal ber brush. The meability of cort to 16 bar hydro cracks up to a he direction of the st anyleakage.F	s of the base subway and parts water) surfaces ar materialshal ncrete by ma static pressi width of 0.5 he engineer or horizonta	ement, water bridge deck for vertical applying II meet the core than 90 ure on negation. The in-charge. Tall surface or 13.600	tanks, roof tetc., prepair surfaces a thesame from equirement workshall to the product the coat @1.	slabs, podiored by mixing and 3: 1 (3 per megative as specific dwith control e crystalline performance 10 kg per solutal Quantity and Quantity and Quantity	ums, reserving in the rationartsintegra (internal) seed in ACI-27 rol concrete eslurry shall out all comple shall carry qm.  145.194  0.000 sqm  145.194 sq	ior, sewag o of 5 : 2 ( I crystallin ide with th 12-3R-201 e as perDII be capabl blete as per y guarante

	"(Ref. No. 000, Techr							
		3.14/4	13.600	13.600	3.600		522.697	
					Тс	otal Quantity	522.697 K	ilo litre
		0.000 Kilo	litre					
		522.697 Ki	lo litre					
			Say 522.6	97 Kilo litre	@ Rs 185.6	67 / Kilo litre	Rs 97	049.15
19	50.10.1 Steel work in built up cutting, hoisting,fixing and bolted with speci	g in position a	nd applying	a priming c	_	•	•	
		1	600.000	6			600.000	
		·	JAN		To	otal Quantity	600.000 kg	9
		-	E. J. W.	A 2 1	otal Deduct	ted Quantity	0.000 kg	
		619	K Z	5. 7	Net To	otal Quantity	600.000 kg	
				Say 600 0	∩∩ ka @ Re	191.08 / kg	Rs 114	1648.00
		3. 1.36*		Ouy 000.0	oo ky w Ka	1011007 119		
SI No	2.6.1 Earth work in excav	K Ar	chanical m	B (Cost Index	x:36.44 %)	CF vator)/manu	Quantity  ual means	Remark
	2.6.1	<b>6SLUDGE</b> vation by me depth, 1.5 m	E SUMP echanical main in width as	(Cost Index eans (Hydr well as 10	x:36.44 %) raulic exca	cF vator)/manu	Quantity  ual means disposal o	Remark  over are
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50	<b>6SLUDGE</b> vation by me depth, 1.5 m	E SUMP echanical main in width as	(Cost Index eans (Hydr well as 10	x:36.44 %) raulic exca	cF vator)/manu	Quantity  ual means disposal o	Remark  over are
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50 soil	vation by mendepth, 1.5 mm and lift up t	echanical main width as to 1.5 m, dis	eans (Hydi well as 10 posed earth	raulic exca sqm on pla to be level	cF vator)/manu	Quantity  ual means disposal o atly dressed  4.275	over are f excavat .All kinds
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50 soil	vation by mendepth, 1.5 mm and lift up t	echanical main width as to 1.5 m, dis	eans (Hydi well as 10 posed earth	raulic exca sqm on pla to be level	cr vator)/manu in) including lled and nea	Quantity  ual means disposal o atly dressed  4.275  4.275 cum	over are f excavat .All kinds
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50 soil	vation by mendepth, 1.5 mm and lift up t	echanical main width as to 1.5 m, dis	eans (Hydi well as 10 posed earth	raulic exca sqm on pla to be level 0.500	cr vator)/manun) including lled and nea	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum	over are f excavat .All kinds
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50 soil	vation by mendepth, 1.5 mm and lift up t	echanical main width as to 1.5 m, dis	eans (Hydraule well as 10 posed earth	raulic exca sqm on pla to be level  0.500  To  Total Deduct	cr vator)/manu in) including lled and nea otal Quantity	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum	over are f excavat .All kinds
	2.6.1 Earth work in excar (exceeding 30 cm in earth, lead up to 50 soil	vation by mendepth, 1.5 mm and lift up to 3.14/4	echanical main width as to 1.5 m, dis	eans (Hydra well as 10 posed earth 3.300	raulic exca sqm on pla to be level 0.500  Total Deduct Net To cum @ Rs 2	cr vator)/manually including including illed and near otal Quantity otal Quantity otal Quantity 15.37 / cum	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum  Rs 9	over are f excavate. All kinds
1	2.6.1 Earth work in excave (exceeding 30 cm in earth, lead up to 50 is soil FOR TRENCH  4.1.5 Providing and laying shuttering - All work in excave and exceeding 30 cm in earth, lead up to 50 is soil.	vation by mendepth, 1.5 mm and lift up to 3.14/4	echanical main width as to 1.5 m, dis	eans (Hydra well as 10 posed earth 3.300	raulic exca sqm on pla to be level 0.500  Total Deduct Net To cum @ Rs 2	cr vator)/manually including including illed and near otal Quantity otal Quantity otal Quantity 15.37 / cum	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum  Rs 9	over are f excavat. All kinds
1	2.6.1 Earth work in excave (exceeding 30 cm in earth, lead up to 50 is soil  FOR TRENCH  4.1.5 Providing and laying shuttering - All work in nominal size)	vation by mendepth, 1.5 mm and lift up to 3.14/4	echanical manner in width as to 1.5 m, dis 3.300	eans (Hydraum) well as 10 posed earth 3.300	raulic exca sqm on pla to be level  0.500  To  total Deduct  Net To  cum @ Rs 2  fied grade excarse sand  0.200	cr vator)/manually including including illed and near otal Quantity otal Quantity otal Quantity 15.37 / cum	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum  Rs 9  e cost of cestone aggre  1.710	over are f excavate. All kinds 20.71
1	2.6.1 Earth work in excave (exceeding 30 cm in earth, lead up to 50 is soil  FOR TRENCH  4.1.5 Providing and laying shuttering - All work in nominal size)	vation by mendepth, 1.5 mm and lift up to 3.14/4	echanical manner in width as to 1.5 m, dis 3.300	eans (Hydraum) well as 10 posed earth 3.300	raulic exca sqm on pla to be level  0.500  To  total Deduct  Net To  tum @ Rs 2  fied grade excarse sand  0.200  To	vator)/manum) including led and near led Quantity stal Qua	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum  Rs 9  e cost of cestone aggre  1.710  1.710 cum	over are f excavar. All kinds  20.71  entering a gate 20 r
1	2.6.1 Earth work in excave (exceeding 30 cm in earth, lead up to 50 is soil  FOR TRENCH  4.1.5 Providing and laying shuttering - All work in nominal size)	vation by mendepth, 1.5 mm and lift up to 3.14/4	echanical manner in width as to 1.5 m, dis 3.300	eans (Hydraum) well as 10 posed earth 3.300	raulic exca sqm on pla to be level  0.500  To  total Deduct  Net To  cum @ Rs 2  fied grade excarse sand  0.200  To  Total Deduct	vator)/manum) including led and near led Quantity stal Quantity stal Quantity stal Quantity excluding the control of the contr	Quantity  ual means disposal of atly dressed  4.275  4.275 cum  0.000 cum  4.275 cum  Rs 9  e cost of cestone aggre  1.710  1.710 cum  0.000 cum	over are f excavate. All kinds  20.71  entering a gate 20 m

3	5.37.1  Providing and laying using cement contentransported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wo-charge. Note:- Cemeper design mix is pay	t as per appr work in trans specified gra site of laying, ixtures in rec rkability witho	roved designation in the control of	n mix, manuall leads, had broked ceme ne cost of cemproportions strength and this item is	factured in aving contine on concrete entering, she as per IS: 9 d durability 6 @ 330 kg/d	fully automations agitate work include uttering finised 103 to access per directions.	atic batching mixer, maling pumping hing and reigherate/ retartion of the E	g plant and anufactured g of R.M.C. nforcement d setting of ngineer - in
	FOR BASE SLAB	3.14/4	3.100	3.100	0.300		2.264	
			9.30		То	tal Quantity	2.264 cum	
			160	T A	otal Deduct	ed Quantity	0.000 cum	
			$-\Omega$		Net To	tal Quantity	2.264 cum	
			٤	Say 2.264 cu	m @ Rs 99	47.98 / cum	Rs 22	522.23
	Providing and laying using cement contentransported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wo-charge. Note:- Cemeper design mix is pay	t as per appr work in trans specified gra site of laying, ixtures in rec rkability witho	roved designate mixer for ade for reinforce excluding the commended out impairing considered in the co	n mix, manuall leads, had broced ceme ne cost of ceproportions strength and this item is	factured in aving continuing concrete entering, shu as per IS: 9 d durability 6 @ 330 kg/d	fully automous agitate work include uttering finise 103 to access per directum. Excess	atic batching of mixer, ma- ling pumping hing and rei elerate/ retar tion of the E	g plant and anufactured g of R.M.C. nforcement d setting of ngineer - in ent used as
	FOR TANK WALLS	3.14	2.200	0.300	2.350		4.871	
	COVER SLAB	3.14/4	2.500	2.500	0.120		0.589	
	Manhole	1	0.500	0.500	0.120		-0.030	
					То	tal Quantity	5.460 cum	
				Т	otal Deduct	ed Quantity	-0.030 cum	
					Net To	tal Quantity	5.430 cum	
			Sa	y 5.430 cun	n @ Rs 116	10.43 / cum	Rs 630	044.63
5	5.34.1 Extra for providing ric content used is payal BMC/RMC. (Note:- C	ble/ recovera	ble separat	ely.Providin	g M-30 grad	de concrete	•	
		ı	7.094				7.094	
					т.	tal Ouantitu	7 604 000	
				т		tal Quantity	7.694 cum	

5.22.6 Steel reinforcement binding all complete 20120kg/m3 Fig. 12			g straighten o - Mechanio 120.000	cally Treated	bending, p	placing in p		
Steel reinforcement binding all complete @120kg/m3	e upto plinth	levelThermo	120.000	cally Treated	d bars of g	rade Fe-500		
I.12	1	7.694		Tot	al Ouantity	923.280		
			Т	Tot	al Ouantity			
			Т		ai Quarilly	923.280 ki	logram	
			<u> </u>	otal Deducte	ed Quantity	0.000 kilog	ram	
				Net Tot	al Quantity	923.280 kile	ogram	
		Say 923.	280 kilogram	n @ Rs 98.92	? / kilogram	Rs 91	330.86	
	ufacturer's sp	pecification .			orete work		y weigh	
	11	7.694	50/3	11. /4. 3	10 11			
Total Quantity 2539.020 kg								
	700			10%				
		Apr.	Say 2539	1.020 kg @ R	.s 1.36 / kg	Rs 34	153.07	
	1201				al Quantity	923.280 923.280 kg	3	
Total Deducted Quantity							y 0.000 kg	
Net Total Quantity								
Say 923.280 kg @ Rs 2.32 / kg							42.01	
		ant cement f	or the structu	ires above n	linth level			
Extra for providing 5			or the structe	area above p	inter level.	7 694		
		7.00		Tot	al Quantity			
			Т					
			<u> </u>					
			Sav 7.694 cu				614.52	
	d328599/2021_202 ixtra for providing e 120kg/m3 d328596/2021_202	d328599/2021_2022 Extra for providing epoxy coating 120kg/m3  d328596/2021_2022 Extra for providing sulphate resist 1	d328599/2021_2022 Kerala Wastra for providing epoxy coating for reinforces d328596/2021_2022 Extra for providing sulphate resistant cement for the following sulphate resistant cement for the followi	Say 2539 d328599/2021_2022 Kerala Water Auth extra for providing epoxy coating for reinforcement bars. 20120kg/m3 1 7.694 120.000  The structure of the structu	1 7.694 330.000  Total Deducte  Net Tot  Say 2539.020 kg @ R  d328599/2021_2022 Kerala Water Authority  Extra for providing epoxy coating for reinforcement bars.  2120kg/m3 1 7.694 120.000  Tot  Total Deducte  Net Tot  Say 923.280 kg @ R  d328596/2021_2022  Extra for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for the structures above plants for providing sulphate resistant cement for providing sulphate	Total Quantity  Total Deducted Quantity  Net Total Quantity  Say 2539.020 kg @ Rs 1.36 / kg  d328599/2021_2022 Kerala Water Authority  Extra for providing epoxy coating for reinforcement bars.  2120kg/m3 1 7.694 120.000  Total Quantity  Total Deducted Quantity  Net Total Quantity  Net Total Quantity  Say 923.280 kg @ Rs 2.32 / kg  d328596/2021_2022  Extra for providing sulphate resistant cement for the structures above plinth level.  1 7.694  Total Quantity  Total Deducted Quantity	1 7.694 330.000 2539.020 Total Quantity 2539.020 Formula Providing epoxy coating for reinforcement bars.  2120kg/m3 1 7.694 120.000 923.280 Formula Providing epoxy coating for reinforcement bars.  2120kg/m3 1 7.694 120.000 923.280 Formula Providing epoxy coating for reinforcement bars.  2120kg/m3 1 7.694 120.000 923.280 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 923.280 kg  Say 923.280 kg @ Rs 2.32 / kg  Rs 21  d328596/2021_2022  Extra for providing sulphate resistant cement for the structures above plinth level.	

	FOR PCC	1	3.140	3.300	0.200		2.073			
	FOR FLOOR SLAB	1	3.140	3.100	0.300		2.921			
					То	tal Quantity	4.994 sqm			
				7	Total Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	4.994 sqm			
				Say 4.994 s	sqm @ Rs 3	37.42 / sqm	Rs 16	85.08		
11	5.9.2 Centering and shuttering including strutting, etc. and removal of form for:Walls (any thickness) includ attached pilasters, butteresses, plinth and string courses etc.									
	FOR TANK WALLS	1	2*3.14	2.200	2.470		34.126			
			100	B.	То	tal Quantity	34.126 sqr	n		
					Total Deduct	ed Quantity	0.000 sqm			
			536	6	Net To	tal Quantity	34.126 sqm	1		
		613	S	Say 34.126 s	sqm @ Rs 7:	21.70 / sqm	Rs 24	628.73		
	Centering and shutter landings, balconies at	nd access	platform		removal of	form for:Su		ors, ro		
	Cover slab	3.14/4	1.900	1.900			2.834			
	Kerala Water Authority Total Quantity 2.834 sqm									
		$D \rightarrow I$			Fotal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	2.834 sqm			
				Say 2.834 s	sqm @ Rs 8	20.89 / sqm	Rs 23	26.40		
13	13.7.1 12 mm cement plaster	finished with	n a floating o	coat of neat	cement of m	nix:1:3 ( 1 ce	ement : 3 fine	e sand)		
	FOR TANK WALL	2*3.14	2.200		2.350		32.468			
	FOR BASE SLAB	3.14/4	1.900	1.900			2.834			
	FOR COVERING SLAB	2*3.14/4	2.200	2.200			7.599			
					То	tal Quantity	42.901 sqr	n		
		ed Quantity	0.000 sqm							
					Net To	tal Quantity	42.901 sqm	1		
			5	Say 42.901 s	sqm @ Rs 4	03.73 / sqm	Rs 17:	320.42		
14	13.52.2 Finishing with Epoxy manufacturer's specific concrete work	. ,		•						

	TANK WALL OUTSIDE	3.14	2.500	2.350			18.448				
	FOR COVERING SLAB OUTSIDE	3.14/4	2.500	2.500			4.907				
					То	tal Quantity	23.355 sqr	n			
				Т	otal Deduct	ed Quantity	0.000 sqm				
	Net Total Quantity 23.355 sqm										
			5	Say 23.355 s	sqm @ Rs 2	24.31 / sqm	Rs 5238.76				
15	22.23.1 Providing and applying RCC structures like ret & water treatment plant partsintegral crystalline slurry: 1 part water) fo help of synthetic fiber bile by reducing permea 1048 and resistant to 1 of self-healing of crac specification and the diffor 10 years against an TANK WALL INSIDE  FOR COVERING SLAB BOTTOM	aining walls t, tunnels/s e slurry: 2   r horizontal brush. The i bility of cor 6 bar hydro ks up to a rection of the	of the base ubway and parts water surfaces a materialsha acrete by m static press width of 0.5 ne engineer	ement, water bridge deck) for vertical nd applying all meet the record than 90 ure on negation. The rin-charge. To	tanks, roof etc., prepar surfaces are thesame from equirement % compare tive side. The workshall be the product	slabs, podiored by mixing and 3:1 (3 per megative s as specified with continue crystalline carried operformance	ums, reserving in the rational cartsintegral (internal) sided in ACI-21 rol concrete eslurry shall ut all comple shall carry	or, sewage o of 5 : 2 (5 I crystalline ide with the I2-3R-2010 as perDIN be capable lete as per			
	J					tal Quantity	-	n			
	Total Deducted Quantity 0.000 sqm										
	Net Total Quantity 16.855 sqm										
16	22.23.2 Providing and applying RCC structures like ret & water treatment plant partsintegral crystalline slurry: 1 part water) for help of synthetic fiber is i.e by reducing permeas 1048 and resistant to 1 of self-healing of crac specification and the differ 10 years against an	aining walls t, tunnels/s e slurry: 2   r horizontal brush. The   bility of cor 6 bar hydro ks up to a rection of the	stalline slur of the base ubway and parts water surfaces a materialsha acrete by m static press width of 0.8	ement, water bridge deck) for vertical nd applying all meet the record than 90 ure on negation-charge. The	hilic in nature tanks, roof etc., prepare surfaces are thesame from compare tive side. The workshall between the product	re forwaterp slabs, podium of 3:1 (3 pm negative as specified with contine crystalline performanc	roofing treat ums, reservi g in the ratio partsintegra (internal) si ed in ACI-21 rol concrete eslurry shall ut all comp e shall carry	or, sewage o of 5 : 2 (5 I crystalline ide with the I2-3R-2010 as perDIN be capable lete as pe			
	FOR BASE SLAB	3.14/4	1.900	1.900			2.834				

					To	tal Quantity	2.834 sqm	)
				7		ed Quantity		
						tal Quantity		
				Say 2.834 s		42.27 / sqm	-	253.39
17	100.36.1 Filling water with 5000 the reservoir site and engine pump set , hire "(Ref. No. 000, Techni	pumping the e for tanker l	water into	the reservoi	r of height r	ot less than	3 m using	5 HP diese
	FOR TANK INSIDE	3.14/4	1.900	1.900	2.350		6.660	
			- 63	400	Тс	tal Quantity	6.660 Kilo	litre
			1/40	364\	Total Deduct	ed Quantity	0.000 Kilo	litre
			C. 1 1		Net To	tal Quantity	6.660 Kilo	litre
	Say 6.660 Kilo litre @ Rs 185.67 / Kilo litre Rs 12						236.56	
SI No	Description	No	L	В	D	CF	Quantity	Remark
	•	<b>7SLUDGE T</b>	HICKNER	(Cost Inc	dex:36.44 %	6)		
	(exceeding 30 cm in c	depth, 1.5 m	in width as	well as 10	sqm on pla	,	disposal o	f excavated
	(exceeding 30 cm in cearth, lead up to 50 m soil	depth, 1.5 m	in width as	well as 10	sqm on pla to be level 0.500	n) including	disposal outly dressed	f excavated .All kinds o
	earth, lead up to 50 m	depth, 1.5 m and lift up t	in width as	s well as 10 sposed earth 5.8*5.8	sqm on pla to be level 0.500	n) including	disposal o ttly dressed 13.204 13.204 cu	f excavate .All kinds o
	earth, lead up to 50 m	depth, 1.5 m and lift up t	in width as	s well as 10 sposed earth 5.8*5.8	on to be level  0.500  To  Total Deduct	n) including lled and nea	disposal o atly dressed 13.204 13.204 cu 0.000 cum	f excavate .All kinds o
	earth, lead up to 50 m	depth, 1.5 m and lift up t	in width as o 1.5 m, dis	s well as 10 sposed earth 5.8*5.8	on to be level  0.500  Total Deduct	n) including lled and nea stal Quantity and Quantity	disposal o atly dressed 13.204 13.204 cu 0.000 cum 13.204 cur	f excavate .All kinds o
2	earth, lead up to 50 m	n position ce	in width as o 1.5 m, dis	s well as 10 sposed earth 5.8*5.8  Say 13.204 of the specific spec	on to be level  0.500  Total Deduct  Net Total Cum @ Rs 2	in) including lled and near stal Quantity and Quantity stal Quantity 15.37 / cum	13.204 13.204 cur 0.000 cum 13.204 cur Rs 28	f excavate .All kinds of
2	earth, lead up to 50 m soil  4.1.5 Providing and laying in shuttering - All work up	n position ce	in width as o 1.5 m, dis	s well as 10 sposed earth 5.8*5.8  Say 13.204 of the specific spec	on to be level  0.500  Total Deduct  Net Total Cum @ Rs 2	in) including lled and near stal Quantity and Quantity stal Quantity 15.37 / cum	13.204 13.204 cur 0.000 cum 13.204 cur Rs 28	f excavated. All kinds of m
2	earth, lead up to 50 m soil  4.1.5 Providing and laying in shuttering - All work up	n position cep to plinth lev	in width as o 1.5 m, dis 3.14/4  3.14/4  Sement concretel:1:3:6 (1.6)	Say 13.204 of the cement : 3 o	o.500  Total Deduct  Net Total Quarter (Course Sand)  0.100	in) including lled and near stal Quantity and Quantity stal Quantity 15.37 / cum	13.204 13.204 cur 0.000 cum 13.204 cur Rs 28 e cost of cestone aggre	f excavated. All kinds of mm.  843.75 entering and gate 20 mm.
2	earth, lead up to 50 m soil  4.1.5 Providing and laying in shuttering - All work up	n position cep to plinth lev	in width as o 1.5 m, dis 3.14/4  3.14/4  Sement concretel:1:3:6 (1.6)	Say 13.204 of the second secon	o.500  To o.500  Total Deduct  Net To o.500  Rs 2  ified grade ecoarse sand  0.100	tal Quantity ted Quantity ted Quantity tal Quantity tal Quantity 15.37 / cum excluding the : 6 graded s	13.204 13.204 cur 0.000 cum 13.204 cur Rs 20 e cost of cestone aggre 2.641 2.641 cum	m  843.75 entering and gate 20 mn
2	earth, lead up to 50 m soil  4.1.5 Providing and laying in shuttering - All work up	n position cep to plinth lev	in width as o 1.5 m, dis 3.14/4  3.14/4  Sement concretel:1:3:6 (1.6)	Say 13.204 of the second secon	o.500  Total Deduct  Net Total grade ecoarse sand  0.100  Total Deduct	tal Quantity ted Quantity ted Quantity ted Quantity ted Quantity tal Quantity 15.37 / cum excluding the : 6 graded second	13.204 13.204 cur 0.000 cum 13.204 cur Rs 28 e cost of cestone aggre 2.641 2.641 cum 0.000 cum	m  843.75 entering and gate 20 mm
2	earth, lead up to 50 m soil  4.1.5 Providing and laying in shuttering - All work up	n position cep to plinth lev	3.14/4 3.14/4 3.14/4	Say 13.204 of the second secon	o.500  Total Deduct  Net Total grade ecoarse sand  0.100  Total Deduct  Net Total Deduct  Net Total Deduct  Net Total Deduct	tal Quantity ted Quantity ted Quantity ted Quantity ted Quantity ted Quantity ted Graded s tal Quantity ted Quantity	13.204 13.204 cur 0.000 cum 13.204 cur Rs 28 e cost of cestone aggre 2.641 2.641 cum 0.000 cum	m  843.75 entering and gate 20 mm

using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in -charge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement used as per design mix is payable/recoverable separately. All wiork upto plinth level 1 3.14/4 5.8\*5.8 0.350 1.15 10.629 **Total Quantity** 10.629 cum Total Deducted Quantity 0.000 cum Net Total Quantity 10.629 cum Rs 105737.08 Say 10.629 cum @ Rs 9947.98 / cum 4 5.37.2 Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in -charge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement used as per design mix is payable/recoverable separately.All work above plinth level upto floor V level Wall 3.14 5.500 0.300 2.850 14.766 chamber 3.14 5.700 0.500 0.100 0.895 3.14 5.200 0.300 0.100 0.490 Walkway 3.14 6.800 1.000 0.100 2.136 4 0.250 Cantilever beam 1.000 0.250 0.250 0.50\*.3\*.1 Step 19 1.000 0.428 5 Step Waist 1 5.600 1.000 0.120 0.672 Total Quantity 19.637 cum Total Deducted Quantity 0.000 cum Net Total Quantity 19.637 cum Rs 227994.01 Say 19.637 cum @ Rs 11610.43 / cum 5 5.34.1 Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).

	Qty Vide Item No: 3	1	10.629				10.629			
	Qty Vide Item No: 4	1	19.637				19.637			
					То	tal Quantity	30.266 cur	n		
				Т	otal Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	30.266 cum	1		
				Say 30.266	cum @ Rs	82.61 / cum	Rs 25	00.27		
6	4.12 Extra for providing and cement as per manufa	_	-	g material in	cement co	ncrete work	in doses b	y weight o		
	Qty Vide Item No: 3	1	10.629		330.000		3507.570			
	Qty Vide Item No: 4	1	19.637	B.	330.000		6480.210			
			1		То	tal Quantity	9987.780 k	κg		
		0.000 kg								
		tal Quantity	9987.780 k	g						
		1/2	THE	Say 9987	′.780 kg @ l	Rs 1.36 / kg	Rs 13	583.38		
7	od328596/2021_2022 Extra for providing sulphate resistant cement for the structures above plinth level.									
	Qty Vide Item No: 3	1	10.629	1 300			10.629			
	Qty Vide Item No: 4	Ker	al <sub>49.637</sub> at	er Auth	ority		19.637			
					То	tal Quantity	30.266 cur	n		
				Т	otal Deduct	ed Quantity	0.000 cum			
		30.266 cum								
		Rs 57489.36								
8	5.22.6 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position a binding all complete upto plinth levelThermo - Mechanically Treated bars of grade Fe-500D or me									
	Qty Vide Item No: 3@120km/m3	1	10.629	120.000			1275.480			
	Qty Vide Item No: 4@120km/m3	1	19.637	120.000			2356.440			
					То	tal Quantity	3631.920 k	ilogram		
				Т	otal Deduct	ed Quantity	0.000 kilogi	am		
					Net To	tal Quantity	3631.920 k	ilogram		
			Say 3631.9	920 kilogram	@ Rs 98.9	2 / kilogram	Rs 359	269.53		
	į.									

	Extra for providing epox	Extra for providing epoxy coating for reinforcement bars.  Qtv Vide Item No:								
	Qty Vide Item No: 3@120km/m3	1	10.629	120.000			1275.480			
	Qty Vide Item No: 4@120km/m3	1	19.637	120.000			2356.440			
					То	tal Quantity	3631.920 I	кg		
				Т	otal Deduct	ed Quantity	0.000 kg			
					Net To	tal Quantity	3631.920 k	g		
	Say 3631.920 kg @ Rs 2.32 / kg Rs 8426.05									
10	5.9.1 Centering and shutterin columns, etc for mass of	-	strutting, et	tc. and remo	oval of form	for:Foundat	ions, footing	ıs, base		
		3.14	5.800	0.100	-		1.822			
		1	37.9	K X	То	tal Quantity	1.822 sqm			
		( k		73 / AT	otal Deduct	ed Quantity	0.000 sqm			
							4 000			
		151			Net To	tal Quantity	1.822 sqm			
11	5.9.2			Say 1.822 s	ASSESSED TO			14.78		
11	5.9.2 Centering and shutterin attached pilasters, butter	- K 01°	g strutting, e	tc. and remo	qm @ Rs 3	37.42 / sqm	Rs 6			
11	Centering and shuttering	- K 01°	g strutting, e	tc. and remo	qm @ Rs 3	37.42 / sqm	Rs 6			
11	Centering and shutterin attached pilasters, butte	eresses, pl	g strutting, e	tc. and remo	qm @ Rs 3	37.42 / sqm	Rs 6			
11	Centering and shuttering attached pilasters, butter Wall Inside	eresses, pl	strutting, e inth and strii 5.200	tc. and remo	oval of form etc. 2.850 3.150	37.42 / sqm for:Walls (a	Rs 6 any thicknes 46.535	s) includ		
11	Centering and shuttering attached pilasters, butter Wall Inside	eresses, pl	strutting, e inth and strii 5.200	tc. and remo	oval of form etc. 2.850 3.150	for:Walls (a	Rs 6 any thicknes 46.535 57.368 103.903 sc	s) includ		
11	Centering and shuttering attached pilasters, butter Wall Inside	eresses, pl	strutting, e inth and strii 5.200	tc. and remo	oval of formetc.  2.850  3.150  To	for:Walls (a tal Quantity	Rs 6 any thicknes 46.535 57.368 103.903 sc	s) includ		
11	Centering and shuttering attached pilasters, butter Wall Inside	eresses, pl	strutting, e inth and strii 5.200 5.800	tc. and remo	oval of formetc.  2.850  To  Total Deduct  Net To	for:Walls (a tal Quantity ed Quantity	Rs 6  any thicknes  46.535  57.368  103.903 sq  103.903 sq	s) includ		
11	Centering and shuttering attached pilasters, butter Wall Inside	3.14 3.14 ing includi	strutting, e inth and strii 5.200 5.800 Sa	tc. and remong courses of	oval of formetc.  2.850  3.150  To  Total Deduct  Net To	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6  any thicknes  46.535  57.368  103.903 sq  103.903 sq  Rs 74	s) includ		
	Centering and shuttering attached pilasters, butter Wall Inside Wall outside  5.9.3 Centering and shuttering and shuttering and shuttering and shuttering and shuttering attached by the same shadow of the same should be should	3.14 3.14 ing includi	strutting, e inth and strii 5.200 5.800 Sa	tc. and remong courses of	oval of formetc.  2.850  3.150  To  Total Deduct  Net To	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6  any thicknes  46.535  57.368  103.903 sq  103.903 sq  Rs 74	s) includ		
	Centering and shuttering attached pilasters, butter Wall Inside Wall outside  5.9.3 Centering and shutter landings, balconies ar	ing including access	strutting, e inth and strii 5.200 5.800 Sang strutting platform	tc. and remong courses of ay 103.903 s	oval of formetc.  2.850  3.150  To  Total Deduct  Net To	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6 any thicknes 46.535 57.368 103.903 sq 103.903 sq Rs 74	s) includ		
	Centering and shuttering attached pilasters, butter Wall Inside Wall outside  5.9.3 Centering and shutter landings, balconies are chamber	ing includind access 3.14	strutting, e inth and strii 5.200 5.800 Sang strutting platform 5.700	tc. and remong courses of the second remongraph of the second remonstration of the sec	oval of formetc.  2.850  3.150  To  Total Deduct  Net To	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6  any thicknes  46.535  57.368  103.903 sq  103.903 sq  Rs 74	s) includ		
	Centering and shuttering attached pilasters, butter Wall Inside Wall outside  5.9.3 Centering and shutter landings, balconies are chamber Walkway	ing includind access 3.14 3.14 3.14	strutting, e inth and strii 5.200 5.800 Sang strutting platform 5.700 6.800	ay 103.903 s	oval of formetc.  2.850  3.150  Total Deduct  Net Total Qm @ Rs 7	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6 any thicknes 46.535 57.368 103.903 sq 0.000 sqm 103.903 sq Rs 74 spended flo 8.949 21.352	s) includ		
	Centering and shuttering attached pilasters, butter Wall Inside Wall outside  5.9.3 Centering and shutter landings, balconies are chamber Walkway Stair -step	ing includi ad access 3.14 3.14 19	strutting, e inth and strii 5.200 5.800 Samp strutting platform 5.700 6.800 0.500	tc. and remong courses of the second	oval of formetc.  2.850  To otal Deduct  Net To otal Qm @ Rs 7	for:Walls (a tal Quantity ed Quantity tal Quantity 21.70 / sqm	Rs 6 any thicknes 46.535 57.368 103.903 sq 0.000 sqm 103.903 sq Rs 74 spended flo 8.949 21.352 0.428	s) includ		

					Net To	tal Quantity	31.401 sqm	1		
			S	ay 31.401 s	qm @ Rs 8	20.89 / sqm	Rs 25	776.77		
13	5.9.5 Centering and shuttering girders bressumers and	•		etc. and rem	noval of forr	n for:Lintels	, beams, pli	inth beams		
		4	1.000	0.750			3.000			
			•		То	tal Quantity	3.000 sqm			
				Т	otal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	3.000 sqm			
	Say 3.000 sqm @ Rs 653.89 / sqm									
14	13.7.1 12 mm cement plaster f	inished wit	th a floating o	oat of neat	cement of m	nix:1:3 ( 1 ce	ement : 3 find	e sand)		
	Qty Vide Item No:10	1	1.822				1.822			
	Qty Vide Item No:11	1	103.903	SAA	1.41		103.903			
	Qty Vide Item No:12	1	31.401		I A	Ļ	31.401			
	Qty Vide Item No:13	1	3.000		والوالوكوسيان	Jan Jan	3.000			
	Total Quantity 140.126 sqm									
	Total Deducted Quantity 0.000 sqm									
	Kerala Water Authority Total Quantity 140.126 sqm									
			Sa	y 140.126 s	qm @ Rs 4	03.73 / sqm	Rs 56	573.07		
15	13.52.2 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as prepared and applied applied as prepared and applied applied and applied applied applied applied and applied applied applied a									
	Outer wall	1	3.140	5.800	3.150		57.368			
	Walkway	1	3.140	6.800	1.000		21.352			
	Beams	4	1.000	0.750			3.000			
					То	tal Quantity	81.720 sqr	n		
				Т	otal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	81.720 sqm	1		
			S	ay 81.720 s	qm @ Rs 2	24.31 / sqm	Rs 18	330.61		
16	22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline									

	slurry: 1 part water) for help of synthetic fiber i.e by reducingperment 1048 and resistant to of self-healing of crack specification and the off or 10 years against a	brush. The rability of con 16 bar hydro cks up to a direction of the	materialshal acrete by mo static presso width of 0.5 ne engineeri	I meet the rore than 90 ure on negar 50mm. The in-charge. T	equirement % compare tive side. Th workshall b he product	s as specificated with control  one crystalling  one carried of  performance	ed in ACI-2' rol concrete eslurry shall out all comp e shall carry	12-3R-2010 as perDIN be capable lete as per
		3.14	6.800	2.850			60.854	
					То	tal Quantity	60.854 sqr	n
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	60.854 sqm	า
			S	ay 60.854 s	qm @ Rs 5	73.87 / sqm	Rs 34	922.28
	RCC structures like real water treatment plant partsintegral crystalling slurry: 1 part water) for help of synthetic fiber i.e by reducing permental of self-healing of crasspecification and the off or 10 years against a FOR FLOOR	nt, tunnels/ some slurry: 2 por horizontal brush. The rability of condition of the conditio	ubway and barts water) surfaces ar materialshal acrete by mostatic pressured width of 0.5 are engineericals.	bridge deck for vertical and applying Il meet the report than 90 are on negation. The in-charge. The surface on 5.200	etc., preparent surfaces a thesame from the equirement workshall be the coat @1.	red by mixing a 1 (3 performance)	g in the rational partsintegra (internal) seed in ACI-2 rol concrete esturry shall out all comple shall carry qm.  24.411  24.411 sqr  0.000 sqm	o of 5 : 2 (5 I crystalline ide with the 12-3R-2010 as perDIN be capable lete as per guarantee
			S	ay 24.411 s	qm @ Rs 4	42.27 / sqm	Rs 10	796.25
18	100.36.1 Filling water with 5000 the reservoir site and engine pump set , hire "(Ref. No. 000, Techni	pumping the e for tanker lo	water into t orry, tools a	he reservoi	r of height n	ot less than	3 m using	5 HP diesel
		3.14/4	5.200	5.200	2.850		60.496	
					То	tal Quantity	60.496 Kild	o litre
				Т	otal Deduct	ed Quantity	0.000 Kilo I	itre
					Net To	tal Quantity	60.496 Kilo	litre
			Say 60.4	96 Kilo litre	@ Rs 185.6	67 / Kilo litre	Rs 11	232.29

19	50.10.1 Steel work in built up		•		_						
	cutting, hoisting,fixin and bolted with spec	• .			oat of appro	ved steel pr	imer, includi	ng weld			
		1	250.000				250.000				
					To	tal Quantity	250.000 kg				
				7	Γotal Deduct	ed Quantity	0.000 kg				
					Net To	tal Quantity	250.000 kg				
				Say 250.0	00 kg @ Rs	191.08 / kg	Rs 477	770.00			
SI No	Description No L B D CF Quantity Remark										
	8T	HICKENED S	SLUDGE SUN	MP (Cos	st Index:36.	44 %)					
	(exceeding 30 cm in earth, lead up to 50 soil					, -	•				
	FOR TRUNCH	3.14	2.300	2.300	0.500	1	8.306				
	Total Quantity 8.306 cum										
	Total Deducted Quantity 0.000 cum										
	Kerala Water Authori Net Total Quantity 8.306 cum										
	Say 8.306 cum @ Rs 215.37 / cum Rs 1788.86										
2	4.1.5 Providing and laying shuttering - All work nominal size)	•		•	•	_		•			
	FOR PCC	3.14	2.300	2.300	0.200		3.323				
					To	tal Quantity	3.323 cum				
	Total Deducted Quantity 0.000 cum										
	Net Total Quantity 3.323 cum										
			S	ay 3.323 cu	ım @ Rs 74	13.74 / cum	Rs 246	35.86			
3	5.37.1  Providing and laying using cement content transported to site of as per mix design of from transit mixer to including cost of administration.	nt as per app f work in tran f specified gr site of laying	roved desigr sit mixer for a ade for reinfo , excluding th	n mix, manuall leads, had broken to the cost of ce	ufactured in aving continent concrete entering, sho	fully automous agitate work includ attering finis	atic batching ed mixer, ma ling pumping hing and rei	g plant a inufactu g of R.M nforcem			

	FOR BASE SLAB	3.14/4	4.400	4.400	0.300		4.560			
					To	otal Quantity	4.560 cum	<u> </u>		
				٦	Total Deduc	ted Quantity	0.000 cum			
					Net To	otal Quantity	4.560 cum			
			S	Say 4.560 cu	ım @ Rs 99	947.98 / cum	Rs 45	362.79		
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works -charge. Note:- Cement per design mix is payable.	as per apprork in transpecified grade of laying, ures in recability without content c	roved designate mixer for ade for reinforce excluding the commended out impairing onsidered in	n mix, manuall leads, had orced cemente cost of comproportions astrength arm this item is	ufactured in aving conting ent concrete entering, sh as per IS: 9 nd durability s @330 kg/	fully automations agitate work include the work included the work incl	atic batching ding pumpin hing and relerate/ retation of the Est/less cement.	g plant anufact g of R. inforce rd setti Enginee ent use		
	FOR COVERING SLAB	3.14/4	3.800	3.800	0.120	itti level upt	1.361	Vei		
	Manhole	1	0.500	0.500	0.120		-0.030			
	FOR TANK WALL	3.14 <sub>e</sub> r	3.500 <sub>at</sub>	er0,300†	2.500		8.243			
					To	otal Quantity	9.604 cum	1		
	Total Deducted Quantity -0.030 cum									
	Net Total Quantity 9.574 cum									
	Say 9.574 cum @ Rs 11610.43 / cum									
5	5.34.1 Extra for providing riche content used is payable BMC/RMC. (Note:- Cer	e/ recovera	ıble separat	ely.Providin	ig M-30 gra	de concrete	•			
	ITEM 3 & 4	1	14.134				14.134			
					To	otal Quantity	14.134 cu	m		
				7	Total Deduc	ted Quantity	0.000 cum			
					Net To	otal Quantity	14.134 cun	n		
	Say 14.134 cum @ Rs 82.61 / cu							167.61		

			_						
		1	12.803	330.000			4224.991		
					То	tal Quantity	4224.991 l	кg	
				Т	otal Deduct	ed Quantity	0.000 kg		
					Net To	tal Quantity	4224.991 k	g	
				Say 4224	.991 kg @ I	Rs 1.36 / kg	Rs 57	45.99	
7	od328596/2021_2022 Extra for providing sulp	ohate resista	int cement fo	or the structu	ures above p	olinth level.			
	ITEM 3&4	1	14.134				14.134		
					То	tal Quantity	14.134 cur	n	
				т	otal Deduct	ed Quantity	0.000 cum		
			160	163	Net To	tal Quantity	14.134 cum	1	
			Sa	ay 14.134 cu	m @ Rs 18	99.47 / cum	Rs 26	847.11	
8	5.22.6 Steel reinforcement for binding all complete to		1. 1. 1.41 1.	W AC 22 F - 1875			• .		
	@120kg/m3	1	14.184	120.000	والوارا	ميا	1702.080		
	Total Quantity 1702.080 kilogram								
	Total Deducted Quantity 0.000 kilogram								
	Kerala Water Authori Net Total Quantity 1702.080 kilogram								
		D	Say 1702.0	080 kilogram	@ Rs 98.9	2 / kilogram	Rs 168	369.75	
9	od328599/2021_2022 Extra for providing epo	oxy coating for	or reinforcen	nent bars.					
	@120kg/m3	1	14.184	120.000			1702.080		
					То	tal Quantity	1702.080 l	кg	
	Total Deducted Quanti								
					Net To	tal Quantity	1702.080 k	g	
				Say 1702	2.080 kg @ I	Rs 2.32 / kg	Rs 39	48.83	
10	5.9.1 Centering and shutteri columns, etc for mass	•	strutting, et	tc. and remo	oval of form	for:Foundat	ions, footing	ıs, bases d	
	FOR PCC	3.14	4.600		0.200		2.889		
	FOR FCC								
	FOR BASE SLAB	3.14	4.400		0.300		4.145		
			4.400			tal Quantity			
			4.400	Т			7.034 sqm		

				Say 7.034 s	sqm @ Rs 3	37.42 / sqm	Rs 23	73.41		
11	5.9.2 Centering and shutterin attached pilasters, butter	-	•			for:Walls (a	ny thicknes	s) including		
	FOR SIDE WALLS	2*3.14	3.500		2.620		57.588			
					То	tal Quantity	57.588 sqr	n		
				-	Total Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	57.588 sqm	1		
			S	Say 57.588	sqm @ Rs 7	21.70 / sqm	Rs 41	561.26		
12	5.9.3 Centering and shuttering landings, balconies and FOR COVERING	•		, etc. and	removal of	form for:Su	spended flo	oors, roofs		
	SLAB	0.17/7	3.000	3.000	1		11.550			
	Manhole	1	0.500	0.500	1-21		-0.250			
	Total Quantity 11.336 sqm									
	Total Deducted Quantity -0.250 sqm									
	Net Total Quantity 11.086 sqm									
	Say 11.086 sqm @ Rs 820.89 / sqm									
13	13.7.1 12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 ( 1 cement : 3 fine sand)									
	FOR FLOOR SLAB	3.14/4	3.200	3.200			8.039			
	TANK WALL	2*3.14	3.500		2.500		54.950			
	COVERING SLAB	2*3.14	1.750	1.750			19.233			
					То	tal Quantity	82.222 sqr	n		
				-	Total Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	82.222 sqm	1		
			S	Say 82.222	sqm @ Rs 4	03.73 / sqm	Rs 33	195.49		
14	13.52.2 Finishing with Epoxy manufacturer's specifications concrete work	•		•				•		
	TANK WALL	3.14	3.800		2.620		31.262			
	COVERING SLAB	3.14/4	3.800	3.800			11.336			

					То	tal Quantity	42.598 sqr	n			
				Т	Total Deduct	ed Quantity	0.000 sqm				
					Net To	tal Quantity	42.598 sqm	า			
			S	Say 42.598 s	sqm @ Rs 2	24.31 / sqm	Rs 95	555.16			
15	Providing and applying RCC structures like retal water treatment plant partsintegral crystalline slurry: 1 part water) for help of synthetic fiber bite by reducing permeal 1048 and resistant to 16 of self-healing of crack specification and the dispersion and the dispersion and the dispersion.	aining walls a tunnels/ s slurry : 2 pr horizontal brush. The publity of cores bar hydroks up to a	of the base ubway and parts water) surfaces ar materialshal acrete by mostatic pressuridth of 0.5	ement, water bridge deck for vertical applying Il meet the rore than 90 ure on nega 50mm. The	tanks, roof etc., prepail surfaces all thesame from equirement % compare tive side. The workshall be	slabs, podion red by mixing and 3:1 (3 per megative as as specified with continue crystalline are carried of	ums, reserving in the rational state of the control of the control of the control of the control control control control control control compout all compouts all compou	ior, sewage o of 5 : 2 (5 I crystalline ide with the I2-3R-2010 as perDIN be capable lete as per			
	for 10 years against an		Aug	Name of the Party		•	ntrol concrete as perDineslurry shall be capable out all complete as possible certain the capable out all carry guarante of the capable of th				
	TANK WALL INSIDE	3.14	3.200	23/A	2.500	31 1					
	COVERING SLAB	3.14/4	3.200	3.200		L	8.039				
	Total Quantity 33.159 sqm										
	Total Deducted Quantity 0.000 sqm										
		Kera	ara wat	er Autr	Net To	tal Quantity	33.159 sqm	1			
			S	Say 33.159 s	sqm @ Rs 5	73.87 / sqm					
16	Providing and applying RCC structures like retal water treatment plant partsintegral crystalline slurry: 1 part water) for help of synthetic fiber beine by reducing permeal 1048 and resistant to 16 of self-healing of crack specification and the differ 10 years against an	aining walls to tunnels/ s s slurry: 2 p r horizontal brush. The p bility of cor bar hydro ks up to a rection of the	s of the base ubway and parts water) surfaces ar materialshal acrete by mo static pressi width of 0.5 ne engineer	ement, water bridge deck for vertical applying II meet the rore than 90 ure on nega 50mm. The in-charge. T	tanks, roof etc., prepar surfaces are thesame from requirement % compare tive side. The workshall be the product	slabs, podiired by mixin and 3:1 (3 pom negative is as specified with contine crystalline ce carried operformance	ums, reserving in the rational coartsintegral (internal) sided in ACI-21 rol concrete eslurry shallout all compershall carry	ior, sewage o of 5 : 2 (5 I crystalline ide with the I2-3R-2010 as perDIN be capable lete as per			
	FOR FLOOR SLAB	3.14/4	3.200	3.200		31	8.039				
			1	1 2.23	To	tal Quantity		I			
				Т	Total Deduct						
				<u>'</u>		tal Quantity					
				Say 8.039 s	sqm @ Rs 4			555.41			
	·			•							

17	Filling water with 5000 litre tankers fited in lorry and conveying water from a distance of 5 km (average) to the reservoir site and pumping the water into the reservoir of height not less than 3 m using 5 HP diese engine pump set, hire for tanker lorry, tools and other appliences and cost of water etc. complete.  "(Ref. No. 000, Technical Circular)"									
	SLUDGE SUMP	3.14/4	3.200	3.200	2.500		20.097			
					То	tal Quantity	20.097 Kild	litre		
				7	Total Deduct	ed Quantity	0.000 Kilo I	itre		
					Net To	tal Quantity	20.097 Kilo	litre		
			Say 20.0	97 Kilo litre	@ Rs 185.6	7 / Kilo litre	Rs 37	31.41		
SI No	Description	No	L	В	D	CF	Quantity	Remark		
		9FILTER FE	ED TANK	(Cost Inc	dex:36.44 %	<b>b)</b>				
	Earth work in excave (exceeding 30 cm in earth, lead up to 50 m soil	depth, 1.5 m	in width as o 1.5 m, dis	well as 10 posed earth	sqm on pla n to be level	n) including	disposal of tly dressed.	excavate		
		1	5.500	5.500	0.500		15.125			
	Total Quantity 15.125 cum									
	Kerala Water Authority 0.000 cum									
	-	$\mathbf{n}$			Net To	tal Quantity	15.125 cum	1		
		P - 1	8	ay 15.125 d	cum @ Rs 2	15.37 / cum	Rs 32	57.47		
2	4.1.5 Providing and laying i shuttering - All work u nominal size)									
		1	5.500	5.500	0.200		6.051			
					То	tal Quantity	6.051 cum			
				7	Total Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	6.051 cum			
			S	ay 6.051 cu	ım @ Rs 74	13.74 / cum	Rs 448	860.54		
3	5.37.1  Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete wor using cement content as per approved design mix, manufactured in fully automatic batching plant an transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufacture as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.6 from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of the cost of centering in the cost of centering in the cost of admixtures in recommended proportions.									

	concrete, improve wo -charge. Note:- Ceme per design mix is pay	ent content co	onsidered ir	this item is	@330 kg/	cum. Excess		•	
		1	5.300	5.300	0.300		8.427		
					To	tal Quantity	8.427 cum		
				Т	otal Deduct	ed Quantity	0.000 cum		
					Net To	tal Quantity	8.427 cum		
			S	Say 8.427 cu	ım @ Rs 99	47.98 / cum	Rs 83	331.63	
	Providing and laying using cement contentransported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wo-charge. Note:- Cemeper design mix is pay	t as per appr work in trans specified gra site of laying, ixtures in recorkability withou ent content co	roved designation in the control of	n mix, manuall leads, had orced ceme ne cost of cemproportions attength and this item is	ufactured in aving contin nt concrete entering, sho as per IS: 9 ad durability is @330 kg/o	fully autom uous agitate work includuttering finis 103 to acceas per directum. Excess	atic batching ding pumping hing and reighterate/ retartion of the Est/less cemes	g plant a anufactu g of R.M nforcem d setting ngineer ent used	
	Long Wall	2	4.700	0.250	2.850	itir iovor apt	6.698		
	Short Wall	2	4.200	0.250	2.850		5.985		
	Kerala Water Authority Total Quantity 12.683 cum								
	Total Deducted Quantity 0.000 cum								
		$P \mid$	K		Net To	tal Quantity	12.683 cum	1	
	Say 12.683 cum @ Rs 11610.43 / cum Rs 147255.08								
5	5.34.1 Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cent content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade CNC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).								
			ble separat	ely.Providin	g M-30 gra	de concrete	•		
			ble separat	ely.Providin	g M-30 gra	de concrete	•		
		Cement conte	ble separat nt considere	ely.Providin	g M-30 gra s @ 340 kg	de concrete /cum).	instead of I	M-25 gr	
		Cement conte	ble separat nt considere	ely.Providin ed in M-30 i	g M-30 gra s @ 340 kg	de concrete /cum).	21.110 21.110 cur	M-25 gr	
		Cement conte	ble separat nt considere	ely.Providin ed in M-30 i	g M-30 grads @ 340 kg  Total Deduct	de concrete /cum). otal Quantity red Quantity	21.110 21.110 cur	M-25 gr	
		Cement conte	ble separat nt considere 21.110	ely.Providin ed in M-30 i	g M-30 grads @ 340 kg  To  Total Deduct	de concrete /cum). otal Quantity red Quantity	21.110 21.110 cur 0.000 cum 21.110 cur	M-25 gr	
6		1 1 and mixing wa	ble separat nt considere 21.110	ely.Providin ed in M-30 i T Say 21.110	g M-30 grades @ 340 kg  Total Deduct  Net Total Cum @ Rs	de concrete /cum). etal Quantity ed Quantity etal Quantity 82.61 / cum	21.110 21.110 cur 0.000 cum 21.110 cur Rs 17	M-25 gra	
6	4.12 Extra for providing as	1 1 and mixing wa	ble separat nt considere 21.110	ely.Providin ed in M-30 i T Say 21.110	g M-30 grades @ 340 kg  Total Deduct  Net Total Cum @ Rs	de concrete /cum). etal Quantity ed Quantity etal Quantity 82.61 / cum	21.110 21.110 cur 0.000 cum 21.110 cur Rs 17	M-25 gra	

				Т	otal Deduct	ed Quantity	0.000 kg			
					Net To	tal Quantity	6966.300 k	g		
				Say 6966	5.300 kg @ I	Rs 1.36 / kg	Rs 94	74.17		
7	od328596/2021_20 Extra for providing		ant cement fo	or the structu	ıres above p	olinth level.				
		1	21.110				21.110			
					То	tal Quantity	21.110 cur	n		
				Т	otal Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	21.110 cum	)		
	Say 21.110 cum @ Rs 1899.47 / cum Rs 40097.81									
8	5.22.6 Steel reinforcement binding all comple	ete upto plinth I	evelThermo	- Mechanic		• .	rade Fe-500			
	@120kg/m3	1	21.110	120.000	441		2533.200			
		1 1300			То	tal Quantity	2533.200 k	kilogram		
	Total Deducted Quantity 0.000 kilogram									
	Net Total Quantity 2533.200 kilogram									
	Say 2533.200 kilogram @ Rs 98.92 / kilogram Rs 250584.14									
9	od328599/2021_2022 Extra for providing epoxy coating for reinforcement bars.									
	@120kg/m3	1	21.110	120.000			2533.200			
					То	tal Quantity	2533.200 l	κg		
				Т	otal Deduct	ed Quantity	0.000 kg			
					Net To	tal Quantity	2533.200 k	g		
				Say 2533	3.200 kg @ I	Rs 2.32 / kg	Rs 58	77.02		
10	5.9.1 Centering and shur columns, etc for ma	-	strutting, et	c. and remo	oval of form	for:Foundat	ions, footing	s, bases of		
		4	5.500	0.200			4.400			
	PCC	4	0.000							
	PCC Base	4	5.300	0.300			6.360			
				0.300	То	tal Quantity		n		
					To		10.760 sqr	n		
					otal Deduct	ed Quantity	10.760 sqr			

11	5.9.2 Centering and shutte attached pilasters, bu	•	-			for:Walls (a	ny thicknes	s) inclu		
	Outside wall	4	4.700	2.850	510.		53.581			
	Inside wall	4	4.200	2.850			47.880			
					To	tal Quantity		qm		
				T	otal Deduct	ed Quantity	0.000 sqm	·		
					Net To	tal Quantity	101.461 sc	ηm		
			Sa	y 101.461 s	qm @ Rs 7	21.70 / sqm	Rs 73	224.40		
12	13.7.1 12 mm cement plaste	er finished wit	h a floating c	oat of neat o	cement of m	nix:1:3 ( 1 ce	ment : 3 fin	e sand)		
	Outside wall	4	4.700	2.850			53.581			
	Inside wall	4	4.200	2.850			47.880			
	Base	4	5.300	0.300			6.360			
		18	+ NW		To	tal Quantity	107.821 s	qm		
	Total Deducted Quantity 0.000 sqm									
	Net Total Quantity 107.821 sqm									
	Say 107.821 sqm @ Rs 403.73 / sqm									
	Finishing with Epo manufacturer's specif concrete work	1 1 1								
		4	4.700	2.850			53.581			
					To	tal Quantity	53.581 sq	m		
	Total Deducted Quantity 0.000 sqm									
					Net To	tal Quantity	53.581 sqr	n		
			S	ay 53.581 s	qm @ Rs 2	24.31 / sqm	Rs 12	018.75		
14	Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewark water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:22 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystall slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with help of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capar of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as									

	for 10 years against	anyleakage.F	or vertical su	rface two co	oats @0.70	kg per sqm	T	
	Inside wall	4	4.200	2.850			47.880	
	Outside wall	4	4.700	2.850			53.581	
					То	tal Quantity	101.461 sc	mp
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	101.461 sq	m
			Sa	y 101.461 s	sqm @ Rs 5	73.87 / sqm	Rs 58	225.42
	Providing and apply RCC structures like & water treatment p partsintegral crysta slurry: 1 part water help of synthetic fib i.e by reducingpern 1048 and resistant tof self-healing of c specification and the for 10 years against Floor	retaining wall- lant, tunnels/s lline slurry : 2 ) for horizonta er brush. The neability of co o 16 bar hydro racks up to a e direction of to t anyleakage.F	s of the base subway and parts water) I surfaces ar materialshal ncrete by mostatic pressured width of 0.5 the engineer or horizonta	ement, water bridge deck for vertical ad applying I meet the rore than 90 ure on negation. The in-charge. To I surface or 4.200	tanks, roof etc., preparatives and thesame from the trequirement of compared tive side. The workshall be the product the coat @1.	slabs, podiing red by mixing and 3:1 (3 per megative so as specified with continue crystalline performance to kg per so	ums, reserving in the rationartsintegra (internal) seed in ACI-2′ rol concrete eslurry shall out all compe shall carry qm.	or, sewago of 5 : 2 I crystallinide with the 12-3R-201 be capable te as per guarante
		Ker	ala Wat					n
		D			otal Deduct	1	0.000 sqm 17.640 sqm	<u> </u>
							17.040 Sq11	ı
			U	ay 17.640 s	sqm @ Rs 4	42.27 / sam	Rs 78	01.64
16	100.36.1 Filling water with 50 the reservoir site ar engine pump set , h "(Ref. No. 000, Tech	id pumping the lire for tanker	s fited in lorry water into t lorry, tools a	and convey	ying water fi	ot less than	ce of 5 km (	average) 5 HP dies
16	Filling water with 50 the reservoir site an engine pump set, h	id pumping the lire for tanker	s fited in lorry water into t lorry, tools a	and convey	ying water fi	om a distan	ce of 5 km (	average) 5 HP dies
16	Filling water with 50 the reservoir site an engine pump set, h	nd pumping the nire for tanker nnical Circular)	s fited in lorry water into t lorry, tools a	and convey he reservoi nd other ap	ying water fr r of height n pliences and 2.850	om a distan	ce of 5 km ( 3 m using ter etc. com	average) 5 HP dies plete.
16	Filling water with 50 the reservoir site an engine pump set, h	nd pumping the nire for tanker nnical Circular)	s fited in lorry water into t lorry, tools a	and convey he reservoind other app 4.200	ying water fr r of height n pliences and 2.850	om a distan ot less than d cost of wa tal Quantity	ce of 5 km ( 3 m using ter etc. com 50.274	average) 5 HP dies plete.  o litre
16	Filling water with 50 the reservoir site an engine pump set, h	nd pumping the nire for tanker nnical Circular)	s fited in lorry water into t lorry, tools a	and convey he reservoind other app 4.200	ying water from the pliences and the pliences are pliences and the pliences are pliences	om a distan ot less than d cost of wa tal Quantity	ce of 5 km ( 3 m using ter etc. com 50.274	average) 5 HP dies plete.  o litre
16	Filling water with 50 the reservoir site an engine pump set, h	nd pumping the nire for tanker nnical Circular)	s fited in lorry e water into t orry, tools a " 4.200	and convey he reservoired other app 4.200	ying water from the pliences and the pliences are pliences and the pliences are pliences	om a distant of less than distant of wastern	ce of 5 km ( 3 m using ster etc. com 50.274 50.274 Kilo 0.000 Kilo I	average) 5 HP dies plete.  o litre

1	2.6.1 Earth work in excavate (exceeding 30 cm in detearth, lead up to 50 m soil	epth, 1.5 m	in width as	well as 10	sqm on pla	ın) including	disposal of	excavated
		1	8.100	8.100	0.500		32.805	
					To	otal Quantity	32.805 cun	n
				٦	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	32.805 cum	1
			S	ay 32.805 d	cum @ Rs 2	15.37 / cum	Rs 70	65.21
2	4.1.5 Providing and laying in shuttering - All work up nominal size)	•		MONEY T.	•	_		_
		1	8.100	8.100	0.200		13.122	
			L KYEE		To	otal Quantity	13.122 cun	n
		(SI			Total Deduc	ted Quantity	0.000 cum	
		4000			Net To	otal Quantity	13.122 cum	ı
			Sa	y 13.122 cu	ım @ Rs 74	13.74 / cum	Rs 972	283.10
3	5.37.1 Providing and laying in using cement content a transported to site of w as per mix design of sp from transit mixer to site including cost of admixed concrete, improve work -charge. Note:- Cemen per design mix is payar	position re as per apprork in trans becified grade of laying, tures in rec ability without t content c	roved designate it mixer for a cade for reinforce excluding the commended pout impairing considered in	M-25 grade n mix, manuall leads, had proced ceme ne cost of co proportions strength ar this item is	concrete for ufactured in aving continuent concrete entering, she as per IS: 9 and durability is @330 kg/	fully automations agitate work include uttering finis 9103 to access as per directors.	atic batching of mixer, ma ling pumping hing and rei elerate/ retar tion of the E	g plant and anufactured g of R.M.C. nforcement d setting of ngineer - in
		1	8.100	8.100	0.300		19.683	
					To	otal Quantity	19.683 cun	<u>n</u>
				7	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	19.683 cum	ı
			Sa	y 19.683 cu	ım @ Rs 99	47.98 / cum	Rs 195	806.09
4	5.37.2 Providing and laying in using cement content a transported to site of w as per mix design of sp	as per appr ork in trans	roved desigr sit mixer for a	n mix, manu all leads, ha	ufactured in aving contin	fully automa	atic batching d mixer, ma	g plant and anufactured

	from transit mixer to including cost of acconcrete, improve to charge. Note:- Ceper design mix is p	dmixtures in red workability with ment content of	commended out impairing considered in	proportions strength ar this item is	as per IS: 910 nd durability as s @330 kg/cui	03 to acce per direc m. Excess	elerate/ retar tion of the E s /less ceme	d setting of ngineer - in ent used as
	Long Wall	2	7.200	0.300	3.350		14.473	
	Short Wall	2	6.000	0.300	3.350		12.060	
					Tota	Quantity	26.533 cun	n
				7	Total Deducted	I Quantity	0.000 cum	
					Net Total	l Quantity	26.533 cum	<u> </u>
			Say	26.533 cur	m @ Rs 11610	.43 / cum	Rs 308	059.54
5	5.34.1 Extra for providing content used is pa BMC/RMC. (Note:-	yable/ recover	able separat	ely.Providin	ng M-30 grade	concrete	•	
	ITEM 3&4	1	46.216		TAL		46.216	
		1/2	LKB.		Total	Quantity	46.216 cun	n
		ALC:			Total Deducted	I Quantity	0.000 cum	
			A Paris	A MANAGEMENT	Net Tota	l Quantity	46.216 cum	l
		Ker	ala Wat	Say 46.216	cum @ Rs 82	.61 / cum	Rs 38	17.90
6	4.12 Extra for providing cement as per ma			material ir	n cement cond	rete work	in doses b	y weight of
		1	46.216		330.000		15251.280	
					Tota	l Quantity	15251.280	kg
					Total Deducted	I Quantity	0.000 kg	
					Net Tota	l Quantity	15251.280	kg
				Say 1525	Net Tota 1.280 kg @ Rs			
7	od328596/2021_20			· ·	1.280 kg @ Rs	1.36 / kg		
7	od328596/2021_20 Extra for providing	sulphate resista		· ·	1.280 kg @ Rs	1.36 / kg	Rs 207	
7			ant cement fo 46.216	· ·	1.280 kg @ Rs	1.36 / kg	Rs 207	741.74
7		sulphate resista		or the struct	1.280 kg @ Rs ures above plir Tota	1.36 / kg	46.216 46.216 cur	741.74
7		sulphate resista		or the struct	1.280 kg @ Rs ures above plir Total	1.36 / kg  th level.  Quantity Quantity	46.216 46.216 cur 0.000 cum	7 <b>41.74</b>
7		sulphate resista	46.216	or the struct	1.280 kg @ Rs ures above plir Total	1.36 / kg  th level.  Quantity Quantity Quantity	46.216 cum 0.000 cum 46.216 cum	741.74

	binding all complete	upto plinth	levelThermo _	- Mechanio	cally Treate	d bars of g	rade Fe-500	D or mo
	@120kg/m3	1	46.216	120.000			5545.920	
					То	tal Quantity	5545.920 k	kilogram
				Т	otal Deduct	ed Quantity	0.000 kilogi	am
					Net To	tal Quantity	5545.920 k	ilogram
			Say 5545.9	920 kilogram	n @ Rs 98.9	2 / kilogram	Rs 548	602.41
9	od328599/2021_2022 Extra for providing ep		for reinforcen	nent bars.				
	@120kg/m3	1	46.216	120.000			5545.920	
			100	12.	То	tal Quantity	5545.920 k	кg
			-J/W		otal Deduct	ed Quantity	0.000 kg	
			33 8	B 74	Net To	tal Quantity	5545.920 k	g
		61	The	Say 5545	5.920 kg @ I	Rs 2.32 / kg	Rs 128	366.53
10	5.9.1 Centering and shutter columns, etc for mass		8.000	tc. and remo	oval of form	for:Foundat	ions, footing	s, bases
	FOR PCC	1 Ker	2*8.1+2*8.	0.200 er Auth	lority		6.480	
	FOR BASE SLAB		2*7.3+2*7. 3	0.300	1 [		8.760	
					То	tal Quantity	15.240 sqr	n
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	15.240 sqm	1
			S	Say 15.240 s	sqm @ Rs 3	37.42 / sqm	Rs 51	42.28
11	5.9.2 Centering and shutter attached pilasters, but	•	-			for:Walls (a	ny thicknes	s) includ
	Inside Wall	1	2*6.6+2*6. 6		3.350		88.440	
	Outside Wall	1	2*7.2+2*7. 2		3.350		96.480	
					То	tal Quantity	184.920 sc	ηm
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	184.920 sq	m
							·	

12 mm cement plaster finished with a floating coat of neat cement of mix:1:3 (1 cement: 3 fine sand) Inside Wall  1 2*6.6+2*6. 3.350 88.440  Outside Wall 1 2*7.2+2*7. 2 3.650 Inside floor 1 6.600 6.600  Total Quantity 237.120 sqm  Net Total Quantity 237.120 sqm Rs 95732.46  13 13.52.2 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as pmanufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. Concrete work  1 2*7.2+2*7. 3.650 105.120 Total Quantity 105.120 sqm Rs 95732.46  13 13.52.2 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as pmanufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. Concrete work  1 2*7.2+2*7. 3.650 105.120 Total Quantity 105.120 sqm Rs 224.31 / sqm Rs 23579.47  14 22.23.1 Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sew as a water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5: 2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3: 1 (3 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3: 1 (3 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 4: 1 (3 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 4: 1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in AC1-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallinestury shall be capat of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all compl	12	13.7.1	finished wit	th a floating co	nat of neat (	rement of m	nix:1:3 ( 1 ce	ment · 3 fine	e sand)
Outside Wall 1 2 3.650 105.120  Inside floor 1 6.600 6.600 237.120 sqm  Total Quantity 237.120 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 237.120 sqm  Rs 95732.46  13 13.52.2  Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as pmanufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete of concrete work  1 2*7.2+2*7. 2 3.650 105.120 sqm  Total Deducted Quantity 0.000 sqm  Total Deducted Quantity 105.120 sqm  Rs 23579.47  14 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to t RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 2 parts water) for vertical surfaces are serior on regative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallinesburry shall be capat of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as p specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  Total Deducted Quantity 0.000 sqm		·		2*6.6+2*6.	oat of fleat		11.7.5 ( 1 66		S dand)
Total Quantity 237.120 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 237.120 sqm  Say 237.120 sqm @ Rs 403.73 / sqm  Rs 95732.46  13 13.52.2  Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as p manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete of concrete work  1 2'7.2+2'7. 2 3.650 105.120  Total Quantity 105.120 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Authori Net Total Quantity 105.120 sqm  Say 105.120 sqm @ Rs 224.31 / sqm  Rs 23579.47  14 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewand water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the rare crystallistic slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capation of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capation of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  FOR WALLS 1 2'6.6+2'6. 6 3.350 88.440 sqm  Total Deducted Quantity 0.000 sqm		Outside Wall	1			3.650		105.120	
Total Deducted Quantity   0.000 sqm   Net Total Quantity   237.120 sqm   Rs 95732.46    13   13.52.2   Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as p manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete of concrete work   2*7.2+2*7.   3.650   105.120      Total Quantity   105.120 sqm   Total Deducted Quantity   0.000 sqm		Inside floor	1	6.600	6.600			43.560	
Say 237.120 sqm @ Rs 403.73 / sqm  Rs 95732.46  13 13.52.2 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as premarufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete of concrete work  1 2'7.2+2'7. 2 3.650 105.120  Total Quantity 105.120 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Authori Net Total Quantity 105.120 sqm  Say 105.120 sqm @ Rs 224.31 / sqm Rs 23579.47  14 22.23.1 Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewands water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as per 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capat of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as paspecification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS 1 2'6.6+2'6. 3.350 88.440 sqm  Total Quantity 88.440 sqm  Total Deducted Quantity 0.000 sqm						То	tal Quantity	237.120 sc	mp
Say 237.120 sqm @ Rs 403.73 / sqm Rs 95732.46  13					Т	otal Deduct	ed Quantity	0.000 sqm	
13 13.52.2 Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as properties and applied as properties of the properties of						Net To	tal Quantity	237.120 sq	m
Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as promanufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete of concrete work  1 2*7.2+2*7. 3.650 105.120 sqm  Total Deducted Quantity 105.120 sqm  Total Deducted Quantity 105.120 sqm  Kerala Water Authori Net Total Quantity 105.120 sqm  Say 105.120 sqm @ Rs 224.31 / sqm Rs 23579.47  14 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capal of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as p specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS 1 2*6.6+2*6. 3.350 88.440 sqm  Total Deducted Quantity 0.0000 sqm				Say	/ 237.120 s	qm @ Rs 4	03.73 / sqm	Rs 95	732.46
Total Deducted Quantity 0.000 sqm  Kerala Water Author Net Total Quantity 105.120 sqm  Say 105.120 sqm @ Rs 224.31 / sqm Rs 23579.47  14 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to to RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capated of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as pecification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS 1 2*6.6+2*6. 3.350 88.440 88.440 Total Deducted Quantity 0.000 sqm		concrete work	1	1.1 5.45		3.650	Ł	105.120	
Say 105.120 sqm @ Rs 224.31 / sqm  Rs 23579.47  14 22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to t RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capat of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as paspecification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS  1 2*6.6+2*6. 3.350 88.440  Total Quantity 88.440 sqm  Total Deducted Quantity 0.000 sqm			400	477.0		То	tal Quantity	105.120 sc	m
22.23.1  Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducingpermeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capat of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as p specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage.For vertical surface two coats @0.70 kg per sqm  FOR WALLS  1 2*6.6+2*6.				P WH	10.P2//	otal Deduct	ed Quantity	0.000 sqm	
Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewal & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5:2 partsintegral crystalline slurry: 2 parts water) for vertical surfaces and 3:1 (3 partsintegral crystalline slurry: 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capated of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as proposed specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS  1  2*6.6+2*6. 6  3.350  88.440 sqm  Total Deducted Quantity  0.000 sqm			Ker	ala Wate	er Auth	OTINE To	tal Quantity	105.120 sq	m
Providing and applying integral crystalline slurry of hydrophilic in nature forwaterproofing treatment to to RCC structures like retaining walls of the basement,water tanks, roof slabs, podiums, reservior, sewa & water treatment plant, tunnels/ subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 partsintegral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 partsintegral crystalline slurry : 1 part water) for horizontal surfaces and applying thesame from negative (internal) side with thelp of synthetic fiber brush. The materialshall meet the requirements as specified in ACI-212-3R-20 i.e by reducing permeability of concrete by more than 90% compared with control concrete as perD 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystallineslurry shall be capable of self-healing of cracks up to a width of 0.50mm. The workshall be carried out all complete as properly specification and the direction of the engineerin-charge. The product performance shall carry guarant for 10 years against anyleakage. For vertical surface two coats @0.70 kg per sqm  FOR WALLS  1  2*6.6+2*6.  6  3.350  88.440 sqm  Total Deducted Quantity  0.000 sqm				Say	/ 105.120 s	qm @ Rs 2	24.31 / sqm	Rs 23	579.47
FOR WALLS  1 2*6.6+2*6. 6 3.350 88.440  Total Quantity 88.440 sqm  Total Deducted Quantity 0.000 sqm	17	Providing and applying RCC structures like ret & water treatment plan partsintegral crystalline slurry: 1 part water) for help of synthetic fiber is i.e by reducing permeat 1048 and resistant to 1 of self-healing of crac specification and the discourse in the self-healing of craces and self-healing and the discourse in the self-healing of craces and self-healing and the discourse in the self-healing of craces and self-healing and the discourse in the self-healing and the self-healing and the self-healing and se	aining wall t, tunnels/ e slurry: 2 or horizonta orush. The ability of co 6 bar hydro ks up to a irection of	s of the basers subway and be parts water) at surfaces and material shall encrete by modulatic pressure width of 0.50 the engineering subwards and the subwards	ment, water or idge deck for vertical dapplying meet the rure than 90 re on negar Dmm. The	tanks, roof etc., prepar surfaces a thesame from equirement % compare tive side. The workshall be the product	slabs, podiored by mixing and 3:1 (3 points as specified with continue crystalline performance	ums, reserving in the rational control concrete eslurry shall out all carry	ior, sewago of 5 : 2 I crystalliride with the second of th
Total Deducted Quantity 0.000 sqm		, ,		2*6.6+2*6.	mace (WO (		ky per syn		
						To	tal Quantity	88.440 sqr	n_
Net Total Quantity 88.440 sqm					T	otal Deduct	ed Quantity	0.000 sqm	
						Net To	tal Quantity	88.440 sqm	1

			5	Say 88.440 s	sqm @ Rs 5	73.87 / sqm	Rs 50	753.06
15	Providing and applying RCC structures like water treatment ple partsintegral crystall slurry: 1 part water) help of synthetic fiberice by reducing permit 1048 and resistant to of self-healing of cryspecification and the for 10 years against	retaining walls ant, tunnels/s line slurry: 2 for horizontal er brush. The eability of corp 16 bar hydroacks up to a edirection of the	s of the bas subway and parts water I surfaces a materialshancrete by mostatic press width of 0.4	ement, wate bridge decker) for vertica and applying all meet the more than 90 ture on negation. The rin-charge.	r tanks, roof c etc., prepar I surfaces a thesame fro requirement 0% compare ative side. The workshall b	slabs, podiored by mixing and 3:1 (3 points negative is as specified with continue crystalline carried operformance	ums, reserving in the rational control concrete eslurry shall carry e shall carry	or, sewage o of 5 : 2 (5 crystalline de with the 2-3R-2010 as perDIN be capable lete as per
		1	9.800	6.000		регод регод	58.801	
			1.0		To	tal Quantity	58.801 sqr	n
		1	367 9	R X	Fotal Deduct	ed Quantity	0.000 sqm	
		( k.		73//	Net To	tal Quantity	58.801 sqm	1
		11/15		Sav 58 801 s	sgm @ Rs 4	42.27 / sqm	Rs 260	005.92
16	100.36.1 Filling water with 500 the reservoir site and engine pump set . hi	d pumping the	s fited in lorr water into	y and conve	ying water fi	ot less than	3 m using	5 HP diese
16	Filling water with 500	d pumping the ire for tanker l	s fited in lorr water into orry, tools a	y and conve	ying water from the property of the property o	oot less than d cost of wa	3 m using ster etc. com	5 HP diese plete.
16	Filling water with 500 the reservoir site and engine pump set, hi	d pumping the ire for tanker I nical Circular)	s fited in lorr water into orry, tools a	y and conve the reservo and other ap 6.600	ying water from the property of the property o	ot less than d cost of wa tal Quantity	3 m using ster etc. com	5 HP diese plete. lo litre
16	Filling water with 500 the reservoir site and engine pump set, hi	d pumping the ire for tanker I nical Circular)	s fited in lorr water into orry, tools a	y and conve the reservo and other ap 6.600	ying water from the pliences and the state of the state o	ot less than d cost of wa tal Quantity ed Quantity	3 m using ster etc. com  145.926  145.926 Ki  0.000 Kilo I	5 HP diese plete.  lo litre
16	Filling water with 500 the reservoir site and engine pump set, hi	d pumping the ire for tanker I nical Circular)	s fited in lorr e water into orry, tools a	y and converthe reservound other ap	ying water from the pliences and a second se	tal Quantity tal Quantity	3 m using ster etc. com  145.926  145.926 Kil  145.926 Kil	5 HP diese plete.  lo litre  itre  o litre
	Filling water with 500 the reservoir site and engine pump set , hi "(Ref. No. 000, Tech	d pumping the ire for tanker I nical Circular)	s fited in lorr water into orry, tools a " 6.600	y and converthe reservound other ap	ying water from the pliences and state of the pliences are state of th	tal Quantity ed Quantity tal Quantity	145.926 Kil 0.000 Kilo I 145.926 Kil	5 HP diese plete. lo litre itre o litre
16	Filling water with 500 the reservoir site and engine pump set, hi	d pumping the ire for tanker I nical Circular)	s fited in lorre water into orry, tools a	y and converthe reservound other ap 6.600	ying water from the pliences and state of the pliences are the pliences and state of the pliences are the pliences	tal Quantity tal Quantity	3 m using ster etc. com  145.926  145.926 Kil  145.926 Kil	5 HP diese plete.  lo litre  itre  o litre
	Filling water with 500 the reservoir site and engine pump set , hi "(Ref. No. 000, Tech	No  11Centrat  vation by me	Say 145.9  Lee Sump	y and converthe reservound other applications (6.600)  926 Kilo litre  B  (Cost Indeed)  neans (Hydes)  s well as 10	ying water from the pliences and state of the pliences are state of th	tal Quantity ed Quantity tal Quantity tal Quantity tal Quantity tal Quantity tal Quantity or / Kilo litre cF	145.926 Killon Rs 270 Quantity	lo litre itre o litre O94.08 Remark
SI No	Pilling water with 500 the reservoir site and engine pump set , hi "(Ref. No. 000, Tech.)  Description  2.6.1  Earth work in exca (exceeding 30 cm in earth, lead up to 50)	No  11Centrat  vation by me	Say 145.9  Lee Sump	y and converthe reservound other applications (6.600)  926 Kilo litre  B  (Cost Indeed)  neans (Hydes)  s well as 10	ying water from the pliences and state of the pliences are state of th	tal Quantity ed Quantity tal Quantity tal Quantity tal Quantity tal Quantity tal Quantity or / Kilo litre cF	145.926 Killon Rs 270 Quantity	lo litre itre o litre O94.08 Remark
SI No	Pilling water with 500 the reservoir site and engine pump set , hi "(Ref. No. 000, Tech.)  Description  2.6.1  Earth work in exca (exceeding 30 cm in earth, lead up to 50 soil	No  11Centrate  vation by mean depth, 1.5 mm and lift up to	Say 145.9  Say 145.9  Lee Sump  echanical main width asto 1.5 m, dis	926 Kilo litre B (Cost Index see well as 10 sposed eart	ying water from the pliences and substitution of the pliences and substitution of the pliences and substitution of the plant of the pla	tal Quantity ed Quantity tal Quantity tal Quantity tal Quantity tal Quantity tal Quantity or / Kilo litre cF	145.926 145.926 Kil 0.000 Kilo I 145.926 Kil Rs 270 Quantity  ual means disposal of the dispos	lo litre itre o litre O94.08 Remark over areas excavated All kinds o
SI No	Pilling water with 500 the reservoir site and engine pump set , hi "(Ref. No. 000, Tech.)  Description  2.6.1  Earth work in exca (exceeding 30 cm in earth, lead up to 50 soil	No  11Centrate  vation by mean depth, 1.5 mm and lift up to	Say 145.9  Say 145.9  Lee Sump  echanical main width asto 1.5 m, dis	y and converthe reservound other applications of the servound other applications of the servound of the servou	ying water from the pliences and substitution of the pliences and substitution of the pliences and substitution of the plant of the pla	tal Quantity ed Quantity tal Quantity tal Quantity or / Kilo litre  CF  vator)/manu n) including led and nea	145.926 Kil 145.926 Kil 0.000 Kilo I 145.926 Kil Rs 270 Quantity  ual means disposal of the di	lo litre itre o litre O94.08 Remark over areas excavated All kinds o

				Say 5.087 c	cum @ Rs 2	15.37 / cum	Rs 10	095.59	
2	4.1.5  Providing and laying in position cement concrete of specified grade excluding the cost of centering ar shuttering - All work up to plinth level:1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 m nominal size)								
	FOR PCC	3.14/4	3.600	3.600	0.200		2.035		
					To	otal Quantity	2.035 cum	1	
				7	Total Deduc	ted Quantity	0.000 cum		
					Net To	otal Quantity	2.035 cum		
			S	ay 2.035 cu	ım @ Rs 74	13.74 / cum	Rs 15	086.96	
	transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforced including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard seconcrete, improve workability without impairing strength and durability as per direction of the Engine-charge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement up transition of the engine content considered in this item is @330 kg/cum.								
	concrete, improve work	nt content co	onsidered in	this item is	s @330 kg/	cum. Excess		•	
	concrete, improve work -charge. Note:- Cemen	nt content co	onsidered in	this item is	s @330 kg/	cum. Excess		_	
	concrete, improve work -charge. Note:- Cemen per design mix is paya	nt content co	onsidered ir able separa	this item is	s @330 kg/ rk upto plint 0.300	cum. Excess	3.053	ent used	
	concrete, improve work -charge. Note:- Cemen per design mix is paya	nt content co	onsidered ir able separa	this item is tely.All wion	s @330 kg/rk upto plint 0.300	cum. Excess	3.053 3.053 cum	ent used	
	concrete, improve work -charge. Note:- Cemen per design mix is paya	nt content co	onsidered ir able separa	this item is tely.All wion 3.600	s @330 kg/rk upto plint 0.300 Total Deduc	cum. Excess th level tal Quantity	3.053 3.053 cum 0.000 cum	ent used	
	concrete, improve work -charge. Note:- Cemen per design mix is paya FOR BASE SLAB	nt content co	onsidered ir able separa 3.600	this item is tely.All wion 3.600	s @330 kg/rk upto plint 0.300  Total Deduction  Net To	cum. Excess th level  otal Quantity ted Quantity	3.053 3.053 cum 0.000 cum 3.053 cum	ent used	
4	concrete, improve work -charge. Note:- Cemen per design mix is paya	position reason per approver in transpecified grave of laying, tures in receptability without content	ady mixed Moved design it mixer for excluding the commended out impairing considered in the commended of the	athis item is tely. All wion 3.600 and 3.600 a	os @330 kg/rk upto plint 0.300  Total Deduct Net Total De	cum. Excess th level  ctal Quantity ted Quantity days / cum  ar reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direc cum. Excess	3.053 3.053 cum 0.000 cum 3.053 cum Rs 30 cement coratic batchined mixer, maling pumpin hing and realerate/ retation of the Est/less cement	371.18  acrete word g plant a anufacturing of R.M inforcement used	
4	concrete, improve work -charge. Note:- Cemen per design mix is paya  FOR BASE SLAB  5.37.2 Providing and laying in using cement content a transported to site of w as per mix design of sp from transit mixer to site including cost of admix concrete, improve work -charge. Note:- Cemen	position reason per approver in transpecified grave of laying, tures in receptability without content	ady mixed Moved design it mixer for excluding the commended out impairing considered in the commended of the	athis item is tely. All wion 3.600 and 3.600 a	os @330 kg/rk upto plint 0.300  Total Deduct Net Total De	cum. Excess th level  ctal Quantity ted Quantity days / cum  ar reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direc cum. Excess	3.053 3.053 cum 0.000 cum 3.053 cum Rs 30 cement coratic batchined mixer, maling pumpin hing and realerate/ retation of the Est/less cement	371.18  acrete word g plant a anufacturing of R.M inforcement used	
4	concrete, improve work -charge. Note:- Cemen per design mix is paya  FOR BASE SLAB  5.37.2  Providing and laying in using cement content a transported to site of w as per mix design of sp from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemen per design mix is paya  FOR COVERING	position reas per approver in trans pecified grae of laying, tures in receasible/recovers	ady mixed Noved designit mixer for excluding the ommended out impairing onsidered in able separa	athis item is tely.All wion 3.600 and 3.600 an	os @ 330 kg/rk upto plint 0.300  Total Deduct Net Total  Rs 99  concrete four aving continuation concrete entering, she as per IS: 9  d durability so @ 330 kg/k above plint  or with the concrete entering as per IS: 9  d durability so @ 330 kg/k above plint  or with the concrete entering as per IS: 9  d durability so @ 330 kg/k above plint	cum. Excess th level  ctal Quantity ted Quantity days / cum  ar reinforced fully autom uous agitate work includ uttering finis 103 to acce as per direc cum. Excess	3.053 3.053 cum 0.000 cum 3.053 cum Rs 30 cement coratic batchined mixer, maling pumpin hing and repleted retaition of the Est /less cement of floor V levents	371.18  acrete word g plant a anufacturing of R.M inforcement used	

						1	
				То	tal Quantity	6.627 cum	
				Total Deduct	ed Quantity	-0.030 cum	
				Net To	tal Quantity	6.597 cum	
			Sa	ay 6.597 cum @ Rs 116	10.43 / cum	Rs 765	94.01
5	content used is pay	/able/ recovera	able separat	els. Note:- Excess/less ely.Providing M-30 grad ed in M-30 is @ 340 kg	de concrete	•	
	ITEM 3&4	1	9.650			9.650	
				То	tal Quantity	9.650 cum	
			100	Total Deduct	ed Quantity	0.000 cum	
			JAB	Net To	tal Quantity	9.650 cum	
6	4.12 Extra for providing cement as per mar		T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Say 9.650 cum @ Rs a		I	
	FOR BAS	1	8.933	330.000		2947.890	
		17			tal Quantity	2947.890 k	g
		Ker	ala Wat	er Authority Total Deduct	ed Quantity	0.000 kg	
		D		Net To	tal Quantity	2947.890 kç	9
				Say 2947.890 kg @ F	₹s/1.36 / kg	Rs 40	09.13
7	od328596/2021_20 Extra for providing s		ant cement fo	or the structures above p	olinth level.		
	ITEM 3&4	1	9.650			9.650	
			1	То	tal Quantity	9.650 cum	
				Total Deduct	ed Quantity	0.000 cum	
					tal Quantity		
			S	Say 9.650 cum @ Rs 189			329.89
8			ork includinç	g straightening, cutting - Mechanically Treate	, bending, <sub>l</sub>	olacing in po	osition ar
	@120kg/m3	1	9.650		120.0	1158.000	
				To	tal Quantity	1158.000 k	ilogram
				Total Daduct		0.000 kilo an	
				rotai Deduct	ed Quantity	U.UUU KIIOGI	alli

			Say 1158.0	000 kilogram	@ Rs 98.9	2 / kilogram	Rs 114	549.36
9	od328599/2021_2022 Extra for providing epox	ky coating fo	or reinforcen	nent bars.				
	@120kg/m3	1	9.650			120.0	1158.000	
					To	tal Quantity	1158.000 k	κg
				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	1158.000 k	g
				Say 1158	.000 kg @	Rs 2.32 / kg	Rs 26	86.56
10	5.9.1 Centering and shuttering columns, etc for mass of	-	strutting, et	c. and remo	val of form	for:Foundat	ions, footing	s, bases
	FOR PCC	3.14	3.600		0.200		2.261	
	FOR FLOOR SLAB	3.14	3.400	8 2	0.300		3.203	
		613	Y M	51/1	To	tal Quantity	5.464 sqm	
				1020 Y T	otal Deduct	ed Quantity	0.000 sqm	
		101	Ka		2 537	tal Quantity	5.464 sqm	
					Net To	otal Quantity 37.42 / sqm		43.66
11	5.9.2 Centering and shuttering attached pilasters, butt	-	strutting, et	Say 5.464 s	Net To qm @ Rs 3	37.42 / sqm	Rs 18	
11	Centering and shuttering	-	strutting, et	Say 5.464 s	Net To qm @ Rs 3	37.42 / sqm	Rs 18	
11	Centering and shuttering attached pilasters, butter	eresses, pli	strutting, et	Say 5.464 s	Net To qm @ Rs 3 oval of form etc. 2.600	37.42 / sqm	Rs 18	s) includi
11	Centering and shuttering attached pilasters, butter	eresses, pli	strutting, et	Say 5.464 s	Net To qm @ Rs 3 oval of form etc. 2.600	37.42 / sqm for:Walls (a	Rs 18  any thickness  40.820  40.820 sqr	s) includi
11	Centering and shuttering attached pilasters, butter	eresses, pli	strutting, et	Say 5.464 s	Net To qm @ Rs 3 oval of form etc. 2.600 To	37.42 / sqm for:Walls (a	Rs 18  any thickness  40.820  40.820 sqr	s) includii
11	Centering and shuttering attached pilasters, butter	eresses, pli	strutting, einth and strii	Say 5.464 s c. and remo	Net To qm @ Rs 3 oval of form etc. 2.600 To otal Deduct Net To	37.42 / sqm for:Walls (a	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr	s) includii n
11	Centering and shuttering attached pilasters, butter	eresses, pli 2*3.14	strutting, einth and strii 2.500	Say 5.464 s c. and remong courses o	Net To qm @ Rs 3 oval of form etc. 2.600 To otal Deduct Net To qm @ Rs 7	for:Walls (a day of the control of t	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr	s) includi
	Centering and shuttering attached pilasters, buttoo FOR TANK WALL  5.9.3 Centering and shutter	eresses, pli 2*3.14	strutting, einth and strii 2.500	Say 5.464 s c. and remong courses o	Net To qm @ Rs 3 oval of form etc. 2.600 To otal Deduct Net To qm @ Rs 7	for:Walls (a day of the control of t	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr	s) includi
	Centering and shuttering attached pilasters, buttoo FOR TANK WALL  5.9.3 Centering and shutter landings, balconies are FOR COVERING	eresses, pli 2*3.14  ring including access	strutting, einth and strip 2.500 Sing strutting	Say 5.464 s c. and remong courses of T ay 40.820 s	Net To qm @ Rs 3 oval of form etc. 2.600 To otal Deduct Net To qm @ Rs 7	for:Walls (a days and a land quantity and quantity atal qu	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr	s) includi
	Centering and shuttering attached pilasters, buttoo FOR TANK WALL  5.9.3 Centering and shutter landings, balconies are FOR COVERING SLAB	eresses, pli 2*3.14  ring including access 3.14/4	strutting, einth and strin 2.500 Sing strutting platform 2.200	Say 5.464 s c. and remong courses of the say 40.820 s , etc. and r	Net To qm @ Rs 3  oval of form etc.  2.600  To otal Deduct Net To qm @ Rs 7  emoval of	for:Walls (a days and a land quantity and quantity atal qu	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr Rs 29 spended flo	n 159.79
	Centering and shuttering attached pilasters, buttoo FOR TANK WALL  5.9.3 Centering and shutter landings, balconies are FOR COVERING SLAB	eresses, pli 2*3.14  ring including access 3.14/4	strutting, einth and strin 2.500 Sing strutting platform 2.200	Say 5.464 s c. and remong courses of the say 40.820 s quad etc. and remong courses of the say 40.820 s	Net To qm @ Rs 3  oval of form etc. 2.600  To otal Deduct Net To qm @ Rs 7  emoval of	for:Walls (and the control of the co	Rs 18 40.820 40.820 sqr 0.000 sqm 40.820 sqr Rs 29 spended flo	n 159.79
	Centering and shuttering attached pilasters, buttoo FOR TANK WALL  5.9.3 Centering and shutter landings, balconies are FOR COVERING SLAB	eresses, pli 2*3.14  ring including access 3.14/4	strutting, einth and strin 2.500 Sing strutting platform 2.200	Say 5.464 s c. and remong courses of the say 40.820 s quad etc. and remong courses of the say 40.820 s	Net To qm @ Rs 3  oval of form etc. 2.600  To Total Deduct Qm @ Rs 7  emoval of  To Total Deduct	for:Walls (and the control of the co	Rs 18 40.820 40.820 sqm 40.820 sqm 40.820 sqm Rs 294 spended flo 3.800 -0.250 3.800 sqm -0.250 sqm	n 159.79

13	13.7.1 12 mm cement plaster	finished with	a floating (	coat of neat	cement of m	niv:1:3 ( 1 cc	ment : 3 fine	e sand)
	FOR FLOOR SLAB	3.14/4	2.200	2.200		11.1.5 ( 1 00	3.800	z sanu)
	TANK WALL INSIDE AND OUTSIDE	2*3.14	2.500	2.500			39.250	
	COVERING SLAB	2*3.14/4	2.500	2.500			9.813	
					То	tal Quantity	52.863 sqr	n
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	52.863 sqm	1
			5	Say 52.863 s	qm @ Rs 4	03.73 / sqm	Rs 213	342.38
	Finishing with Epoxy manufacturer's specific concrete work						• •	•
	TANK WALL OUTSIDE	3.14	2.800	2.620	1-8	l.	23.036	
	COVERING SLAB OUTSIDE	3.14/4	2.800	2.800		lar.	6.155	
				HISPAN	То	tal Quantity	29.191 sqr	n
		Kera	ala Wat	er Auth	otal Deduct	ed Quantity	0.000 sqm	
		D = 1			Net To	tal Quantity	29.191 sqm	1
			5	Say 29.191 s	sqm @ Rs 2:	24.31 / sqm	Rs 65	47.83
15	22.23.1  Providing and applying RCC structures like ret & water treatment plant partsintegral crystalline slurry: 1 part water) for help of synthetic fiber be i.e by reducing permea 1048 and resistant to 1 of self-healing of crac specification and the di	aining walls t, tunnels/s e slurry: 2 p r horizontal brush. The r bility of con 6 bar hydro ks up to a v irection of the	of the base ubway and parts water; surfaces a materialsha acrete by m static press width of 0.5 ne engineer	ement, water bridge deck of for vertical applying the meet the rore than 90 ure on negation. The in-charge. To	tanks, roof etc., prepar surfaces are thesame from equirement % compare tive side. The workshall be the product	slabs, podiired by mixin nd 3:1 (3 pom negative s as specified with contine crystalline performance	ums, reserving in the rational control concrete eslurry shall out all carry	or, sewa o of 5 : 2 I crystalli ide with t I 2-3R-20 as perD be capal lete as p
	for 10 years against an							
	for 10 years against an	3.14	2.200		2.500		17.270	
	for 10 years against an		2.200	2.200	2.500		17.270 3.800	

				7	otal Deduct			
							21.070 sqn	
				Say 21.070 s	sqm @ Rs 57	73.87 / sqm	Rs 12	091.44
16	Providing and applying RCC structures like ret & water treatment plant partsintegral crystalline slurry: 1 part water) for help of synthetic fiber & i.e by reducing permea 1048 and resistant to 1 of self-healing of crac specification and the differ 10 years against an	aining walls t, tunnels/s e slurry: 2 p r horizontal brush. The r bility of con 6 bar hydros ks up to a rection of th	of the base ubway and parts water; surfaces and materialshat acrete by m static press width of 0.5 me engineer	ement, water bridge deck of for vertical applying li meet the core than 90 ure on nega 50mm. The in-charge. The	tanks, roof etc., prepar surfaces and thesame from equirements % compare tive side. The workshall be the product	slabs, podiced by mixing and 3:1 (3 per negative as as specified with contract contr	ums, reserving in the rationarts integral (internal) seed in ACI-2 rol concrete eslurry shall out all compersions.	ior, sewage o of 5 : 2 (5 I crystalline ide with the 12-3R-2010 as perDIN be capable olete as per
	FOR FLOOR SLAB	3.14/4	2.200	2.200	1 1		3.800	
		1 1	17/10	73. /A	То	tal Quantity	3.800 sqm	l
		185			otal Deduct	ed Quantity	0.000 sqm	
		400			Net To	tal Quantity	3.800 sqm	
				Say 3.800 s	qm @ Rs 4	12.27 / sqm	Rs 16	80.63
17	100.36.1 Filling water with 5000 the reservoir site and p engine pump set, hire "(Ref. No. 000, Technic	itre tankers umping the for tanker lo	fited in lorry water into orry, tools a	the reservoi	ying water fr r of height n	ot less than	3 m using	5 HP diesel
	FOR TANK INSIDE	3.14/4	2.200	2.200	2.500		9.499	
					То	tal Quantity	9.499 Kilo	litre
				7	otal Deduct	ed Quantity	0.000 Kilo I	itre
					Net To	tal Quantity	9.499 Kilo I	itre
			Say 9.4	199 Kilo litre	@ Rs 185.6	7 / Kilo litre	Rs 17	763.68
						Total	33093	324.83
						Centage @	0.	0%
					Centa	ige Amount	0.	.00
			Pr	ovision for C	SST paymen	ts (in %) @	18	.0%
			P	Amount rese	rved for GS	Γ payments	59567	798.47
					Total	& Centage	39050	123.30
					Lumpsum f	or round off	0	.00

GRAND TOTAL	L Rs 39050123	3.30
Rounded (	Grand Total Rs 3,90	,50,123
Rupees Three Crore Ninety Lakh Fifty Thousand One Hundre	ed and Twenty Thre	ee Only



## **Detailed Estimate**

## SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART B- STP2

(Dsor year: 2018)

SI No	Description	No	L	В	D	CF	Quantity	Remark
		1Site Pre	peration	(Cost Inde	x:36.44 %)			
1	2.32 Clearing grass and recleared.	moval of th	e rubbish uţ	o to a distar	nce of 50 m	outside the	e periphery (	of the area
		1	90.000	70.000	2		6300.000	
		11		20/2	То	tal Quantity	6300.000 s	qm
		12	1038	ie Li	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	6300.000 sc	mp
			S	Say 6300.00	0 sqm @ Rs	7.57 / sqm	Rs 476	91.00
	branches, removing t material.Beyond 120		-	cluding 240	cm girth	tal Quantity	6.000 No	erviceabl
					Net To	tal Quantity	6.000 No	
				Say 6.000	No @ Rs 9	310.60 / No	Rs 558	63.60
3	50.2.26.1 Filling with contractor of consolidating each dependent direction of site Engine	osited laye	r by rammin	, .			•	•
	direction of site Engine							
	direction of site Engine	1	90.000	70.000	2.000		12600.000	
	unection of site Engine			70.000		tal Quantity		cum
	unection of site Engine						12600.000	cum
	unection of site Engine				To otal Deduct	ed Quantity	12600.000	

1			•	II	D	CF	Quantity	Remark
	dministrative/Laborator	y/Chemic	al House / (	Control Roc	om Building	(Cost I	ndex:36.44	%)
	2.8.1 Earth work in excavation trenches or drains (not ramming of bottoms, lift excavated soil as direct	exceeding t up to 1.5	g 1.5 m in w 5 m, includir	vidth or 10 s	sqm on plar out the exca	n), including	dressing o	f sides a
	FOR FOOTING	16	1.500	1.500	1.500		54.000	
	FOR STEP	1	2.000	2.000	0.200		0.800	
	FOR RAMP	0.5	3.000	0.150	1.500		0.338	
					To	tal Quantity	55.138 cur	m
			1Con	T ANS	Total Deduct	ed Quantity	0.000 cum	
			-//\		Net To	tal Quantity	55.138 cum	า
			S	Say 55.138 c	cum @ Rs 2	98.80 / cum	Rs 16	475.23
	nominal size) FOR FOOTING BASE	16	1.500	1.500	0.100		3.600	
	FOR FOOTING BASE	16	1.500	1.500	0.100		3.600	
	FOR STEP BOTTOM	Ker	2.000 <sub>at</sub>	er <sup>2.000</sup> th	0.100		0.400	
	FOR STEP BOTTOM FOR RAMP BOTTOM	Ker	2.000 at	2.000 0.150	0.100 1.500	7	0.400 0.338	
		1101	<del>aia yy at</del>	CI Auu	1.500	tal Quantity	0.338	
		1101	<del>aia yy at</del>	0.150	1.500		0.338 4.338 cum	
		1101	<del>aia yy at</del>	0.150	1.500 To		0.338 4.338 cum 0.000 cum	
		1101	3.000	0.150	1.500 To	ed Quantity	0.338 4.338 cum 0.000 cum 4.338 cum	748.31
3		0.5	3.000 Sement concr	0.150 Say 4.338 cuete of speci	1.500  Total Deduct  Net To  um @ Rs 68	ed Quantity tal Quantity 57.61 / cum	0.338 4.338 cum 0.000 cum 4.338 cum Rs 29	<b>748.31</b> ntering a
3	FOR RAMP BOTTOM  4.1.3  Providing and laying in shuttering - All work up	0.5	3.000 Sement concr	0.150 Say 4.338 cuete of speci	1.500  Total Deduct  Net To  um @ Rs 68	ed Quantity tal Quantity 57.61 / cum	0.338 4.338 cum 0.000 cum 4.338 cum Rs 29	<b>748.31</b> ntering a
3	4.1.3 Providing and laying in shuttering - All work up nominal size)	0.5 position ce	3.000 Sement concrevel:1:2:4 (ce	0.150  Say 4.338 cuete of speciement : 2 co	1.500 Total Deduct Net Tour @ Rs 68 ified grade exparse sand 1.500	ed Quantity tal Quantity 57.61 / cum	0.338 4.338 cum 0.000 cum 4.338 cum Rs 29 e cost of ce tone aggreg	748.31 ntering a gate 20 i
3	4.1.3 Providing and laying in shuttering - All work up nominal size)	0.5 position ce	3.000 Sement concrevel:1:2:4 (ce	0.150  Say 4.338 cuete of speciement : 2 co	1.500 Total Deduct Net Tour @ Rs 68 ified grade exparse sand 1.500	ed Quantity stal Quantity 57.61 / cum excluding the 4 graded s	0.338 4.338 cum 0.000 cum 4.338 cum Rs 29 e cost of ce tone aggreg 1.013 1.013 cum	748.31 ntering a
3	4.1.3 Providing and laying in shuttering - All work up nominal size)	0.5 position ce	3.000 Sement concrevel:1:2:4 (ce	0.150  Say 4.338 cuete of speciement : 2 co	1.500 Total Deduct Net Tour @ Rs 68 ified grade exparse sand 1.500 Total Deduct	ed Quantity stal Quantity 57.61 / cum excluding the 4 graded s	0.338 4.338 cum 0.000 cum 4.338 cum Rs 29 e cost of ce tone aggreg 1.013 1.013 cum 0.000 cum	748.31 ntering a gate 20 i

		Ba	asement Fill	ing	_		
Office Room	1	7.000	5.000	0.500		17.500	
stair	1	7.000	3.000	0.500		10.500	
chemical room	1	6.000	4.000	0.500		12.000	
visitors room	1	4.000	4.000	0.500		8.000	
Ramp	1*0.5	2.000	1.500	0.600		0.900	
				Тс	tal Quantity	48.900 cun	n
			7	Total Deduct	ed Quantity	0.000 cum	
		-0	65	Net To	tal Quantity	48.900 cum	1
		S	Say 48.900 d	cum @ Rs 2	97.37 / cum	Rs 145	541.39
transported to site of w as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work	pecified gra e of laying, tures in rec	ade for reinfo excluding the commended	orced ceme ne cost of ce proportions	ent concrete entering, sho as per IS: 9	work includuttering finis	ling pumping hing and reinelerate/ retare	g of R. nforce d setti
as per mix design of sp from transit mixer to sit including cost of admix	e of laying, tures in recability without to content of ble/recove	excluding the excluding the commended out impairing onsidered in table separate	orced ceme ne cost of co proportions strength ar this item is stely.All wion	ent concrete entering, sho as per IS: 9 nd durability s @330 kg/o rk upto plint	work include uttering finis 103 to access per direction. Excess to the work includes	ling pumping hing and reing lelerate/ retard tion of the Els /less ceme	g of R. nforce d setti nginee
as per mix design of section transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya	pecified grae of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in Table separation 1.400	orced ceme ne cost of ce proportions strength ar this item is itely.All wion	ent concrete entering, sho as per IS: 9 nd durability is @330 kg/o rk upto plint 0.250	work include uttering finis 103 to access per direction. Excess to the work includes	ling pumping hing and reing elerate/ retardition of the Eles /less ceme	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING	e of laying, tures in recability without to content of ble/recove	excluding the excluding the commended out impairing onsidered in table separate	orced ceme ne cost of co proportions strength ar this item is stely.All wion	ent concrete entering, sho as per IS: 9 nd durability s @330 kg/o rk upto plint	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing lelerate/ retard tion of the Els /less ceme	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING	pecified grae of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in Table separation 1.400	orced ceme ne cost of ce proportions strength ar this item is itely.All wion	ent concrete entering, sho as per IS: 9 nd durability is @330 kg/o rk upto plint 0.250	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing elerate/ retardition of the Eles /less ceme	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO	e of laying, tures in rec ability without content of ble/recove	excluding the excluding the commended out impairing considered in rable separated 1.400	orced ceme ne cost of ce proportions strength ar this item is ately.All wion 1.400 3.920	ent concrete entering, she as per IS: 9 nd durability s @330 kg/o rk upto plint 0.250  0.350	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing elerate/ retardition of the Eles /less cemes 7.840	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM	e of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in able separation 1.400  0.167	proportions strength are this item is stell. All wion 1.400 3.920	ent concrete entering, she as per IS: 9 ad durability s @330 kg/d rk upto plint 0.250  0.350  0.800	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing elerate/ retardition of the Eles /less cemes 7.840  3.666  1.025	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS	pecified grae of laying, tures in recability without content of ble/recovers 16	excluding the commended out impairing considered in able separation 1.400  0.167  0.400  11.100	orced ceme ne cost of ce proportions strength ar n this item is stely.All wion 1.400 3.920 0.200	ent concrete entering, she as per IS: § ad durability s @330 kg/d rk upto plint 0.250  0.350  0.800  0.450	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing elerate/ retardition of the Eles /less cemes 7.840 3.666 1.025 2.998	g of Ranforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	pecified grae of laying, tures in recability without content of ble/recovers 16 16 16 3 4	excluding the commended out impairing considered in able separation 1.400  0.167  0.400  11.100  10.400	orced ceme ne cost of ce proportions strength ar n this item is stely.All wion  1.400  3.920  0.200  0.200  0.200	ent concrete entering, she as per IS: § ad durability s @330 kg/c rk upto plint 0.250  0.350  0.800  0.450  0.450	work include uttering finis 9103 to access per direction. Excess cum.	ling pumping hing and reing elerate/ retardition of the Eles /less cemes 7.840 3.666 1.025 2.998 3.744	g of R. nforce d setti nginee
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	pecified grae of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in able separation 1.400  0.167  0.400  11.100  10.400  3.200	orced ceme ne cost of ce proportions strength ar n this item is stely.All wion  1.400  3.920  0.200  0.200  0.200  0.200	ent concrete entering, she as per IS: 9 ad durability s @330 kg/d rk upto plint 0.250  0.350  0.800  0.450  0.450  0.100	work include uttering finis 9103 to access per direction. Excess cum.	ing pumping hing and reing elerate/ retardition of the Eles /less cemes 7.840 3.666 1.025 2.998 3.744 0.289 11.979	g of Ranforce d setti
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	pecified grae of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in able separation 1.400  0.167  0.400  11.100  10.400  3.200	orced ceme ne cost of ce proportions strength ar n this item is stely.All wion  1.400  3.920  0.200  0.200  0.200  10.600	ent concrete entering, she as per IS: 9 ad durability s @330 kg/d rk upto plint 0.250  0.350  0.450  0.450  0.100	work include uttering finis 2103 to access as per direct cum. Excess h level	ing pumping hing and reing elerate/ retardition of the Eris /less cemes 7.840 3.666 1.025 2.998 3.744 0.289 11.979 31.541 cum	g of Ranforce d setti
as per mix design of sign from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer per design mix is paya  FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	pecified grae of laying, tures in recability without content of ble/recove	excluding the commended out impairing considered in able separation 1.400  0.167  0.400  11.100  10.400  3.200	orced ceme ne cost of ce proportions strength ar n this item is stely.All wion  1.400  3.920  0.200  0.200  0.200  10.600	ent concrete entering, she as per IS: 9 ad durability s @330 kg/d rk upto plint 0.250  0.350  0.450  0.450  0.450  0.100  Total Deduct	work include uttering finis of 103 to access as per direct cum. Excess the level of	ing pumping hing and reing elerate/ retardition of the Eris /less cemes 7.840 3.666 1.025 2.998 3.744 0.289 11.979 31.541 cum	g of R. nforce d setti nginee ent use

using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in -charge. Note:- Cement content considered in this item is @330 kg/cum. Excess /less cement used as per design mix is payable/recoverable separately.All work above plinth level upto floor V level

			GR	OUND FLO	OR	
	DLUMN ABOVE INTH UP TO ROOF AB	16	3.250	0.200	0.400	4.160
SU	N SHADE DOOR	2	2.000	1.200	0.080	0.384
SU	N SHADE W3	7	1.900	0.600	0.080	0.639
SU	N SHADE RS	1	3.400	1.200	0.080	0.327
SU	N SHADE V	1	1.000	0.600	0.080	0.048
LIN	ITELS	3	11.100	0.200	0.150	1.000
LIN	ITELS	3	10.400	0.200	0.150	0.936
LIN	ITELS	1	3.200	0.200	0.150	0.097
BE	AMS	6	3.100	0.200	0.450	1.675
BE	AMS	Kera 2	11a W at 4.000	er Autr 0.200	0.450	0.721
BE	AMS	2	3.200	0.200	0.450	0.577
BE	AMS	2	4.200	0.200	0.450	0.757
BE	AMS	4	5.500	0.200	0.450	1.981
BE	AMS	4	1.700	0.200	0.450	0.613
BE	AMS	4	4.200	0.200	0.450	1.513
ST. SL.	AIR CASE WAIST AB	2	3.700	1.500	0.125	1.388
LAI	NDING	1	3.000	1.500	0.125	0.563
STI	EPS	22*0.5	1.500	0.300	0.150	0.743
RO	OF SLAB	1	11.300	10.600	0.125	14.973
			F	IRST FLOO	PR	
	OLUMN UP TO OOF SLAB	16	3.250	0.200	0.400	4.160
LIN	ITELS	2	11.100	0.200	0.150	0.666
LIN	ITELS	4	10.400	0.200	0.150	1.248

	LINTELS	1	1.700	0.200	0.150		0.052	
	SUN SHADE	8	2.000	0.600	0.080		0.768	
	SUN SHADE	1	1.000	0.600	0.080		0.048	
	BEAMS	6	3.100	0.200	0.450		1.675	
	BEAMS	2	4.000	0.200	0.450		0.721	
	BEAMS	2	3.200	0.200	0.450		0.577	
	BEAMS	2	4.200	0.200	0.450		0.757	
	BEAMS	4	5.500	0.200	0.450		1.981	
	BEAMS	4	1.700	0.200	0.450		0.613	
	BEAMS	4	4.200	0.200	0.450		1.513	
	ROOF SLAB	1	11.900	11.200	0.125		16.660	
			GROUND&a	amp;amp;FII	RST FLOOF	2		
	COLUMN	16	0.600	0.200	0.400		-0.768	
	OPENING	1	1.500	0.200	0.150		-0.045	
					То	tal Quantity	64.534 cur	n
		444438	45.3000	BE 1889 アメ	Bit II			
					otal Deduct	ed Quantity∣⋅	-0.813 cum	
		1. Named		HE PAY		ed Quantity tal Quantity		
		Ker	ala Wsay	HEPE/	Net To	tal Quantity		1
7	50.6.7.2  Laterate masonry wit mortar 1:6 for super stocharges etc.	h neatly dre	essed latera	63.721 cunter stone of	Net To	tal Quantity 10.43 / cum x15cm or no	63.721 cum Rs 739 earest size	9828.21 in cemen
7	Laterate masonry wit mortar 1:6 for super st	h neatly dre	essed latera ve plinth leve	63.721 cunter stone of	Net To n @ Rs/116 size 40x20 two level in	tal Quantity 10.43 / cum x15cm or no	63.721 cum Rs 739 earest size	9828.21 in cemen
7	Laterate masonry wit mortar 1:6 for super st	h neatly dre	essed latera ve plinth leve	63.721 cun te stone of al up to floor	Net To n @ Rs/116 size 40x20 two level in	tal Quantity 10.43 / cum x15cm or no	63.721 cum Rs 739 earest size	9828.21 in cemen
7	Laterate masonry wit mortar 1:6 for super st charges etc.	h neatly dre	essed latera ve plinth leve	63.721 cunter stone of up to floor	Net To n @ Rs/116 size 40x20 two level in	tal Quantity 10.43 / cum x15cm or no	Rs 739 earest size ost of mate	9828.21 in cement
7	Laterate masonry wit mortar 1:6 for super st charges etc.  Long Wall	h neatly dre tructure above	essed latera ve plinth leve GR 11.100	te stone of up to floor OUND FLO	Net To n @ Rs 116 size 40x20 two level in OR 3.200	tal Quantity 10.43 / cum x15cm or no	Rs 739 earest size ost of mate	9828.21 in cement
7	Laterate masonry wit mortar 1:6 for super st charges etc.  Long Wall  Short Wall	tructure above	essed latera ve plinth leve GR 11.100 10.400	te stone of up to floor  OUND FLO  0.200  0.200	Net To n @ Rs/116 size 40x20 two level in OR 3.200 3.200	tal Quantity 10.43 / cum x15cm or no	63.721 cum  Rs 739  earest size ost of mate  21.313  19.969	9828.21 in cemen
7	Laterate masonry wit mortar 1:6 for super st charges etc.  Long Wall  Short Wall	tructure above	essed latera ve plinth leve GR 11.100 10.400	te stone of up to floor  OUND FLO  0.200  0.200  0.200	Net To n @ Rs/116 size 40x20 two level in OR 3.200 3.200	tal Quantity 10.43 / cum x15cm or no	63.721 cum  Rs 739  earest size ost of mate  21.313  19.969	9828.21 in cemen
7	Laterate masonry with mortar 1:6 for super structure charges etc.  Long Wall  Short Wall  Short Wall	th neatly dreatructure above	essed latera ve plinth leve GR 11.100 10.400 3.200	te stone of up to floor  OUND FLO  0.200  0.200  Door	Net To n @ Rs/116 size 40x20 two level in OR 3.200 3.200	tal Quantity 10.43 / cum x15cm or no	83.721 cum Rs 739 earest size ost of mate 21.313 19.969 2.049	9828.21 in cemen
7	Laterate masonry with mortar 1:6 for super structure charges etc.  Long Wall Short Wall D	th neatly dreatructure above 3 3 1	GR 11.100 10.400 3.200	te stone of up to floor  OUND FLO  0.200  0.200  Door  2.100	Net To n @ Rs 116  size 40x20 two level in OR  3.200 3.200 0.200	tal Quantity 10.43 / cum x15cm or no	Rs 739 earest size ost of mate  21.313 19.969 2.049	9828.21 in cemen
7	Laterate masonry with mortar 1:6 for super structure charges etc.  Long Wall Short Wall D D1	th neatly drawtructure above 3 3 1 1 2	GR 11.100 10.400 3.200 1.200 1.000	63.721 cun te stone of lup to floor 0.200 0.200 0.200 Door 2.100 2.100	Net To n @ Rs 116  size 40x20 two level in OR  3.200 3.200 0.200 0.200	tal Quantity 10.43 / cum x15cm or no	earest size ost of mate 21.313 19.969 2.049 -0.504 -0.840	9828.21 in cemen
7	Laterate masonry with mortar 1:6 for super structure charges etc.  Long Wall Short Wall  D D1 D2	th neatly drawtructure above  3 3 1 1 2 1	GR 11.100 10.400 3.200 1.200 1.000 0.800	63.721 cun te stone of lup to floor 0.200 0.200 Door 2.100 2.100	Net To n @ Rs 116  size 40x20 two level in OR  3.200  3.200  0.200  0.200  0.200	tal Quantity 10.43 / cum x15cm or no	earest size ost of mate 21.313 19.969 2.049 -0.504 -0.840 -0.336	9828.21 in cemen
7	Laterate masonry with mortar 1:6 for super structure charges etc.  Long Wall Short Wall Short Wall D D1 D2 W3	th neatly drawtructure above  3 3 1 1 2 1 7	GR 11.100 10.400 3.200 1.200 1.000 0.800 1.500	63.721 cun te stone of lup to floor 0.200 0.200 Door 2.100 2.100 1.500	Net To n @ Rs 116  size 40x20 two level in OR  3.200  3.200  0.200  0.200  0.200  0.200	tal Quantity 10.43 / cum x15cm or no	earest size ost of mate 21.313 19.969 2.049 -0.504 -0.840 -0.336 -3.150	9828.21 in cement

	Opening	1	1.500	0.200	3.200		-0.960	
			F	IRST FLOO	R	T	Γ	
	Long Wall	2	11.100	0.200	3.200		14.209	
	Short Wall	4	10.400	0.200	3.200		26.625	
	Short Wall	1	7.000	0.200	3.200		4.480	
	Parappet	1	45.400	0.200	0.600		5.448	
			_	Door		T		
	D1	2	1.000	2.100	0.200		-0.840	
	D2	1	0.800	2.100	0.200		-0.336	
	W3	8	1.500	1.500	0.200		-3.600	
	V	1	0.600	0.500	0.200		-0.060	
	Column	16	0.400	0.200	3.200		-4.096	
	Opening	1	1.500	0.200	3.200		-0.960	
		1 R	L KNI		То	tal Quantity	94.093 cur	n
		USI.		MAD I	otal Deduct	ed Quantity	-28.238 cur	n
		400			Net To	tal Quantity	65.855 cum	1
	9	400	Sa	ıy 65.855 cu		tal Quantity 68.75 / cum		
8	5.22.6 Steel reinforcement fo binding all complete u	r R.C.C wo	ala Wat ork including	er Auth	m @ Rs 79 Ority ing, cutting	68.75 / cum , bending, ¡	Rs 524	<b>782.03</b> osition a
8	Steel reinforcement fo	r R.C.C wo	ala Wat ork including	er Auth	m @ Rs 79 Ority ing, cutting	68.75 / cum , bending, ¡	Rs 524	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete u	r R.C.C wo	ala Wat ork including evelThermo	er Auth g straighten - Mechanic	ority ing, cutting cally Treate	68.75 / cum , bending, μ d bars of g	Rs 524 placing in p rade Fe-500	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete under the state of the steel reinforcement for binding all complete under the steel reinforcement for steel reinforcement for binding all complete under the steel reinforcement for bindi	r R.C.C we pto plinth I	ala Wat ork including evelThermo 1.400	er Auth g straighten - Mechanic 1.400	m @ Rs 79 Ority ing, cutting cally Treate 0.250	, bending, pd bars of g	Rs 524 clacing in p rade Fe-500 705.600	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete up FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO	r R.C.C wo pto plinth I 16	ala Wat ork including evelThermo 1.400 0.167	er Authorstraighten - Mechanic 1.400	ority ing, cutting cally Treate 0.250 0.350	, bending, pd bars of g	Rs 524  clacing in p rade Fe-500  705.600  329.939	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete under the second of the second for t	pto plinth I  16  16	ala Wat ork including evelThermo 1.400 0.167 0.400	er Auth straighten - Mechanio 1.400 3.920 0.200	ority ing, cutting cally Treate 0.250 0.350 0.800	90.0	Rs 524  clacing in p rade Fe-500  705.600  329.939  92.161	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete upon the second of the seco	r R.C.C we pto plinth I  16  16  16	ala Waterk including evelThermo 1.400 0.167 0.400 11.100	er Authorstraighten - Mechanic 1.400 3.920 0.200 0.200	ority ing, cutting cally Treate 0.250 0.350 0.800 0.450	90.0 90.0 90.0	Rs 524  colacing in parade Fe-500  705.600  329.939  92.161  269.730	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete upon the second of the seco	16 16 16 3	ala Water including evelThermo 1.400 0.167 0.400 11.100 10.400	er Authorstraighten - Mechanic 1.400 3.920 0.200 0.200 0.200	0.250 0.350 0.450	90.0 90.0 90.0 90.0	Rs 524  clacing in p rade Fe-500  705.600  329.939  92.161  269.730  336.961	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete upon the second of the seco	r R.C.C we pto plinth I  16  16  16  3  4  1	ala Water including evelThermo 1.400 0.167 0.400 11.100 10.400 3.200 11.300	er Authorstraighten - Mechanic 1.400 3.920 0.200 0.200 0.200 0.200 0.200	0.250 0.350 0.450 0.450 0.100	90.0 90.0 90.0 90.0 90.0	Rs 524  colacing in prade Fe-500  705.600  329.939  92.161  269.730  336.961  25.921	<b>782.03</b> osition a
8	Steel reinforcement for binding all complete upon the second of the seco	r R.C.C we pto plinth I  16  16  16  3  4  1	ala Water including evelThermo 1.400 0.167 0.400 11.100 10.400 3.200 11.300	er Authorstraighten - Mechanic 1.400 3.920 0.200 0.200 0.200 10.600	0.250 0.350 0.450 0.450 0.100	90.0 90.0 90.0 90.0 90.0	Rs 524  colacing in prade Fe-500  705.600  329.939  92.161  269.730  336.961  25.921	<b>782.03</b> osition a

SUN SHADE W3						1			
SUN SHADE V	SUN SHA	DE W3	7	1.900	0.600	0.080	85.0	54.264	
LINTELS 3 11.100 0.200 0.150 85.0 84.915  LINTELS 3 10.400 0.200 0.150 85.0 79.560  LINTELS 1 3.200 0.200 0.150 85.0 8.161  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 2 4.000 0.200 0.450 90.0 64.801  BEAMS 2 3.200 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 178.201  BEAMS 4 4.200 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 124.876  STEPS 22'0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB 1 11300 1.0600 0.0125 90.0 1347.525   COLUMN UP TO ROOF SLAB 1 1.700 0.200 0.150 85.0 1347.525  COLUMN UP TO ROOF SLAB 1 1.700 0.200 0.150 85.0 106.080  LINTELS 2 11.100 0.200 0.150 85.0 56.611  LINTELS 1 1.700 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.450 90.0 150.661  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 6 3.100 0.200 0.450 90.0 64.801  BEAMS 2 4.000 0.200 0.450 90.0 68.040  BEAMS 6 3.100 0.200 0.450 90.0 68.040  BEAMS 2 4.000 0.200 0.450 90.0 68.040  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 55.081	SUN SHA	DE RS	1	3.400	1.200	0.080	85.0	27.745	
LINTELS 3 10.400 0.200 0.150 85.0 79.560  LINTELS 1 3.200 0.200 0.150 85.0 8.161  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 2 4.000 0.200 0.450 90.0 64.801  BEAMS 2 3.200 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 68.040  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 124.876  STEPS 22'0.5 1.500 0.300 0.150 90.0 1347.525  FIRST FLOOR  COLUMN UP TO ROOF SLAB 1 11.000 0.200 0.150 85.0 166.080  LINTELS 2 11.100 0.200 0.150 85.0 106.080  LINTELS 4 10.400 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 4.335  SUN SHADE 8 2.000 0.600 0.080 85.0 4.395  SUN SHADE 1 1.000 0.200 0.450 90.0 150.661  BEAMS 2 4.200 0.200 0.450 90.0 150.661  BEAMS 2 4.200 0.200 0.450 90.0 150.661  BEAMS 2 4.200 0.200 0.450 90.0 150.0 150.0 150.61  BEAMS 2 4.200 0.200 0.450 90.0 150.0 150.0 150.61  BEAMS 2 4.200 0.200 0.450 90.0 150.61  BEAMS 2 4.200 0.200 0.450 90.0 150	SUN SHA	DE V	1	1.000	0.600	0.080	85.0	4.080	
LINTELS 1 3.200 0.200 0.150 85.0 8.161  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 2 4.000 0.200 0.450 90.0 64.801  BEAMS 2 3.200 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 66.040  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 178.201  BEAMS 4 4.200 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 50.625  STEPS 22*0.5 1.500 0.300 0.150 90.0 1347.525  FIRST FLOOR  COLUMN UP TO ROOF SLAB 1 1.100 0.200 0.450 85.0 166.080  LINTELS 2 11.100 0.200 0.150 85.0 56.611  LINTELS 4 10.400 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 4.335  SUN SHADE 8 2.000 0.600 0.080 85.0 65.280  SUN SHADE 1 1.000 0.200 0.450 90.0 150.661  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 2 4.000 0.200 0.450 90.0 150.661  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 178.201	LINTELS		3	11.100	0.200	0.150	85.0	84.915	
BEAMS         6         3.100         0.200         0.450         90.0         150.661           BEAMS         2         4.000         0.200         0.450         90.0         64.801           BEAMS         2         3.200         0.200         0.450         90.0         51.841           BEAMS         2         4.200         0.200         0.450         90.0         68.040           BEAMS         4         5.500         0.200         0.450         90.0         178.201           BEAMS         4         1.700         0.200         0.450         90.0         178.201           BEAMS         4         1.700         0.200         0.450         90.0         150.081           BEAMS         4         4.200         0.200         0.450         90.0         136.080           STAIR CASE WAIST SLAB         2         3.700         1.500         0.125         90.0         124.876           LANDING         1         3.000         1.500         0.125         90.0         124.876           STEPS         22*0.5         1.500         0.300         0.150         90.0         1347.525           FIRST FLOOR	LINTELS		3	10.400	0.200	0.150	85.0	79.560	
BEAMS 2 4.000 0.200 0.450 90.0 64.801  BEAMS 2 3.200 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 68.040  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 55.081  BEAMS 4 4.200 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 50.625  STEPS 22*0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB 1 11300 1.0600 0.125 90.0 1347.525  FIRST FLOOR  COLUMN UP TO ROOF SLAB 1 1.700 0.200 0.450 95.0 395.200  LINTELS 2 11.100 0.200 0.150 85.0 106.080  LINTELS 4 10.400 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 4.335  SUN SHADE 8 2.000 0.600 0.080 85.0 65.280  SUN SHADE 1 1.000 0.200 0.450 90.0 150.661  BEAMS 6 3.100 0.200 0.450 90.0 64.801  BEAMS 2 4.000 0.200 0.450 90.0 68.040  BEAMS 2 4.000 0.200 0.450 90.0 68.040  BEAMS 2 4.200 0.200 0.450 90.0 51.841  BEAMS 4 5.500 0.200 0.450 90.0 178.201	LINTELS		1	3.200	0.200	0.150	85.0	8.161	
BEAMS 2 3.200 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 68.040  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 178.201  BEAMS 4 1.700 0.200 0.450 90.0 55.081  BEAMS 4 4.200 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 50.625  STEPS 22*0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB 1 1.11.300 1.0600 0.125 90.0 1347.525  FIRST FLOOR  COLUMN UP TO 16 3.250 0.200 0.400 95.0 395.200  LINTELS 2 11.100 0.200 0.150 85.0 56.611  LINTELS 4 10.400 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 4.335  SUN SHADE 8 2.000 0.600 0.080 85.0 4.335  SUN SHADE 1 1.000 0.600 0.080 85.0 4.080  BEAMS 6 3.100 0.200 0.450 90.0 150.661  BEAMS 2 4.000 0.200 0.450 90.0 68.040  BEAMS 2 3.200 0.200 0.450 90.0 68.040  BEAMS 2 4.200 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 178.201	BEAMS		6	3.100	0.200	0.450	90.0	150.661	
BEAMS         2         4.200         0.200         0.450         90.0         68.040           BEAMS         4         5.500         0.200         0.450         90.0         178.201           BEAMS         4         1.700         0.200         0.450         90.0         55.081           BEAMS         4         4.200         0.200         0.450         90.0         136.080           STAIR CASE WAIST SLAB         2         3.700         1.500         0.125         90.0         124.876           LANDING         1         3.000         1.500         0.125         90.0         50.625           STEPS         22°0.5         1.500         0.300         0.150         90.0         66.825           ROOF SLAB         1         1.300         10.600         0.125         90.0         1347.525           FIRST FLOOR           COLUMN UP TO ROOF SLAB         16         3.250         0.200         0.400         95.0         395.200           LINTELS         2         11.100         0.200         0.150         85.0         56.611           LINTELS         4         10.400         0.200         0.150         85.0	BEAMS		2	4.000	0.200	0.450	90.0	64.801	
BEAMS         4         5.500         0.200         0.450         90.0         178.201           BEAMS         4         1.700         0.200         0.450         90.0         55.081           BEAMS         4         4.200         0.200         0.450         90.0         136.080           STAIR CASE WAIST SLAB         2         3.700         1.500         0.125         90.0         124.876           LANDING         1         3.000         1.500         0.125         90.0         50.625           STEPS         22*0.5         1.500         0.300         0.150         90.0         66.825           ROOF SLAB         1         11300         10.600         0.0125         90.0         1347.525           FIRST FLOOR           COLUMN UP TO ROOF SLAB         16         3.250         0.200         0.400         95.0         395.200           LINTELS         2         11.100         0.200         0.150         85.0         56.611           LINTELS         1         1.700         0.200         0.150         85.0         4.335           SUN SHADE         8         2.000         0.600         0.080         85.0 <td>BEAMS</td> <td></td> <td>2</td> <td>3.200</td> <td>0.200</td> <td>0.450</td> <td>90.0</td> <td>51.841</td> <td></td>	BEAMS		2	3.200	0.200	0.450	90.0	51.841	
BEAMS         4         1,700         0.200         0.450         90.0         55.081           BEAMS         4         4,200         0.200         0.450         90.0         136.080           STAIR CASE WAIST SLAB         2         3,700         1.500         0.125         90.0         124.876           LANDING         1         3,000         1.500         0.125         90.0         50.625           STEPS         22°0.5         1,500         0,300         0.150         90.0         66.825           ROOF SLAB         1         1,1300         10,600         0,125         90.0         1347.525           FIRST FLOOR           COLUMN UP TO ROOF SLAB         16         3,250         0,200         0,400         95.0         395.200           LINTELS         2         11,100         0,200         0,150         85.0         56.611           LINTELS         4         10,400         0,200         0,150         85.0         106.080           LINTELS         1         1,700         0,200         0,150         85.0         106.080           LINTELS         1         1,700         0,200         0,150         85.0	BEAMS		2	4.200	0.200	0.450	90.0	68.040	
BEAMS 4 4.200 0.200 0.450 90.0 136.080  STAIR CASE WAIST 2 3.700 1.500 0.125 90.0 124.876  LANDING 1 3.000 1.500 0.125 90.0 50.625  STEPS 22*0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB 1 11.300 10.600 0.125 90.0 1347.525  FIRST FLOOR  COLUMN UP TO 16 3.250 0.200 0.400 95.0 395.200  LINTELS 2 11.100 0.200 0.150 85.0 56.611  LINTELS 4 10.400 0.200 0.150 85.0 106.080  LINTELS 1 1.700 0.200 0.150 85.0 4.335  SUN SHADE 8 2.000 0.600 0.080 85.0 4.335  SUN SHADE 1 1.000 0.600 0.080 85.0 4.080  BEAMS 6 3.100 0.200 0.450 90.0 51.841  BEAMS 2 4.000 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 68.040  BEAMS 4 5.500 0.200 0.450 90.0 178.201  BEAMS 4 5.500 0.200 0.450 90.0 55.081	BEAMS		4	5.500	0.200	0.450	90.0	178.201	
STAIR CASE WAIST SLAB       2       3.700       1.500       0.125       90.0       124.876         LANDING       1       3.000       1.500       0.125       90.0       50.625         STEPS       22*0.5       1.500       0.300       0.150       90.0       66.825         ROOF SLAB       1       11.300       10.600       0.125       90.0       1347.525         FIRST FLOOR         COLUMN UP TO ROOF SLAB       16       3.250       0.200       0.400       95.0       395.200         LINTELS       2       11.100       0.200       0.150       85.0       56.611         LINTELS       4       10.400       0.200       0.150       85.0       106.080         LINTELS       1       1.700       0.200       0.150       85.0       4.335         SUN SHADE       8       2.000       0.600       0.080       85.0       4.080         SUN SHADE       1       1.000       0.600       0.080       85.0       4.080         BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS	BEAMS		4	1.700	0.200	0.450	90.0	55.081	
SLAB  LANDING  1 3.000 1.500 0.125 90.0 124.876  LANDING  1 3.000 1.500 0.125 90.0 50.625  STEPS  22*0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB  1 11.300 10.600 0.125 90.0 1347.525  FIRST FLOOR  COLUMN UP TO 16 3.250 0.200 0.400 95.0 395.200  LINTELS  2 11.100 0.200 0.150 85.0 56.611  LINTELS  4 10.400 0.200 0.150 85.0 106.080  LINTELS  1 1.700 0.200 0.150 85.0 4.335  SUN SHADE  8 2.000 0.600 0.080 85.0 65.280  SUN SHADE  1 1.000 0.600 0.080 85.0 4.080  BEAMS  6 3.100 0.200 0.450 90.0 150.661  BEAMS  2 4.000 0.200 0.450 90.0 51.841  BEAMS  2 4.200 0.200 0.450 90.0 68.040  BEAMS  4 5.500 0.200 0.450 90.0 178.201  BEAMS  4 1.700 0.200 0.450 90.0 178.201  BEAMS  4 1.700 0.200 0.450 90.0 178.201	BEAMS		4	4.200	0.200	0.450	90.0	136.080	
STEPS 22*0.5 1.500 0.300 0.150 90.0 66.825  ROOF SLAB 1 11:300 10:600 0.125 90.0 1347.525  FIRST FLOOR  COLUMN UP TO 16 3.250 0.200 0.400 95.0 395.200  LINTELS 2 11:100 0.200 0.150 85.0 56:611  LINTELS 4 10:400 0.200 0.150 85.0 106:080  LINTELS 1 1.700 0.200 0.150 85.0 4:335  SUN SHADE 8 2.000 0.600 0.080 85.0 65:280  SUN SHADE 1 1.000 0.600 0.080 85.0 4:080  BEAMS 6 3.100 0.200 0.450 90.0 150:661  BEAMS 2 4.000 0.200 0.450 90.0 51.841  BEAMS 2 4.200 0.200 0.450 90.0 68:040  BEAMS 4 5.500 0.200 0.450 90.0 178:201  BEAMS 4 5.500 0.200 0.450 90.0 178:201  BEAMS 4 5.500 0.200 0.450 90.0 178:201		ASE WAIST	2	3.700	1.500	0.125	90.0	124.876	
ROOF SLAB	LANDING		1	3.000	1.500	0.125	90.0	50.625	
FIRST FLOOR  COLUMN UP TO ROOF SLAB  LINTELS  2 11.100 0.200 0.150 85.0 56.611  LINTELS  4 10.400 0.200 0.150 85.0 106.080  LINTELS  1 1.700 0.200 0.150 85.0 4.335  SUN SHADE  8 2.000 0.600 0.080 85.0 65.280  SUN SHADE  1 1.000 0.600 0.080 85.0 4.080  BEAMS  6 3.100 0.200 0.450 90.0 150.661  BEAMS  2 4.000 0.200 0.450 90.0 51.841  BEAMS  2 4.200 0.200 0.450 90.0 68.040  BEAMS  4 5.500 0.200 0.450 90.0 178.201  BEAMS  4 1.700 0.200 0.450 90.0 178.201  BEAMS  4 1.700 0.200 0.450 90.0 55.081	STEPS		22*0.5	1.500	0.300	0.150	90.0	66.825	
COLUMN UP TO ROOF SLAB         16         3.250         0.200         0.400         95.0         395.200           LINTELS         2         11.100         0.200         0.150         85.0         56.611           LINTELS         4         10.400         0.200         0.150         85.0         106.080           LINTELS         1         1.700         0.200         0.150         85.0         4.335           SUN SHADE         8         2.000         0.600         0.080         85.0         65.280           SUN SHADE         1         1.000         0.600         0.080         85.0         4.080           BEAMS         6         3.100         0.200         0.450         90.0         150.661           BEAMS         2         4.000         0.200         0.450         90.0         64.801           BEAMS         2         3.200         0.200         0.450         90.0         51.841           BEAMS         4         5.500         0.200         0.450         90.0         178.201           BEAMS         4         1.700         0.200         0.450         90.0         55.081	ROOF SL	AB	Kers	11.300	10.600	0.125	90.0	1347.525	
ROOF SLAB				<b>5</b>	IRST FLOO	R			
LINTELS       4       10.400       0.200       0.150       85.0       106.080         LINTELS       1       1.700       0.200       0.150       85.0       4.335         SUN SHADE       8       2.000       0.600       0.080       85.0       65.280         SUN SHADE       1       1.000       0.600       0.080       85.0       4.080         BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       55.081			16	3.250	0.200	0.400	95.0	395.200	
LINTELS       1       1.700       0.200       0.150       85.0       4.335         SUN SHADE       8       2.000       0.600       0.080       85.0       65.280         SUN SHADE       1       1.000       0.600       0.080       85.0       4.080         BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       55.081	LINTELS		2	11.100	0.200	0.150	85.0	56.611	
SUN SHADE       8       2.000       0.600       0.080       85.0       65.280         SUN SHADE       1       1.000       0.600       0.080       85.0       4.080         BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       178.201         BEAMS       4       1.700       0.200       0.450       90.0       55.081	LINTELS		4	10.400	0.200	0.150	85.0	106.080	
SUN SHADE       1       1.000       0.600       0.080       85.0       4.080         BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       178.201         BEAMS       4       1.700       0.200       0.450       90.0       55.081	LINTELS		1	1.700	0.200	0.150	85.0	4.335	
BEAMS       6       3.100       0.200       0.450       90.0       150.661         BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       178.201         BEAMS       4       1.700       0.200       0.450       90.0       55.081	SUN SHA	DE	8	2.000	0.600	0.080	85.0	65.280	
BEAMS       2       4.000       0.200       0.450       90.0       64.801         BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       178.201         BEAMS       4       1.700       0.200       0.450       90.0       55.081	SUN SHA	DE	1	1.000	0.600	0.080	85.0	4.080	
BEAMS       2       3.200       0.200       0.450       90.0       51.841         BEAMS       2       4.200       0.200       0.450       90.0       68.040         BEAMS       4       5.500       0.200       0.450       90.0       178.201         BEAMS       4       1.700       0.200       0.450       90.0       55.081	BEAMS		6	3.100	0.200	0.450	90.0	150.661	
BEAMS     2     4.200     0.200     0.450     90.0     68.040       BEAMS     4     5.500     0.200     0.450     90.0     178.201       BEAMS     4     1.700     0.200     0.450     90.0     55.081	BEAMS		2	4.000	0.200	0.450	90.0	64.801	
BEAMS     4     5.500     0.200     0.450     90.0     178.201       BEAMS     4     1.700     0.200     0.450     90.0     55.081	BEAMS		2	3.200	0.200	0.450	90.0	51.841	
BEAMS 4 1.700 0.200 0.450 90.0 55.081	BEAMS		2	4.200	0.200	0.450	90.0	68.040	
	BEAMS		4	5.500	0.200	0.450	90.0	178.201	
BEAMS 4 4.200 0.200 0.450 90.0 136.080	BEAMS		4	1.700	0.200	0.450	90.0	55.081	
	BEAMS		4	4.200	0.200	0.450	90.0	136.080	

	DOOF OLAD	4	44.000	44 000	0.405	00.0	4.400.400	
	ROOF SLAB	1	11.900	11.200	0.125	90.0	1499.400	
			GROUND&					
	COLUMN	16	0.600	0.200	0.400	95.0	-72.960	
	OPENING	1	1.500	0.200	0.150	85.0	-3.825	
					То	tal Quantity	8655.145 k	ilogram
				Т	otal Deduct	ed Quantity	-76.785 kilo	gram
					Net To	tal Quantity	8578.360 k	ilogram
			Say 8578.3	360 kilogram	@ Rs 98.9	2 / kilogram	Rs 848	571.37
9	14.12 Providing and fixing 1 including cutting chase the chase with matchin	, anchoring	clamp to re	inforcement	bar, includ	ing cleaning	յ, refilling, m	aking god
					То	tal Quantity	2.000 No	
		1/2	4870		otal Deduct	ed Quantity	0.000 No	
		1/51			Net To	tal Quantity	2.000 No	
		466		Say 2.00	0 No @ Rs	503.53 / No	Rs 10	07.06
10	5.9.5 Centering and shuttering girders bressumers and			DESTRUCTION OF THE PARTY			1	
10	Centering and shuttering			DESTRUCTION OF THE PARTY			1	
10	Centering and shuttering girders bressumers and FOR FIRST	d cantileve	rs	DESTRUCTION OF THE PARTY	oyal of form		, beams, pli	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING	d cantileve	1.400	DESTRUCTION OF THE PARTY	oval of form		, beams, pli 22.400	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO	d cantileve 16*4 16*4	1.400 1.600	DESTRUCTION OF THE PARTY	0.250 0.175		22.400 17.920	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM	16*4 16*4	1.400 1.600 0.800	DESTRUCTION OF THE PARTY	0.250 0.175 1.200		22.400 17.920 15.360	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS	16*4 16*4 16	1.400 1.600 0.800 11.100	DESTRUCTION OF THE PARTY	0.250 0.175 1.200		22.400 17.920 15.360 36.630	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	16*4 16*4 16 3 4	1.400 1.600 0.800 11.100 10.400 3.200	DESTRUCTION OF THE PARTY	0.250 0.175 1.200 1.100 1.100		22.400 17.920 15.360 36.630 45.761	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS	16*4 16*4 16 3 4	1.400 1.600 0.800 11.100 10.400 3.200	etc. and rem	0.250 0.175 1.200 1.100 1.100		22.400 17.920 15.360 36.630 45.761	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAM  PLINTH BEAMS  PLINTH BEAMS  PLINTH BEAMS  COLUMN ABOVE PLINTH UP TO ROOF	16*4 16*4 16 3 4	1.400 1.600 0.800 11.100 10.400 3.200 GR	etc. and rem	0.250 0.175 1.200 1.100 1.100 OR		22.400 17.920 15.360 36.630 45.761 3.521	
10	Centering and shuttering girders bressumers and FOR FIRST FOOTING  FOR SECOND FOOTING  COLUMN UP TO PLINTH BEAMS  PLINTH BEAMS  PLINTH BEAMS  PLINTH BEAMS  COLUMN ABOVE PLINTH UP TO ROOF SLAB	16*4 16*4 16 3 4 1	1.400 1.600 0.800 11.100 10.400 3.200 GR	etc. and rem	0.250 0.175 1.200 1.100 1.100 OR		22.400 17.920 15.360 36.630 45.761 3.521	

 SUN SHADE V	1	1.200		0.700		0.840	
LINTELS	3	11.100		0.500		16.650	
LINTELS	3	10.400		0.500		15.601	
LINTELS	1	3.200		0.500		1.600	
BEAMS	6	3.100		1.100		20.461	
BEAMS	2	4.000		1.100		8.800	
BEAMS	2	3.200		1.100		7.041	
BEAMS	2	4.200		1.100		9.241	
BEAMS	4	5.500		1.100		24.201	
BEAMS	4	1.700	65	1.100		7.480	
BEAMS	4	4.200		1.100		18.481	
		C P F	IRST FLOO	R	1		
COLUMN UP TO ROOF SLAB	16	3.250	50%	1.200		62.400	
LINTELS	2	11.100		0.500	F	11.100	
LINTELS	4	10.400		0.500		20.800	
LINTELS	1	1.700	10 22/	0.500		0.850	
SUN SHADE	8 era	2.200	er Auth	1.300		22.881	
SUN SHADE	1	1.200		1.300		1.560	
BEAMS	6	3.100		1.100	1	20.461	
BEAMS	2	4.000		1.100		8.800	
BEAMS	2	3.200		1.100		7.041	
BEAMS	2	4.200		1.100		9.241	
BEAMS	4	5.500		1.100		24.201	
BEAMS	4	1.700		1.100		7.480	
BEAMS	4	4.200		1.100		18.481	
	(	GROUND&a	mp;amp;FIF	RST FLOOF	2	ı	
COLUMN	16	0.600	0.200	0.400		-0.768	
OPENING	1	1.500	0.200	0.150		-0.045	
				То	tal Quantity	528.776 sq	m
			Т	otal Deduct	ed Quantity	-0.813 sqm	
				Net To	tal Quantity	527.963 sqr	n
		Sa	y 527.963 s	qm @ Rs 6	53.89 / sqm	Rs 345	229.73

11	5.9.3 Centering and shutter landings, balconies ar	-		, etc. and r	removal of	form for:Su	spended flo	oors, roo
			GR	OUND FLO	OR			
	STAIR CASE WAIST SLAB	2	3.700		1.500		11.101	
	LANDING	1	3.000		1.500		4.500	
	STEPS	22	1.600		0.150		5.280	
	ROOF SLAB	1	11.300		10.600		119.780	
			F	IRST FLOO	R			
	ROOF SLAB	1	11.900	600	11.200		133.280	
			JAM		To	otal Quantity	273.941 sc	mp
		-	62 N	W. F. J	Total Deduc	ted Quantity	0.000 sqm	
		610	K Z	S. 7	Net To	otal Quantity	273.941 sq	m
		B	Sa	ay 273.941 s	sqm @ Rs 8	20.89 / sqm	Rs 224	875.43
12	13.1.1 12 mm cement plaster of	of mix:1:4 (	1 cement : 4	fine sand)				
	·		15005600	OUND FLO	OR			
	Building Outside-Long Wall	Kera	ala <sub>1.300</sub> at	er Auth	013.900		88.140	
	Short Wall	2	10.600		3.900	1	82.680	
	Building Inside long wall	4	10.900		3.300		143.880	
	Short wall	4	10.000		3.300		132.000	
	Toilet out side	2	1.600		3.300		10.560	
	Toilet inside	2	1.500		3.300		9.900	
	Sun shade	7	2.100		0.700		10.290	
	Sun shade	2	2.200		1.300		5.721	
	Sun shade	1	1.200		0.700		0.840	
	Step top	1	1.500		1.500		2.250	
	Step side	2	0.900		0.300		0.540	
	Ramp	2*0.5	0.300		1.500		0.450	
	Rolling shutter	1	2.000		2.100		-4.200	
	Door D2	3	1.000		2.100		-6.300	
	Window W1	7	1.500		1.500		-15.750	

	Ventilators V1	1	0.450		0.600	-0.270
	Opening	2	1.500		3.300	-9.899
				First Floor		
	Building Outside-Long Wall	2	11.300		3.300	74.580
	Short Wall	2	10.600		3.300	69.960
	Building Inside long wall	2	10.700		3.300	70.620
	Short wall	4	10.000		3.300	132.000
	Short wall	1	5.700		3.300	18.810
	Short Wall	1	7.000	12.	3.300	23.100
	Toilet inside	2	1.500		3.300	9.900
	Parappet	1	45.400	8	1.400	63.560
		1	11/1/	51/1	1 4 1	0.000
	Door D2	2	1.000		2.100	-4.200
	Door D2	1	0.800		2.100	-1.680
	Window W1	8	1.500		1.500	-18.000
	Ventilators V1	1	0.450	4 1	0,600	-0.270
		Ker	ala wat	er Autr	Tot	al Quantity 949.781 sqm
				7	otal Deducte	ed Quantity -60.569 sqm
					Net Tot	al Quantity 889.212 sqm
			Sa	y 889.212 s	qm @ Rs 31	6.06 / sqm Rs 281044.34
13	13.16.1 6 mm cement plaster of	mix:1:3 ( 1	cement : 3 f	fine sand)		
			C	Ground Floo	r	
	Roof slab-Bottom	1	10.700		10.000	107.000
	Beam Bottom	1	82.800		0.850	70.380
	Sunshead Door	2	2.000		1.200	4.800
	Sunshead W3	7	1.900		0.600	7.980
	Sunshead V	1	0.900		0.600	0.540
	Sunshead edge	1	30.200		0.100	3.020
	Stair Waist Slab bottom	2	3.700		1.700	12.580
	Landing	1	3.000		1.500	4.500

			_	First Floor				
	Roof slab-Bottom	1	10.700		10.000		107.000	
	Beam Bottom	1	82.800		0.850		70.380	
	Sunshead W3	8	1.900		0.600		9.120	
	Sunshead V	1	0.900		0.600		0.540	
	Sunshead edge	1	30.200		0.100		3.020	
	Roof Slab Out Side	1	33.700		0.300		10.111	
					То	tal Quantity	410.971 s	qm
				Т	otal Deduct	ed Quantity	0.000 sqm	
			-0	(2)	Net To	tal Quantity	410.971 sc	m
			Sa	ıy 410.971 s	sqm @ Rs 20	69.26 / sqm	Rs 110	658.05
14	13.7.1 12 mm cement plaster f	inished wit	h a floating c	coat of neat	cement of m	nix:1:3 ( 1 ce	ement : 3 fin	e sand)
	Roof top	1	11.900	11.200	131		133.280	
		165			То	tal Quantity	133.280 s	qm
				2007 T	otal Deduct	ed Quantity	0.000 sam	
		333.00			otal Deddot	ou Quartity	0.000 34111	
			The same	me PE/	D/S	tal Quantity		m
		Ker	ala Waa	TO PEN	D/S	tal Quantity	133.280 sc	m 809.13
15	11.41.2 Providing and laying vitwith water absorption leshades, laid on 20 mm with white cement and	trified floor ess than 0.0 thick cem	tiles in diffe 08% and conent mortar 1:	y 133,280 s rent sizes (t forming to I	Net To sqm @ Rs 46 thickness to S: 15622, o a: 4 coarse	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the ma make, in all ding groutin	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm	trified floor ess than 0.0 thick cem	tiles in diffe 08% and con ent mortar 1: pigments etc	y 133,280 s rent sizes (t forming to I	Net To sqm @ Rs 40 thickness to S: 15622, o a: 4 coarse Size of Tile	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the ma make, in all ding groutin	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm	trified floor ess than 0.0 thick cem	tiles in diffe 08% and con ent mortar 1: pigments etc	rent sizes (forming to It 4(1 cement complete.	Net To sqm @ Rs 40 thickness to S: 15622, o a: 4 coarse Size of Tile	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the ma make, in all ding groutin	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and	trified floor ss than 0.0 thick cem matching p	tiles in diffe 08% and con ent mortar 1: pigments etc	rent sizes (1) forming to I: 4(1 cement, complete	Net To sqm @ Rs 40 thickness to S: 15622, o a: 4 coarse Size of Tile	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the ma make, in all ding groutin mm.	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room	trified floor ess than 0.0 thick cem matching p	tiles in diffe 08% and con ent mortar 1: pigments etc 7.000	rent sizes (1) forming to I: 4(1 cement, complete	Net To sqm @ Rs 40 thickness to S: 15622, o a: 4 coarse Size of Tile	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	d by the manake, in all ding grouting mm.	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room  Vistors room	trified floor ess than 0.0 thick cem matching parts	tiles in diffe 08% and con ent mortar 1: pigments etc 7.000 4.000	rent sizes (1) forming to I: 4(1 cement, complete	Net To	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	d by the mamake, in all ding groutinmm.  49.000 16.000	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room  Vistors room  Skirting-office room	trified floor ss than 0.0 thick cem- matching parts of 1 1	7.000 4.000 26.500	rent sizes (1) forming to I: 4(1 cement, complete	Net To	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the manake, in all ding grouting mm. 49.000 16.000 2.651	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room Vistors room Skirting-office room Skirting-Vistors room	trified floor ss than 0.0 thick cemmatching parts of the commatching parts of the command parts of the commatching parts of the commatching parts of the commatching parts of the command parts of th	7.000 4.000 14.200	rent sizes (1) forming to II 4(1 cement ., complete Ground Floo 7.000 4.000	Net To	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the manake, in all ding grouting mm. 49.000 16.000 2.651 1.420	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room  Vistors room  Skirting-office room  Skirting-Vistors room  Chemical Room  Skirting-Chemical	trified floor ss than 0.0 thick cem- matching parts of the 1 1 1	7.000 4.000 26.500 6.000	rent sizes (1) forming to II 4(1 cement ., complete Ground Floo 7.000 4.000	Net To	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the manake, in all ding grouting mm. 49.000 16.000 2.651 1.420 24.000	809.13 anufactur
15	Providing and laying vit with water absorption le shades, laid on 20 mm with white cement and  Office room  Vistors room  Skirting-office room  Skirting-Vistors room  Chemical Room  Skirting-Chemical room	trified floor ss than 0.0 thick cem- matching parts of the com- matching parts of the com- parts of the com- matching parts of the com- matching parts of th	7.000 4.000 26.500 14.200 20.000	rent sizes (1) forming to II: 4(1 cement, complete: Ground Floor 7.000 4.000	Net To	tal Quantity 03.73 / sqm be specifie f approved r sand), inclu	133.280 so Rs 53 d by the marke, in all ding grouting mm. 49.000 16.000 2.651 1.420 24.000	809.13 anufactur

	Controll Room	1	7.000	5.000			35.000	
	Laboratary Room	1	10.200	4.000			40.800	
	Passage	1	7.000	1.500			10.500	
					Tota	al Quantity	221.722 sc	ım
				Т	otal Deducte	d Quantity	0.000 sqm	
					Net Tota	al Quantity	221.722 sq	m
			Say	221.722 sq	m @ Rs 177	7.34 / sqm	Rs 394	075.38
16	11.37 Providing and laying C manufacturer), of 1st question Grey, Fume Red Brown pointing the joints with	uality confo n, laid on 2	rming to IS : 0 mm thick o	15622, of a cement mor	pproved mak tar 1:4 (1 Ce	ke, in colou ement : 4 C	rs such as V	Vhite, Ivor
	For floor-Toilet	1	1.500	1.500			2.250	
	For Floor Toilet	1	3.000	1.500	9 13		4.500	
		1 1		763/A	Tota	al Quantity	6.750 sqm	
		155			otal Deducte	d Quantity	0.000 sqm	
		435			Net Tota	al Quantity	6.750 sqm	
			S	ay 6.750 sq	m @ Rs 109	7.86 / sqm	Rs 74	10.55
17	11.38 Providing and laying C manufacturer), of 1st qu White, Ivory, Grey, Fu Coarse sand), includin Wall Tile Wall Tile	eramic gla uality confo me Red B	rming to IS : rown, laid o	es of size 3 15622, of a n 20 mm th	00x300 mm approved ma ick bed of c	ike, in all c ement mo	olours, shad rtar 1:4 ( 1	des, excep cement :
	Door D2	2	0.800		2.100			
	D001 D2		0.000				2 260	
						al Ouantity	-3.360	•
				т	Tota	al Quantity	31.502 sqr	
				T	Total Deducte	d Quantity	31.502 sqr -3.360 sqm	
					Total Deducte Net Tota	d Quantity	31.502 sqr -3.360 sqm 28.142 sqm	l
18			Sa		Total Deducte	d Quantity	31.502 sqr -3.360 sqm	l

	top cover				
	RS	1	2.000	2.100	4.200
				Total C	Quantity 4.200 sqm
				Total Deducted C	Quantity 0.000 sqm
				Net Total C	Quantity 4.200 sqm
			Say 4	4.200 sqm @ Rs 3487.2	0 / sqm <b>Rs 14646.24</b>
19	10.7 Providing and fixing b	pall bearing fo	r rolling shutters	s	
	RS	1			1.000
			2.00	Total C	Quantity 1.000 Nos
			/Geta	Total Deducted C	Quantity 0.000 Nos
			// J Will	Net Total C	Quantity 1.000 Nos
			Say	y 1.000 Nos @ Rs 497.3	2 / Nos <b>Rs 497.32</b>
			GROU	ND FLOOR	
	Building Outside-Lor	ng 2 Ker	GROU 11.300	ND FLOOR 3.900 Authority	88.140
	<u> </u>	ng 2 Ker	- Value 11	2527	88.140 82.680
	Wall	Ker 2	11.300 ala Water	Authority 3.900	
	Wall Short Wall Building Inside Ior	Kera D <sup>2</sup>	11,300 1a Water 10.600	3.900 Authority 3.900	82.680
	Wall Short Wall Building Inside Ior wall	Kera 2 19 4	11.300 10.600 10.900	3.900 Authority 3.900 3.300	82.680 143.880
	Wall Short Wall Building Inside Ior wall Short wall	2 2 1 4 4	11.300 10.600 10.900 10.000	3.900 3.900 3.300 3.300	82.680 143.880 132.000
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side	2 2 4 4 2	11.300 10.600 10.900 10.000 1.600	3.900 3.900 3.300 3.300 3.300	82.680 143.880 132.000 10.560
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside	2 2 4 4 2 2 2	11,300 10.600 10.900 10.000 1.600 1.500	3.900 3.900 3.300 3.300 3.300 1.200	82.680 143.880 132.000 10.560 3.600
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade	2 2 4 2 2 7	11,300 10.600 10.900 10.000 1.600 1.500 2.100	3.900 3.900 3.300 3.300 3.300 1.200 0.700	82.680 143.880 132.000 10.560 3.600 10.290
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade Sun shade	2 2 4 2 7 2	11.300 10.600 10.900 10.000 1.600 1.500 2.100 2.200	3.900 3.900 3.300 3.300 3.300 1.200 0.700 1.300	82.680 143.880 132.000 10.560 3.600 10.290 5.721
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade Sun shade Sun shade	2 2 4 2 7 2 1	11.300 10.600 10.900 10.000 1.600 1.500 2.100 2.200 1.200	3.900 3.900 3.300 3.300 3.300 1.200 0.700 1.300 0.700	82.680 143.880 132.000 10.560 3.600 10.290 5.721 0.840
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade Sun shade Sun shade Step top	2 2 4 2 7 2 1 1 1	11.300 10.600 10.900 10.000 1.600 1.500 2.100 2.200 1.200 1.500	3.900 3.900 3.300 3.300 3.300 1.200 0.700 1.300 0.700 1.500	82.680 143.880 132.000 10.560 3.600 10.290 5.721 0.840 2.250
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade Sun shade Sun shade Step top Step side	2 2 4 2 2 7 2 1 1 1 2 2	11.300 10.600 10.900 10.000 1.600 1.500 2.100 2.200 1.200 1.500 0.900	3.900 3.900 3.300 3.300 3.300 1.200 0.700 1.300 0.700 1.500 0.300	82.680 143.880 132.000 10.560 3.600 10.290 5.721 0.840 2.250 0.540
	Wall Short Wall Building Inside Ior wall Short wall Toilet out side Toilet inside Sun shade Sun shade Sun shade Step top Step side Ramp	2 4 4 2 7 2 1 1 1 2 2*0.5	11.300 10.600 10.900 10.000 1.600 1.500 2.100 2.200 1.200 1.500 0.900 0.300	3.900 3.900 3.300 3.300 3.300 1.200 0.700 1.300 0.700 1.500 0.300 1.500	82.680 143.880 132.000 10.560 3.600 10.290 5.721 0.840 2.250 0.540 0.450

	Ventilators V1	1	0.450		0.600		-0.270	
	Opening	2	1.500		3.300		-9.899	
				First Floo	r			
	Building Outside-Long Wall	2	11.300		3.300		74.580	
	Short Wall	2	10.600		3.300		69.960	
	Building Inside long wall	2	10.700		3.300		70.620	
	Short wall	4	10.000		3.300		132.000	
	Short wall	1	5.700		3.300		18.810	
	Short Wall	1	7.000	B	3.300		23.100	
	Toilet inside	2	1.500		1.200		3.600	
	Door D2	2	1.000	6.3	2.100		-4.200	
	Door D2	1	0.800	53/	2.100		-1.680	
	Window W1	8	1.500		1.500		-18.000	
	Ventilators V1	1	0.450	353)	0.600	lan.	-0.270	
					Tota	al Quantity	873.621 sc	ım
		**	1 777	4 350	Total Deducte	d Quantity	-60.569 sqr	n
		Ker	ala Wat	er Aut	hority	al Occanditur		
					Net rota	ai Quantity	813.052 sq	m
				ay 813.05	2 sqm @ Rs 7	1	-	
21	13.60.1 Wall painting with acryli				2 sqm @ Rs 7	1.09 / sqm	Rs 577	799.87
21	Wall painting with acryli		n paint of app		2 sqm @ Rs 7	1.09 / sqm	Rs 577	799.87
21	Wall painting with acryli		n paint of app	proved bra	2 sqm @ Rs 7	1.09 / sqm	Rs 577	799.87
21	Wall painting with acryli or more coats on new was Building Outside-Long	ork	n paint of app	proved bra	2 sqm @ Rs 7 and and manufa	1.09 / sqm	Rs 577	799.87
21	Wall painting with acryli or more coats on new was Building Outside-Long Wall	vork 2	GR	proved bra	2 sqm @ Rs 7 and and manufa OOR 3.900	1.09 / sqm	<b>Rs 57</b> 7 ive an even 88.140	799.87
21	Wall painting with acryli or more coats on new w  Building Outside-Long Wall  Short Wall  Building Inside long	vork 2 2	GR 11.300 10.600	proved bra	2 sqm @ Rs 7 and and manufa OOR 3.900 3.900	1.09 / sqm	Rs 577 ive an even 88.140 82.680	799.87
21	Wall painting with acryli or more coats on new was Building Outside-Long Wall Short Wall Building Inside long wall	2 2 4	GR 11.300 10.600 10.900	proved bra	2 sqm @ Rs 7 and and manufa  OOR  3.900  3.900  3.300	1.09 / sqm	Rs 577 ive an even  88.140  82.680  143.880	799.87
21	Wall painting with acryli or more coats on new was Building Outside-Long Wall Short Wall Building Inside long wall Short wall	2 2 4 4	GR 11.300 10.600 10.900 10.000	proved bra	2 sqm @ Rs 7 and and manufa  OOR  3.900  3.300  3.300	1.09 / sqm	88.140 82.680 143.880	799.87
21	Wall painting with acryli or more coats on new was a suit of the s	2 2 4 4 2 2	GR 11.300 10.600 10.900 10.000 1.600	proved bra	2 sqm @ Rs 7 and and manufa  OOR  3.900  3.300  3.300  3.300	1.09 / sqm	88.140 82.680 143.880 132.000 10.560	799.87
21	Wall painting with acryli or more coats on new was a suilding Outside-Long Wall  Short Wall  Building Inside long wall  Short wall  Toilet out side  Toilet inside	2 2 4 4 2 2 2	GR 11.300 10.600 10.000 1.600 1.500	proved bra	2 sqm @ Rs 7  and and manufa  OOR  3.900  3.300  3.300  3.300  1.200	1.09 / sqm	88.140 82.680 143.880 132.000 10.560 3.600	799.87

			1	ı	1	1	1	
	Step top	1	1.500		1.500		2.250	
	Step side	2	0.900		0.300		0.540	
	Ramp	2*0.5	0.300		1.500		0.450	
	Rolling shutter	1	2.000		2.100		-4.200	
	Door D2	3	1.000		2.100		-6.300	
	Window W1	7	1.500		1.500		-15.750	
	Ventilators V1	1	0.450		0.600		-0.270	
	Opening	2	1.500		3.300		-9.899	
	Toilet Inside	1	6.000		2.100		-12.600	
				First Floor				
	Building Outside-Long	_	//60	146	0.000		7.1-0-	
	Wall	2	11.300		3.300		74.580	
	Short Wall	2	10.600	B 20	3.300		69.960	
	Building Inside long wall	2	10.700		3.300	4	70.620	
	Short wall	4	10.000	35.7	3.300	and the same	132.000	
	Short wall	1	5.700		3.300		18.810	
	Short Wall	1	7.000	4 3 4	3.300		23.100	
	Toilet inside	Ker 2	ara wat 1.500	er Auth	1.200		3.600	
	Door D2	2	1.000		2.100		-4.200	
	Door D2	1	0.800		2.100		-1.680	
	Window W1	8	1.500		1.500		-18.000	
	Ventilators V1	1	0.450		0.600		-0.270	
	Toilet	1	9.000		2.100		-18.900	
					To	otal Quantity	873.621 sc	m
				Т	otal Deduc	ted Quantity	-92.069 sqr	n
					Net To	otal Quantity	781.552 sq	m
			Sa	ay 781.552 s	qm @ Rs 1	52.34 / sqm	Rs 119	061.63
22	13.61.1 Painting with synthetic more coats on new wor		int of approv	ved brand a	nd manufac	cture to give	an even sh	ade:Two
	Door	6	1.000	2.100			12.601	
	Window	15	1.500	1.500			33.750	
	Window Grill	15	1.500	1.500			33.750	

	Rolling Shutter	2	2.000	2.100			8.400	
	CG	2	1.500	2.100			6.301	
					То	tal Quantity	94.802 sqr	n
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	94.802 sqm	1
			S	ay 94.802 s	qm @ Rs 1	43.94 / sqm	Rs 13	645.80
23	10.3 Providing and fixing in with flat iron diagonals steel pulleys, complet priming coat of appro	s 20x5 mm s e with bolts	size, with to , nuts,lockir	p and botto	m rail of T-	iron 40x40x	6 mm, with	40 mm dia
	CG	1	1.500	2.100			3.151	
			C./ ]		То	tal Quantity	3.151 sqm	
		1	30 3	K XI	otal Deduct	ed Quantity	0.000 sqm	
		6 10	NO.	N/EN	Net To	tal Quantity	3.151 sqm	
			Sa	y 3.151 sqm	n @ Rs 102	69.91 / sqm	Rs 32	360.49
	733 and IS: 1285, fixing gaps at junctions, i.e Aluminium sections s required including cleascrews, all complete a	. at top, bo hall be smo t angle, Alur	ttom and si both, rust fr ninnium sna	des with re ee, straight p beading fo	equired EPI t, mitred ar or glazing /p	OM rubber/ Id jointed m	neoprene nechanically	gasket etc
	paneling and dash fas	teners to be	paid for se	parately):Fo	or fixed port	ionAnodise	d aluminium	inless steel e.(Glazing n (anodised
	transparent or dyed to	teners to be required sh	e paid for se ade accordi	parately):Fo	or fixed port 868, Minimu	ionAnodise	d aluminium	inless steel e.(Glazing n (anodised
	transparent or dyed to For window frames	teners to be required sh	paid for se ade accordi	parately):Foing to IS : 18	or fixed port 868, Minimu 4.500	ionAnodise	d aluminium oating of gr	inless stee e.(Glazing n (anodised
	transparent or dyed to	teners to be required sh	e paid for se ade accordi	parately):Fo	4.500 4.500	ionAnodise ım anodic c	d aluminium oating of gr 151.875 2.430	inless stee le.(Glazing n (anodised ade AC 15
	transparent or dyed to For window frames	teners to be required sh	paid for se ade accordi	parately):Fo ing to IS : 18 1.500 0.450	4.500 4.500	ionAnodise ım anodic c tal Quantity	d aluminium oating of gr 151.875 2.430 154.305 kg	inless stee le.(Glazing n (anodised ade AC 15
	transparent or dyed to For window frames	teners to be required sh	paid for se ade accordi	parately):Fo ing to IS : 18 1.500 0.450	or fixed port 868, Minimu 4.500 4.500 To Total Deduct	ionAnodise um anodic c tal Quantity ed Quantity	d aluminium oating of gr 151.875 2.430 154.305 kg 0.000 kg	inless stee le.(Glazing n (anodised ade AC 15)
	transparent or dyed to For window frames	teners to be required sh	paid for se ade accordi	eparately):Fo ing to IS : 18 1.500 0.450	or fixed port 868, Minimu 4.500 4.500 To Total Deduct Net To	ionAnodise ım anodic c tal Quantity	d aluminium oating of gr 151.875 2.430 154.305 kg 0.000 kg 154.305 kg	inless stee le.(Glazing n (anodised ade AC 15
25	transparent or dyed to For window frames	teners to be required shape 15 2 windows & fittings whe libe paid for	ventilators rever requir r separately 1868, Minin	sparately):Forming to IS: 18 1.500 0.450  The say 154.30 sincluding project including project includin	or fixed port 868, Minimu 4.500 4.500 To Total Deduct Net To 05 kg @ Rs oviding and g the cost of aluminium coating of	tal Quantity ed Quantity tal Quantity focus 17 / kg fixing hing of EPDM rul ( anodised	d aluminium oating of grants of gran	inless stee ie.(Glazing in (anodised ade AC 15 487.34 and making ene gaske

	For window shutter frames	7	0.500	1.440	6.500		32.760	
	For ventilator shutter frames	1	0.520	0.450	6.500		1.522	
	Door	3	0.860	1.960	6.500		32.870	
				First Floor				
	For window shutter frames	8	0.500	1.440	6.500		37.440	
	For ventilator shutter frames	1	0.520	0.450	6.500		1.522	
	For Door Shutter	2	0.860	1.960	6.500		21.913	
			160	1668	To	tal Quantity	128.027 kg	9
			1.1		otal Deduct	ted Quantity	0.000 kg	
		1	Cr 3	R W	Net To	tal Quantity	128.027 kg	
		( b		Say 128.02	27 kg @ Rs	608.11 / kg	Rs 77	854.50
	Providing and fixing gla rubber / neoprene gask in -Charge. ( Cost of al	et etc. con	nplete as per	the archited	ctural drawin	ngs and the	directions o	f Engine
	rubber / neoprene gask	et etc. con uminium s	nplete as per snap beading rala Wat	the archited shall be pa	ctural drawin aid in basic	ngs and the	directions o	f Engine
	rubber / neoprene gask in -Charge. ( Cost of al	et etc. con uminium s	nplete as per snap beading rala Wat	the archited shall be pa er Auth	ctural drawin aid in basic	ngs and the	directions o	f Engine
	rubber / neoprene gask in -Charge. ( Cost of al mm thickness	et etc. con uminium s	nplete as per snap beading rala Wat	the archited shall be pa er Auth	ctural drawin aid in basic cority	ngs and the	directions o	f Engine
	rubber / neoprene gaskin -Charge. ( Cost of al mm thickness  For window shutter	et etc. con uminium s Ker	nplete as personap beading	the archited shall be pa er Auth	ctural drawin aid in basic ority r 1.500	ngs and the	directions of loat glass p	f Engine
	rubber / neoprene gaskin -Charge. ( Cost of al mm thickness  For window shutter	et etc. con uminium s Ker	nplete as personap beading	the architect g shall be pa er Auth Ground Floo	ctural drawin aid in basic ority r 1.500	ngs and the	directions of loat glass p	f Engine
	rubber / neoprene gaskin -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter	et etc. con uminium s Ker 7	nplete as persnap beading ala Wat  0.500  0.600	the architect g shall be pa er Auth Ground Floo	ctural drawin aid in basic ority r 1.500 0.450	ngs and the	directions of loat glass purpose 5.250 0.270	f Engine
	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter	et etc. con uminium s Ker 7 1	o.500 0.500	the architect g shall be pa er Auth Ground Floo	1.500 0.450	ngs and the	5.250 0.270 6.000 0.270	f Engine anes of
	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter	et etc. con uminium s Ker 7 1	o.500 0.500	the architect shall be particular to the archite	tural drawinal drawina	ngs and the item):With f	5.250 0.270 6.000 0.270	f Engine anes of
	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter	et etc. con uminium s Ker 7 1	o.500 0.500	the architect shall be particular to the archite	1.500 0.450 Total Deduct	ngs and the item):With f	5.250 0.270 6.000 0.270 11.790 sqr 0.000 sqm	f Engine anes of
	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter	et etc. con uminium s Ker 7 1	0.500 0.600	the architect shall be particular from the Ground Floor	1.500 0.450 Total Deduction	ngs and the item):With f	5.250 0.270 6.000 0.270 11.790 sqr 11.790 sqr	f Engined
27	rubber / neoprene gaskin -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter	et etc. con uminium s  Ker  7  1  8  1	0.500 0.600 0.600 Saf required parcoat with approximately as personal as a second seco	r the architect shall be parter Author Ground Floor First Floor Tay 11.790 squattern in france.	1.500 1.500 0.450 Total Deduct Net To	otal Quantity ed Quantity stal	5.250 0.270 6.000 0.270 11.790 sqr 0.000 sqm 11.790 sqr	m 959.71
27	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter  For ventilator shutter  9.48.2  Providing and fixing M. round bars etc. including	et etc. con uminium s  Ker  7  1  8  1	0.500 0.600 0.600 Saf required parcoat with approximate as personal part of the control of the c	r the architect shall be parter Author Ground Floor First Floor Tay 11.790 squattern in france.	1.500 0.450 1.500 0.450 Total Deduct Net Total Deduct m@ Rs 11 mes of wind primer all co	otal Quantity ed Quantity stal	5.250 0.270 6.000 0.270 11.790 sqr 0.000 sqm 11.790 sqr	m 959.71
27	rubber / neoprene gaske in -Charge. ( Cost of al mm thickness  For window shutter  For ventilator shutter  For window shutter  For ventilator shutter  9.48.2  Providing and fixing M. round bars etc. including	et etc. con uminium s  Ker  7  1  8  1	0.500 0.600 0.600 Saf required parcoat with approximate as personal part of the control of the c	First Floor  Tay 11.790 squattern in frareroved steel	1.500 0.450 1.500 0.450 Total Deduct Net Total Deduct m@ Rs 11 mes of wind primer all co	otal Quantity ed Quantity stal	5.250 0.270 6.000 0.270 11.790 sqr 0.000 sqm 11.790 sqr	m 959.71

	For ventilator	1	0.600	0.450	17.000		4.590	
				First Floor				
	For window	8	1.500	1.500	17.000		306.000	
	For ventilator	1	0.600	0.450	17.000		4.590	
				1	То	tal Quantity	582.930 kg	]
				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	582.930 kg	
				Say 582.93	30 kg @ Rs	217.35 / kg	Rs 126	699.84
	Providing and fixing stincluding welding, grind same with necessary accessories & stainless floor or the side of wall payment purpose on accessories such as	ding, buffing stainless s s steel dash ist slab wit y weight o	g, polishing steel nuts a fasteners, h suitable a of stainless	and making and bolts co stainless ste arrangemen s steel men	g curvature emplete, i/c eel bolts etc t as per ap	(wherever r fixing the ., of require proval of E	equired) and railing with d size on the ngineer-in-c	d fitting necess e top of charge,
	Stair Hand Rail	1			3 10	223.0	223.000	
	Hand Rail For Ramp	1	10000			30.0	30.000	
				HEPZ/	То	tal Quantity	253.000 kg	]
		Kera	ala Wat	er Auth	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	253.000 kg	
		$P \cap I$	K	Say 253.0	00 kg @ Rs	681.59 / kg	Rs 172	442.27
29	9.117.1 Providing and fixing factorization as below (to to be jointed with galvatinge side vertical of the mm) wall thickness and specification and direct	lerance ±1 inized brack e frames re d 3 nos. sta	mm), with v kets and sta inforced by inless steel	vall thicknes ainless steel galvanized hinges fixed	s 2.0mm (±0 screws, joi M.S. tube of d to the fran	0.2 mm), conts mitred af size 19 x 1	rners of the and plastic w 9 mm and 1 as per mar	door fra velded. mm (±
				Ground Floo	r			
	For doors	3	5.000				15.000	
				First Floor				
	For doors	2	5.000				10.000	
					То	tal Quantity	25.000 me	tre
				Т	otal Deduct	ed Quantity	0.000 metre	Э
					Net To	tal Quantity	25.000 met	re

30	9.118.3							
	Providing and fixing to	_						-
	Multi chamber extrud					•	•	
	average wall thicknes vertical edges to ens	`	,		•		•	
	mm and 1.0 mm (± 0					•		
	be filled with High De	,	•	•				
	an end -cap of the	size 25 mm	x 11 mm.	Door shutte	r shall be i	reinforced v	vith special	polymeric
	reinforcements as p		•			_	_	-
	necessary hardware	e and fixture	s. Stickers	indicating	the location	ns of hardw	are will be	pasted at
	appropriate places.							
			1	Ground Floo	r			
	For doors	1	0.800	65	2.100		1.681	
			JAN.	First Floor				
	For doors	1	0.800	1 83	2.100		1.681	
		610	X 2	35 X	То	tal Quantity	3.362 sqm	
		B		SS OT	otal Deduct	ed Quantity	0.000 sqm	
		101	Lia		Net To	tal Quantity	3.362 sqm	
			9	Say 3.362 sq	m @ Rs 30	58.64 / sqm	Rs 102	283.15
31	17.2.1							
	Providing and fixing v	white vitreous	china pede	estal type wa	ter closet (l	European ty	pe W.C. paı	n) with seat
	and lid, 10 litre low l							
	device (handle lever),	-			_		•	_
	making good the wal	ils and floors	wnerever r	equirea:w.C	. pan with	isi marked	wnite solia į	Diastic seat
	and na	2					2.000	
			ı		То	tal Quantity	2.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	2.000 No	
				Say 2.000	No @ Rs 6	231.49 / No	Rs 124	462.98
32	17.7.2			•				
02	Providing and fixing w	vash basin wi	th C.I. brack	cets, 15 mm	C.P. brass i	oillar taps, 3	2 mm C.P. b	orass waste
	of standard pattern,				-	•		
	wherever require:Wh	ita Vitragua C	China Wash	basin size 6	30 x 450 m	nm with a si	ngle 15 mm	CP brace
	· ·	ite vitreous C					-	C.1 . Diass
	pillar tap	THE VILLEOUS C						O.1 . DIA33
	· ·	2					2.000	O.I . DIASS
	-					tal Quantity	-	C.I . biass
	-			Т	То		2.000 2.000 No	C.I . DIGGS

					Net To	tal Quantity	2.000 No	
				Say 2.000		258.80 / No		517.60
33	18.9.2 Providing and fixing Cl water supply including with one step CPVC s Engineer- in-Charge. I	all CPVC policent ceme	lain & brass ent, trenchin	threaded for the street of the	ttings. This & testing of	includes joi	nting of pipe	es & fittings
		1	45.000				45.000	
					To	tal Quantity	45.000 me	etre
				Т	otal Deduct	ed Quantity	0.000 metr	е
			- 423	J00.	Net To	tal Quantity	45.000 met	tre
			Say	45.000 met	re @ Rs 300	0.51 / metre	Rs 13	522.95
	water supply including with one step CPVC s Engineer- in-Charge.	olvent ceme	ent, trenchin rk25 mm no	g , refilling	& testing of		•	ū
		1	25.000				25.000	
				HI ST P27	To	tal Quantity	25.000 me	etre
		Kera	ala Wat	er Autl	ority	ed Quantity		
						4-1 0		
		D			1	1	25.000 met	
	1004	PI	Say	25.000 met	1	5.88 / metre		672.00
35	18.9.4 Providing and fixing Cl water supply including with one step CPVC s Engineer- in-Charge.	all CPVC polyent ceme	olyvinyl Chl lain & brass ent, trenchin	oride (CPV0 threaded fi g , refilling	re @ Rs 380 C) pipes, ha ttings. This & testing of	5.88 / metre	Rs 96	r hot & cole
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polyent ceme	olyvinyl Chl lain & brass ent, trenchin	oride (CPV0 threaded fi g , refilling	re @ Rs 380 C) pipes, ha ttings. This & testing of	5.88 / metre	Rs 96	r hot & coldes & fittings
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polvent ceme External wor	olyvinyl Chl lain & brass ent, trenchin	oride (CPV0 threaded fi g , refilling	re @ Rs 380 C) pipes, ha ttings. This & testing of dia pipes	5.88 / metre	Rs 96 I stability fo nting of pipelete as per	r hot & coles & fitting direction of
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polvent ceme External wor	olyvinyl Chl lain & brass ent, trenchin	oride (CPV0 threaded fi g , refilling minal outer	re @ Rs 380 C) pipes, ha ttings. This & testing of dia pipes	5.88 / metre	Rs 96 I stability fo nting of pipelete as per 50.000	r hot & coldes & fittings direction of
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polvent ceme External wor	olyvinyl Chl lain & brass ent, trenchin	oride (CPV0 threaded fi g , refilling minal outer	re @ Rs 380 C) pipes, ha ttings. This & testing of dia pipes To	5.88 / metre ving therma includes joi joints comp	Rs 96 I stability fo nting of pipelete as per 50.000 50.000 me 0.000 metro	r hot & coldes & fittings direction of the etre
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polvent ceme External wor	olyvinyl Chl lain & brass ent, trenchin rk32 mm no 50.000	oride (CPV0 threaded fi g , refilling minal outer	re @ Rs 380 C) pipes, ha ttings. This & testing of dia pipes  To otal Deduct	5.88 / metre ving therma includes joi joints comp tal Quantity ed Quantity	Rs 96 I stability foonting of pipelete as per 50.000 50.000 meters 0.000 meters	r hot & coldes & fittings direction of the etre
35	Providing and fixing Cl water supply including with one step CPVC s	all CPVC polvent ceme External work  1  PVC pipes ing of pipes vince the pipes with the pipes wi	olyvinyl Chl lain & brass ent, trenchin rk32 mm no 50.000  Say including fix with one ste	oride (CPV0s threaded fing , refilling minal outer 50.000 met ing the pipe p uPVC sol	re @ Rs 386 C) pipes, ha ttings. This & testing of dia pipes  To otal Deduct  Net To re @ Rs 496  with clamp yent cemen	of the state of th	Rs 96 I stability foonting of pipelete as per  50.000 50.000 met 0.000 metr 50.000 metr 0.000 metr 0.000 metr	r hot & coles & fitting direction of the tre  tre  501.00

		Γotal Quantity	55.000 me	tre
	Total Dedu	cted Quantity	0.000 metr	е
	Net	Γotal Quantity	55.000 met	re
	Say 55.000 metre @ Rs 2	55.33 / metre	Rs 14	043.15
37	od327851/2021_2022 :Providing and fixing uPVC pipes includings jointing of pipes with trenching, fitting refilling & testing of Joints complete as per direction dia 6Kgf/cm2	•		
	1 30.000		30.000	
		Γotal Quantity	30.000 me	tre
	Total Dedu	cted Quantity	0.000 metr	9
	Net <sup>*</sup>	Γotal Quantity	30.000 met	re
	Say 30.000 metre @ Rs 6			004.80
38	18.19.1.2 Providing and fixing gun metal non-return valve of approved qu boreVertical	ality (screwe	d end):25 m	nm nomina
	1		1.000	
	The state of the s	Γotal Quantity	1.000 No	
	V crole Weter Aut Total Dedu	cted Quantity	0.000 No	
	Net	Γotal Quantity	1.000 No	
	Say 1.000 No @ R	s 597.54 / No	Rs 5	97.54
39	18.49.1			
	Providing and fixing C.P brass bib cock of approved quality conform	ng to IS: 8931	1.15 mm nor	ninal bore
	1		1.000	
		Total Quantity	1.000 No	
	Total Dedu	cted Quantity	0.000 No	
	Net	Γotal Quantity	1.000 No	
	Say 1.000 No @ F	s 496.23 / No	Rs 4	96.23
40	18.58.2.1 Providing and fixing PTMT grating of approved quality and colour.Relid150 mm nominal size square 100 mm diameter of the inner hinge	• • • • • • • • • • • • • • • • • • • •	•	able circula
	1		1.000	
		 Γotal Quantity		ı
		cted Quantity		
		Fotal Quantity		

				Say 1.00	0 No @ Rs	200.16 / No	Rs 20	00.16
41	17.31 Providing and fixing 60 with 6 mm thick hard b			•		`		
	Will o Hill thorriand b	1				000 0010110	1.000	o complete
		'			To	tal Quantity		
				Т	otal Deduct			
				<u>'</u>		tal Quantity		
				Sav 1 000	No @ Rs 1			19 87
42	18.48 Providing and placing with cover and suitable pipes but without fitting	e locking ar	rangement	and making	-	_		
		1	1000.000	B A	1		1000.000	
		1 1		$20/\lambda$	То	tal Quantity	1000.000 L	_itre
		1 AT	1338	W. J.	otal Deduct	ed Quantity	0.000 Litre	
		1444		SP X	Net To	tal Quantity	1000.000 L	itre
			Sa	y 1000.000	Litre @ Rs	10.44 / Litre	Rs 10	440.00
SI No	Description	No	L West	B	D	CF	Quantity	Remark
		3Security	/ Cabin	(Cost Index	:36.44 %)			
1	2.8.1 Earth work in excavate trenches or drains (no ramming of bottoms, I	ion by med t exceeding ift up to 1.5	hanical me g 1.5 m in w 5 m, includir	ans (Hydrad ridth or 10 s	ulic excava sqm on plan ut the exca	), including	dressing o	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as directions)	ion by med t exceeding ift up to 1.5 cted, within	chanical me g 1.5 m in w 5 m, includir g a lead of 5	ans (Hydrau ridth or 10 s ng getting o 50 m.All kind	ulic excava eqm on plan ut the exca ds of soil	), including	dressing o	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I	ion by med t exceeding ift up to 1.5 cted, within	chanical me g 1.5 m in w s m, includir a lead of 5	ans (Hydrau ridth or 10 s ng getting o 50 m.All kind 0.600	ulic excava eqm on plan ut the exca ds of soil 0.700	), including	dressing o and disposa 2.646	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire Foundation	ion by med t exceeding ift up to 1.5 cted, within 2	chanical me g 1.5 m in w s m, includir a lead of 5 3.150 1.950	ans (Hydran ridth or 10 s ng getting o 50 m.All kind 0.600	ulic excava eqm on plan ut the exca ds of soil 0.700 0.700	), including	dressing of and disposa 2.646 1.638	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as directions).	ion by med t exceeding ift up to 1.5 cted, within	chanical me g 1.5 m in w s m, includir a lead of 5	ans (Hydrau ridth or 10 s ng getting o 50 m.All kind 0.600	ulic excava eqm on plan ut the exca ds of soil 0.700 0.700 0.100	), including vated soil a	2.646 1.638 0.070	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire Foundation	ion by med t exceeding ift up to 1.5 cted, within 2	chanical me g 1.5 m in w s m, includir a lead of 5 3.150 1.950	ans (Hydran ridth or 10 s ng getting o 50 m.All kind 0.600 0.600	ulic excava sqm on plan ut the exca ds of soil 0.700 0.700 0.100	n), including vated soil a	2.646 1.638 0.070 4.354 cum	f sides ar I of surplu
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire Foundation	ion by med t exceeding ift up to 1.5 cted, within 2	chanical me g 1.5 m in w s m, includir a lead of 5 3.150 1.950	ans (Hydran ridth or 10 s ng getting o 50 m.All kind 0.600 0.600	ulic excava sqm on plan ut the exca ds of soil 0.700 0.700 0.100 To	tal Quantity	2.646 1.638 0.070 4.354 cum	f sides an
1	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire Foundation	ion by med t exceeding ift up to 1.5 cted, within 2	chanical me g 1.5 m in w s m, includir a lead of 5 3.150 1.950	ans (Hydranidth or 10 sing getting of 50 m.All kind 0.600 0.700	ulic excava sqm on plan ut the exca ds of soil 0.700 0.700 To Total Deduct Net To	tal Quantity tal Quantity	2.646 1.638 0.070 4.354 cum 4.354 cum	f sides an
2	Earth work in excavate trenches or drains (no ramming of bottoms, I excavated soil as dire Foundation	ion by medit exceeding ift up to 1.5 cted, within 2 2 1	chanical me g 1.5 m in w g m, includir a lead of 5 3.150 1.950 1.000	ans (Hydran ridth or 10 song getting of 50 m.All kind 0.600 0.600 0.700	ulic excava sqm on plan ut the exca ds of soil 0.700 0.700 To To Total Deduct Net To um @ Rs 29	tal Quantity ed Quantity tal Quantity excluding the	2.646 1.638 0.070 4.354 cum 0.000 cum 4.354 cum Rs 13	f sides ar I of surplu  600.98

	"	2	1.950	0.600	0.100	0.234	
	steps	1	1.000	0.700	0.100	0.070	)
	Floor	1	2.500	2.500	0.080	0.500	)
					Total (	Quantity 1.182 c	cum
				7	Total Deducted (	Quantity 0.000 c	um
					Net Total (	Quantity 1.182 co	um
			S	ay 1.182 cu	ım @ Rs 6857.6	1 / cum	s 8105.70
3	7.1.1 Random rubble mas concrete 1:6:12 (1 cellevel with:Cement mo	ement : 6 coa	rse sand : 12	graded sto	one aggregate 2	•	•
	For Foundation	2	3.150	0.600	0.600	2.268	3
	,,	2	1.950	0.600	0.600	1.404	1
	Basement	2	3.000	0.450	0.450	1.215	5
	11	2	2.100	0.450	0.450	0.851	1
		101	Lia		Total 0	Quantity 5.738 c	cum
		TUE			Total Deducted C	Quantity 0.000 co	um
			A Variable	HILL STAN	Net Total (	Quantity 5.738 c	um
		Ker	ala Wat	ay 5.738 cu	ım @ Rs 7249.9	4 / cum Rs	41600.16
4	50.6.7.2 Laterate masonry w mortar 1:6 for super s charges etc.	ith neatly dr	essed latera	te stone of	size 40x20x15	cm or nearest s	size in cen
4	Laterate masonry w mortar 1:6 for super s	ith neatly dr	essed latera	te stone of	size 40x20x15	cm or nearest s	size in cen aterials, lal
4	Laterate masonry w mortar 1:6 for super scharges etc.	ith neatly dr	essed latera	te stone of	size 40x20x15	cm or nearest sling all cost of m	size in cen aterials, lal
4	Laterate masonry w mortar 1:6 for super s charges etc.	ith neatly dr structure abo	essed laterative plinth leve	te stone of el up to floor 0.200	size 40x20x15 two level included	cm or nearest sling all cost of m	size in cen aterials, la
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet	ith neatly drestructure abo	essed laterative plinth level 2.700 2.700	te stone of up to floor  0.200  0.200	size 40x20x15 two level included 2.850 0.300	cm or nearest sling all cost of m	size in cen aterials, lai
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet	ith neatly drestructure about	essed laterative plinth level 2.700 2.700 1.000	0.200 0.200 0.600	size 40x20x15 two level include 2.850 0.300 0.200	cm or nearest sling all cost of m  6.157  0.648	size in cen aterials, lai
4	Laterate masonry w mortar 1:6 for super s charges etc.  wall  Parapet  Steps	ith neatly drestructure about	essed laterative plinth level 2.700 2.700 1.000 1.000	0.200 0.200 0.600 0.300	2.850 0.300 0.200	cm or nearest sling all cost of m  6.157  0.648  0.120  0.060	size in cen aterials, lai
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet Steps Door D1	ith neatly drestructure about	essed laterative plinth level  2.700  2.700  1.000  1.000  1.000	0.200 0.200 0.600 0.300	2.850 0.300 0.200 2.100 1.500	cm or nearest sling all cost of m 6.157 0.648 0.120 0.060 -0.420	size in cenaterials, lal
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet Steps Door D1	ith neatly drestructure about	essed laterative plinth level  2.700  2.700  1.000  1.000  1.000	0.200 0.200 0.600 0.200 0.200	size 40x20x15 two level include  2.850  0.300  0.200  2.100  1.500  Total 0	cm or nearest sling all cost of m 6.157 0.648 0.120 0.060 -0.420	size in cenaterials, lal
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet Steps Door D1	ith neatly drestructure about	essed laterative plinth level  2.700  2.700  1.000  1.000  1.000	0.200 0.200 0.600 0.200 0.200	2.850 0.300 0.200 0.200 2.100 1.500 Total O	cm or nearest sling all cost of m  6.157  0.648  0.120  0.060  -0.420  -0.900  Quantity 6.985 c	size in cenaterials, lal
4	Laterate masonry w mortar 1:6 for super s charges etc. wall Parapet Steps Door D1	ith neatly drestructure about	essed laterative plinth level  2.700  2.700  1.000  1.000  1.500	0.200 0.200 0.600 0.200	2.850 0.300 0.200 0.200 2.100 1.500 Total O	0.120 0.060 -0.420 0.090 Quantity 6.985 c	size in cenaterials, lal

	concrete for reinforce including pumping of cand reinforcement, incretard setting of concrete Engineer-in-charge. No cement used as per difloor V level	concrete to cluding adn ete, improve ote:- Ceme	site of laying nixtures in r workability nt content o	g but excluded by the commended without impact on sidered in the considered in the c	ling the cos ed proportion airing streng n this item	t of centering ons as per I ons as per I onto our onto our our our our our our our our our ou	ng, shutterin S: 9103 to bility as per g/cum. Exc	g, finishin accelerate direction c ess or les	
	Lintel	4	2.700	0.200	0.150		0.324		
	Sunshade	1	2.900	0.600	0.100		0.175		
	,,	2	1.900	0.600	0.100		0.228		
	Roof slab	1	3.500	3.500	0.120		1.470		
	Total Quantity 2.197 cum								
			M		otal Deduct	ed Quantity	0.000 cum		
			£3 1		Net To	tal Quantity	2.197 cum		
			Sa	y 2.197 cum	n @ Rs 111:	35.00 / cum	Rs 244	463.60	
	using cement content transported to site of v as per mix design of s from transit mixer to sit	ork in trans pecified grate te of laying,	sit mixer for ade for reinfo excluding th	all leads, ha proed ceme ne cost of ce	iving continuent concrete entering, shu	uous agitate work includ uttering finis	ed mixer, ma ling pumping hing and rei	anufacture g of R.M. nforceme	
	transported to site of was per mix design of s	york in trans pecified gra te of laying, tures in rec cability without of content c	sit mixer for ade for reinfor excluding the ommended out impairing onsidered in	all leads, had broked ceme ne cost of cemporations strength and this item is	nt conting nt concrete entering, sho as per IS: 9 d durability s @330 kg/d	work includ work includ uttering finis 103 to acce as per direc cum. Excess	ed mixer, ma ling pumpine hing and rei elerate/ retar tion of the E	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer	york in trans pecified gra te of laying, tures in rec cability without of content c	sit mixer for ade for reinfor excluding the ommended out impairing onsidered in	all leads, had broked ceme ne cost of cemporations strength and this item is	nt conting nt concrete entering, sho as per IS: 9 d durability s @330 kg/d	work includ work includ uttering finis 103 to acce as per direc cum. Excess	ed mixer, ma ling pumpine hing and rei elerate/ retar tion of the E	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work -charge. Note:- Cemer	york in trans pecified gra te of laying, tures in rec cability without of content c	sit mixer for ade for reinfor excluding the ommended out impairing onsidered in	all leads, had broked ceme ne cost of cemproportions strength and this item is tely. All wior	nt conting nt concrete entering, sho as per IS: 9 d durability s @330 kg/d	work includ work includ uttering finis 103 to acce as per direc cum. Excess	ed mixer, ma ling pumpine hing and rei elerate/ retar tion of the E	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to si including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is paya	york in trans pecified gra te of laying, tures in rec cability without ont content c able/recover	sit mixer for ade for reinfor excluding the ommended out impairing onsidered in able separa	all leads, had broced ceme ne cost of cemproportions strength and this item is tely. All wior Plinth Belt	nt continuent concrete entering, shu as per IS: 9 d durability a @330 kg/d k upto plint	work includ work includ uttering finis 103 to acce as per direc cum. Excess	ed mixer, ma ling pumping hing and rei elerate/ retar tion of the E s /less ceme	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar.	york in trans pecified gra te of laying, tures in rec cability without content c able/recover	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in able separated 3.000	all leads, had proced ceme ne cost of cemproportions strength and this item is tely. All wior Plinth Belt 0.250	nt concrete entering, shu as per IS: 9 d durability s @330 kg/c k upto plint	work includ work includ uttering finis 103 to acce as per direc cum. Excess	ling pumping hing and rei elerate/ retartion of the Es /less cemes	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar.	york in trans pecified gra te of laying, tures in rec cability without content c able/recover	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in able separated 3.000	all leads, had broced ceme ne cost of cemproportions strength and this item is telly. All wior Plinth Belt 0.250	nt continuent concrete entering, shu as per IS: 9 d durability \$ @ 330 kg/c k upto plint 0.150	uous agitate work includ uttering finis 103 to acce as per direct cum. Excess h level	od mixer, making pumping hing and rei elerate/ retartion of the Estates cemes 0.225  0.188  0.413 cum	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar.	york in trans pecified gra te of laying, tures in rec cability without content c able/recover	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in able separated 3.000	all leads, had broced ceme ne cost of cemproportions strength and this item is telly. All wior Plinth Belt 0.250	oving continuity as per IS: 9 d durability \$ @ 330 kg/c k upto plint \$ 0.150 \$ To cotal Deduct	work include the i	od mixer, making pumping hing and rei elerate/ retartion of the Es /less cemes  0.225  0.188  0.413 cum  0.000 cum	anufacture g of R.M. nforcemend d setting ngineer -	
	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar.	york in trans pecified gra te of laying, tures in rec cability without content c able/recover	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in table separated 3.000  2.500	all leads, had broced ceme ne cost of cemproportions strength and this item is telly. All wior Plinth Belt 0.250	nt concrete entering, shu as per IS: 9 d durability s @330 kg/c k upto plint  0.150  To  Total Deduct  Net To	work include the work include the include	od mixer, maing pumping hing and rei elerate/ retartion of the Es/less cemes  0.225  0.188  0.413 cum  0.000 cum  0.413 cum	anufactur g of R.M. nforceme d setting ngineer -	
7	transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payar.	york in trans pecified gra te of laying, tures in rec cability without content c able/recover  2 2	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in able separated 3.000  2.500	all leads, had breed ceme ne cost of ceme ne ceme ne cost of ceme ne cost of ceme ne cost of ceme ne c	oving continuity concrete entering, shu as per IS: 9 d durability is @330 kg/c k upto plint    0.150  To otal Deduct   Net To om @ Rs 99-c   ing, cutting	work include the work include the include	od mixer, making pumping hing and reigherate/ retartion of the Est/less cemes 0.225 0.188 0.413 cum 0.000 cum 0.413 cum Rs 41	onufactur g of R.M nforceme d setting ngineer - ent used	
7	transported to site of was per mix design of sfrom transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is payable.  Long wall  Short wall  5.22.6  Steel reinforcement for	pecified grate of laying, attures in recability without content cabile/recovers  2 2 2 pr R.C.C we upto plinth layers	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in able separated 3.000  2.500	all leads, had breed ceme ne cost of ceme ne ceme ne cost of ceme ne cost of ceme ne cost of ceme ne c	oving continuity concrete entering, shu as per IS: 9 d durability is @330 kg/c k upto plint    0.150  To otal Deduct   Net To om @ Rs 99-c   ing, cutting	work include the work include the include	od mixer, making pumping hing and reigherate/ retartion of the Est/less cemes 0.225 0.188 0.413 cum 0.000 cum 0.413 cum Rs 41	g of R.M. nforceme d setting ngineer - ent used  08.52	

				7	Total Deduct	ed Quantity	0.000 kilogi	am
					Net To	tal Quantity	208.800 kild	ogram
			Say 208.8	300 kilogram	n @ Rs 98.9	2 / kilogram	Rs 200	654.50
8	14.12 Providing and fixing including cutting chase the chase with matching	, anchoring	clamp to re	inforcemen	t bar, includ	ing cleaning	ı, refilling, m	aking good
		1					1.000	
					То	tal Quantity	1.000 No	
				7	Total Deduct	ed Quantity	0.000 No	
			-0	65	Net To	tal Quantity	1.000 No	
			JAN	Say 1.00	0 No @ Rs	503.53 / No	Rs 50	03.53
9	5.9.5 Centering and shutteri	d cantileve	rs	etc. and ren	441	n for:Lintels	•	nth beams
	Belt	4	2.900		0.150	L	1.740	
		4	2.500		0.150		1.500	
	Lintel-	4	2.900	H1 01 P Z /	0.150		1.740	
	inside	Kera	2.500 ala W at	er Auth	0.150 OTITY		1.500	
	Op Bott.	1	1.000		0.200		0.200	
	,,	2	1.500		0.200	1	0.601	
	Shade	1	3.100	0.600			1.860	
	,,	2	2.100	0.600			2.520	
					То	tal Quantity	11.661 sqr	n
				٦	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	11.661 sqm	1
			S	Say 11.661 s	sqm @ Rs 6	53.89 / sqm	Rs 76	25.01
10	5.9.3 Centering and shutter landings, balconies a	-	•	, etc. and ı	removal of	form for:Su	spended flo	oors, roofs
	Roof slab bottom	1	2.500	2.500			6.250	
	Edge	4	3.500		0.120		1.680	
	Projection	4	3.200		0.300		3.840	
			•	•	То	tal Quantity	11.770 sqr	n
				7	Total Deduct			
							·	

					Net To	otal Quantity	11.770 sqn	า	
			S	ay 11.770 s	sqm @ Rs 8	20.89 / sqm	Rs 96	61.88	
11	13.7.1 12 mm cement plaster f	inished wit	h a floating c	oat of neat	cement of m	nix:1:3 ( 1 ce	ement : 3 fin	e sand)	
	roof top	1	3.500	3.500			12.250		
			1	I.	To	tal Quantity	12.250 sqr	n	
				7	Fotal Deduct	ted Quantity	0.000 sqm		
					Net To	otal Quantity	12.250 sqn	1	
			S	ay 12.250 s	sqm @ Rs 4	03.73 / sqm	Rs 49	45.69	
12	13.1.1 12 mm cement plaster of	of mix:1:4 (	1 cement : 4	I fine sand)					
	Building outside	4	2.900		3.000		34.800		
	Building inside	4	2.500	3 5	3.000		30.000		
	Parapet including slab width	4	3.200		0.950		12.160		
	Basement	(1)	11.000		0.600	1	6.600		
	Door D1	1	1.000		2.100		-2.100		
	Window W1	2	1.500	1 110	1.500		-4.500		
		Ker	ala Wat	er Auth	nority To	otal Quantity	83.560 sqr	m	
					Total Deduct	ted Quantity	-6.600 sqm	l	
					Net To	otal Quantity	76.960 sqn	า	
	Say 76.960 sqm @ Rs 316.06 / sqm Rs 24323.98								
13	13.16.1 6 mm cement plaster of	mix:1:3 ( 1	cement:3	fine sand)					
	Roof slab bottom	1	2.500	2.500			6.250		
	Projection	4	3.200		0.300		3.840		
	Sunshade bottom & top	2	3.000	0.600			3.600		
		2*2	1.900	0.600			4.560		
	Edge	6	0.600	0.100			0.360		
					To	otal Quantity	18.610 sqr	m	
				7	Fotal Deduct	ted Quantity	0.000 sqm		
					Net To	otal Quantity	18.610 sqn	า	
			S	ay 18.610 s	sqm @ Rs 2	69.26 / sqm	Rs 50	10.93	

14	11.41.2 Providing and laying vi with water absorption le shades, laid on 20 mm with white cement and	ess than 0.0 thick ceme	8% and conent mortar 1:	forming to IS: 4(1 cement	S : 15622, o : 4 coarse :	f approved r sand), inclu	make, in all	colours a
	Floor	1	2.500	2.500			6.250	
	Skirting	1	10.000		0.100		1.000	
	Step	1	1.000	0.600			0.600	
	,, Rise	3	1.000	0.200			0.601	
	Side	2	0.600	0.200			0.240	
	,,	2	0.300	0.200			0.120	
			166	1608	То	tal Quantity	8.811 sqm	
			C. 1	1	otal Deduct	ed Quantity	0.000 sqm	
		1	37.3	R W	Net To	tal Quantity	8.811 sqm	
		16	S	Say 8.811 sq	VL (A) 1			660.14
	Providing and fixing all standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e.	ns/ appropring with dash at top, bo	iate Z section fasteners of ttom and si	ns and othe of required of ides with re	r sections o dia and size equired EPI	f approved i , including i DM rubber/	make confor necessary fi neoprene	ming to illing up gasket
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections sequired including clear screws, all complete a paneling and dash fas	ns/ appropring with dash at top, bo hall be smoot angle, Aluras per architeners to be	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of the tromagnet of trom	ns and other of required of ides with rece, straight up beading for wings and teparately):For example of the control of the co	r sections or dia and size equired EPI t, mitred an or glazing /p the direction or fixed port	f approved in appr	make confornecessary finecessary finecessary finechanically P. brass/ stateer-in-charged aluminium	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections serequired including clear screws, all complete a paneling and dash fast transparent or dyed to	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the transfer and size the transfer and tra	ons and other of required of ides with rece, straight up beading for wings and teparately):For ing to IS: 18	r sections or dia and size equired EPI t, mitred an or glazing /p the direction or fixed port	f approved in approved in the control of the contro	make confornecessary finecessary finecessary finechanically P. brass/ state eer-in-charged aluminium oating of grant process.	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of trom	ons and other of required of ides with receipt beading for wings and teparately):For ing to IS: 18	r sections or dia and size equired EPI t, mitred an or glazing /p the direction or fixed port	f approved in a province of approved in a point of a po	make confornecessary finecessary finecessary finechanically.  P. brass/ state eer-in-charged aluminium oating of grant 20.250	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections serequired including clear screws, all complete a paneling and dash fast transparent or dyed to	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the transfer and size the transfer and tra	ons and other of required of ides with rece, straight up beading for wings and teparately):For ing to IS: 18	r sections or dia and size equired EPI t, mitred an or glazing /p he direction or fixed port 868, Minimu	f approved in a provided in a policy in a	make confornecessary finecessary finecessa	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of trom	ns and other of required of required of ides with receipt beading for wings and teparately):For ing to IS: 18  1.500  2.100	r sections or dia and size equired EPI t, mitred an or glazing /p he direction or fixed port 868, Minimu	f approved in a provided in a policy in a	make confornecessary finecessary finecessa	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of trom	ns and other of required of required of ides with receipt beading for wings and teparately):For ing to IS: 18  1.500  2.100	r sections or dia and size equired EPI, mitred and or glazing /phe direction or fixed port 868, Minimu	f approved in a point of the control	make confornecessary finecessary finecessa	rming to illing up gasket y where ninless si ge.(Glaz n (anodi
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of trom	ns and other of required of required of ides with received a peading for wings and teparately):For ing to IS: 18  1.500  2.100	r sections of dia and size equired EPI, mitred and or glazing /phe direction or fixed port 868, Minimu  To  Total Deduct	f approved in a proved in an eling, C.F. as of Engine ion Anodise im anodic control 4.5  4.5  4.5  tal Quantity ed Quantity tal Quantity	make confornecessary finecessary finecessa	rming to illing up gasket y where sinless sige.(Glaz ade AC
	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1	ns/ appropring with dash at top, bo hall be smott angle, Aluras per architeners to be required sh	iate Z section fasteners of the trom and since the trom and since the tromagnet of tromagnet of the tromagnet of tromagnet of the tromagnet of trom	ns and other of required of required of ides with received a peading for wings and teparately):For ing to IS: 18  1.500  2.100	r sections or dia and size equired EPI, mitred and or glazing /phe direction or fixed port 868, Minimu	f approved in a proved in an eling, C.F. as of Engine ion Anodise im anodic control 4.5  4.5  4.5  tal Quantity ed Quantity tal Quantity	make confornecessary finecessary finecessa	rming to illing up gasket y where ninless si ge.(Glaz n (anodis
16	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections serequired including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1  Doors  21.3.1  Providing and fixing glarubber / neoprene gask in -Charge. (Cost of an extension of the control of the cost of a section of the cost of the cos	ns/ appropring with dash at top, bo hall be smot angle, Aluras per architeners to be required shall azing in aluras et etc. com	iate Z section fasteners of them and site of them and site of the minnium snatectural drapaid for sectoral de according 1.500 1.000	ns and other of required of des with rece, straight up beading for wings and teparately):For ing to IS: 18  1.500  2.100  The say 29.70  The say 29.70  The say 29.70  The say 4.50  The	r sections of dia and size equired EPI to mitred and or glazing /phe direction or fixed port 868, Minimu  To total Deduct Net To O1 kg @ Rs entilator shu ctural drawin	f approved in a point of the po	make conformecessary finecessary finecessa	rming to illing up gasket y where sinless sige.(Glazmade AC)
16	standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections serequired including clear screws, all complete a paneling and dash fast transparent or dyed to Window frames W1  Doors  21.3.1  Providing and fixing glarubber / neoprene gask	ns/ appropring with dash at top, bo hall be smot angle, Aluras per architeners to be required shall azing in aluras et etc. com	iate Z section fasteners of them and site of them and site of the minnium snatectural drapaid for sectoral de according 1.500 1.000	ns and other of required of des with rece, straight up beading for wings and teparately):For ing to IS: 18  1.500  2.100  The say 29.70  The say 29.70  The say 29.70  The say 4.50  The	r sections of dia and size equired EPI to mitred and or glazing /phe direction or fixed port 868, Minimu  To total Deduct Net To O1 kg @ Rs entilator shu ctural drawin	f approved in a point of the po	make conformecessary finecessary finecessa	rming to illing up gasket of ywhere sinless store (Glazin (anodisade AC)

					To	tal Quantity	5.860 sqm	
				7	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	5.860 sqm	
			S	ay 5.860 so	րո @ Rs 118	34.03 / sqm	Rs 69	38.42
17	10.2 Structural steel work ricutting, hoisting, fixing			-				-
	Door	1	1.000	2.100		16.0	33.600	
					To	tal Quantity	33.600 kg	
				7	Total Deducte	ed Quantity	0.000 kg	
			100	B.	Net To	tal Quantity	33.600 kg	
				Say 33.6	00 kg @ Rs	120.54 / kg	Rs 40	50.14
	round bars etc. includin frames with rawl plugs s	screws etc			primer all co	Ł	·	gs/ wooden
	window	2	1.500	1.500		20.0	90.000	
				H 0. P.E./		tal Quantity		
		Kera	ala Wat	er Auth	Total Deducto	ed Quantity	0.000 kg	
	1				Net To	tal Quantity	90.000 kg	
		-		Say 90.0	00 kg @ Rs	217.35 / kg	Rs 19	561.50
19	13.43.1 Applying one coat of surface:Water thinnab			nt primer o	of approved	brand and	l manufactu	ire on wall
	Building outside	4	2.900		3.000		34.800	
	Building inside	4	2.500		3.000		30.000	
	Parapet including slab width	4	3.200		0.950		12.160	
	Basement	1	11.000		0.600		6.600	
	Door D1	1	1.000		2.100		-2.100	
	Window W1	2	1.500		1.500		-4.500	
	Roof slab bottom	1	2.500	2.500			6.250	
			3.200		0.300		3.840	
	Projection	4	3.200		0.300		0.0 10	

		2*2	1.900	0.600			4.560	
	Edge	6	0.600	0.100			0.360	
					To	otal Quantity	102.170 sc	m
				٦	Total Deduc	ted Quantity	-6.600 sqm	
					Net To	otal Quantity	95.570 sqn	1
				Say 95.570	sqm @ Rs	71.09 / sqm	Rs 67	94.07
20	13.82.2 Wall painting with acryl grams/ litre, of approved achieve even shade and	d brand and	d manufactu	•	•	•	•	
	Building outside	4	2.900	65	3.000		34.800	
	Building inside	4	2.500	19	3.000		30.000	
	Parapet including slab width	4	3.200		0.950		12.160	
	Basement	1	11.000	763/A	0.600		6.600	
	Door D1	(1)	1.000		2.100	Ž.	-2.100	
	Window W1	2	1.500		1.500		-4.500	
	Roof slab bottom	1	2.500	2.500			6.250	
	Projection	Ker	ala3.200at	er Auth	0.300		3.840	
	Sunshade bottom & top	2	3.000	0.600	T	1	3.600	
	J	2*2	1.900	0.600			4.560	
	Edge	6	0.600	0.100			0.360	
					To	otal Quantity	102.170 sc	m
				٦	Total Deduc	ted Quantity	-6.600 sqm	
					Net To	otal Quantity	95.570 sqn	1
				Say 95.570 s	sqm @ Rs 1	26.55 / sqm	Rs 12	094.38
21	17.7.2 Providing and fixing was of standard pattern, ir wherever require:White pillar tap	cluding pa	ainting of fi	ttings and I	orackets, c	utting and n	naking goo	d the wa
		1					1.000	
					To	otal Quantity	1.000 No	
					Total Deduc	ted Quantity	0.000 No	
					Net To	otal Quantity	1.000 No	

				Say 1.000	No @ Rs 3	258.80 / No	Rs 32	258.80
22	18.9.2 Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	g all CPVC p solvent cem	olain & brass ent, trenchin	s threaded fing , refilling	ttings. This & testing of	includes joi	nting of pipe	es & fitting:
		1	25.000				25.000	
					То	tal Quantity	25.000 me	tre
				T	otal Deduct	ed Quantity	0.000 metr	e
					Net To	tal Quantity	25.000 met	tre
			Say	25.000 met	re @ Rs 300	0.51 / metre	Rs 75	512.75
	water supply including with one step CPVC separate Engineer- in-Charge.	solvent cem	ent, trenchin rk25 mm no	g, refilling	& testing of		olete as per	-
	LS	1	25.000		7 197	1	25.000	
		4300	8000		То	tal Quantity	25.000 me	tre
			Day .	THE PERSON NAMED IN	otal Deduct	ed Quantity	0.000 metr	е
		Ker	ala Wat					
		Ker			OriNet To	tal Quantity	25.000 met	
24	18.9.4 Providing and fixing C water supply including with one step CPVC s Engineer- in-Charge.	Chlorinated Fig all CPVC posolvent cemos	Say Polyvinyl Chl blain & brass ent, trenchin	25.000 met oride (CPVC s threaded fi g , refilling	Net To re @ Rs 386 c) pipes, ha ttings. This & testing of	tal Quantity 5.88 / metre ving therma includes joi	25.000 mer  Rs 96  I stability fo nting of pipe	r hot & col
24	Providing and fixing C water supply including with one step CPVC:	Chlorinated Fig all CPVC posolvent cemos	Say Polyvinyl Chl blain & brass ent, trenchin	25.000 met oride (CPVC s threaded fi g , refilling	Net To re @ Rs 386 c) pipes, ha ttings. This & testing of	tal Quantity 5.88 / metre ving therma includes joi	25.000 mer  Rs 96  I stability fo nting of pipe	tre 672.00 r hot & coles & fitting
24	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	Chlorinated F g all CPVC p solvent ceme External wo	Say Polyvinyl Chlolain & brassent, trenchin rk32 mm no	25.000 met oride (CPVC s threaded fi g , refilling	re @ Rs 386 c) pipes, ha ttings. This & testing of dia pipes	tal Quantity 5.88 / metre ving therma includes joi	25.000 met  Rs 96  I stability fo nting of pipelete as per  25.000	r hot & coles & fitting direction of
24	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	Chlorinated F g all CPVC p solvent ceme External wo	Say Polyvinyl Chlolain & brassent, trenchin rk32 mm no	25.000 met oride (CPV6 s threaded fi g , refilling minal outer	re @ Rs 386 c) pipes, ha ttings. This & testing of dia pipes	tal Quantity 5.88 / metre ving therma includes joi joints comp	25.000 met  Rs 96  I stability fo nting of pipelete as per  25.000  25.000 me	r hot & coles & fitting direction of
24	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	Chlorinated F g all CPVC p solvent ceme External wo	Say Polyvinyl Chlolain & brassent, trenchin rk32 mm no	25.000 met oride (CPV6 s threaded fi g , refilling minal outer	Pipes, hattings. This testing of dia pipes  To	tal Quantity 5.88 / metre ving therma includes joi joints comp	25.000 metroscopic Rs 96 I stability for nting of pipelete as per 25.000 25.000 metroscopic Rs 96	r hot & coles & fitting direction of
24	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	Chlorinated F g all CPVC p solvent ceme External wo	Say Polyvinyl Chlolain & brassent, trenchin ork32 mm no 25.000	25.000 met oride (CPV6 s threaded fi g , refilling minal outer	Prince To Net To Prince Rs 386  C) pipes, ha ttings. This testing of dia pipes  To Total Deduct Net To	tal Quantity 5.88 / metre ving therma includes joi joints comp tal Quantity ed Quantity tal Quantity	25.000 met  Rs 96  I stability fo nting of pipelete as per  25.000  25.000 met  0.000 metro  25.000 metro	r hot & coles & fitting direction of
24	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.	Chlorinated Fig all CPVC polysolvent cemeral work ternal work tern	Say Polyvinyl Chlolain & brassent, trenchingrk32 mm no 25.000  Say including fix with one ste	25.000 met  25.000 met  oride (CPVC s threaded fi g , refilling minal outer  7  25.000 met  ing the pipe p uPVC solv	Net To re @ Rs 386  C) pipes, ha ttings. This & testing of dia pipes  To rotal Deduct  Net To re @ Rs 490  with clamp vent cement	tal Quantity 6.88 / metre ving therma includes joi joints comp tal Quantity ed Quantity tal Quantity 0.02 / metre	25.000 metroscopic Rs 96 I stability for nting of pipelete as per 25.000 metroscopic Rs 12 00 m 00 m<	r hot & coles & fitting direction of the tree
	Providing and fixing C water supply including with one step CPVC sengineer- in-Charge.  LS  od327849/2021_2022 :Providing and fixing included fittings, jointi	Chlorinated Fig all CPVC polysolvent cemeral work ternal work tern	Say Polyvinyl Chlolain & brassent, trenchingrk32 mm no 25.000  Say including fix with one ste	25.000 met  25.000 met  oride (CPVC s threaded fi g , refilling minal outer  7  25.000 met  ing the pipe p uPVC solv	Net To re @ Rs 386  C) pipes, ha ttings. This & testing of dia pipes  To rotal Deduct  Net To re @ Rs 490  with clamp vent cement	tal Quantity 6.88 / metre ving therma includes joi joints comp tal Quantity ed Quantity tal Quantity 0.02 / metre	25.000 metroscopic Rs 96 I stability for nting of pipelete as per 25.000 metroscopic Rs 12 00 m 00 m<	r hot & coles & fitting direction of the tre etre 250.50  pacing. Thi

				Т	otal Deduct	ed Quantity	0.000 metre	9
					Net To	tal Quantity	30.000 met	re
			Say	30.000 met	re @ Rs 25	5.33 / metre	Rs 76	559.90
26	17.31 Providing and fixing 60 with 6 mm thick hard bo			_		, , ,		
		1					1.000	
			I		To	tal Quantity	1.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
		1.000 No						
			100	Say 1.000	No @ Rs 1	519.87 / No	Rs 15	19.87
27	13.62.1 Painting with synthetic even shade:Two or mo approved brand and m	re coats on	new work o					•
	For windows	2	1.500	1.500	133	1	4.500	
		16/45			То	tal Quantity	4.500 sqm	
				п	otal Deduct	ed Quantity	0.000 sqm	
		Ker	ala Wat	er Auth	Net To	tal Quantity	4.500 sqm	
		IXCI	ana wat	Say 4.500 s	qm @ Rs 2	09.84 / sqm	Rs 94	44.28
SI No	Description	No	L	В	D	CF	Quantity	Remark
		Air Blower	Building	(Cost Ind	lex:36.44 %			
1	2.8.1 Earth work in excavat trenches or drains (no ramming of bottoms, li excavated soil as directions)	t exceeding Ift up to 1.5	1.5 m in w m, includir	vidth or 10 s	sqm on plar ut the exca	n), including	dressing o	f sides and
		12	1.500	1.500	1.000		27.000	
		4	1.800	1.800	1.000		12.960	
					То	tal Quantity	39.960 cur	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	39.960 cum	1
			S	Say 39.960 c	um @ Rs 2	98.80 / cum	Rs 119	940.05
2	4.1.5 Providing and laying in shuttering - All work up nominal size)	•		•	•	•		•

		12	1.500	1.500	0.200		5.400	
		4	1.800	1.800	0.200		2.593	
					To	tal Quantity	7.993 cum	
				7	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	7.993 cum	
			S	ay 7.993 cu	ım @ Rs 74	13.74 / cum	Rs 592	258.02
3	50.2.26.1 Filling with contractor o consolidating each depodirection of site Engineer	osited laye	r by ramming		-		_	
		1	10.000	8.000	0.500		40.000	
			JANS	19	To	tal Quantity	40.000 cur	n
		-	£2 11		otal Deduct	ed Quantity	0.000 cum	
		61	K 2	5. 7	Net To	tal Quantity	40.000 cum	1
			S	ay 40.000 d	um @ Rs 2	97.37 / cum	Rs 118	894.80
	5.37.1  Providing and laying in using cement content a transported to site of well as the stransport of the stransport o	as per app	roved design	mix, manu	ıfactured in	fully automa	atic batchin	g plant a
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works -charge. Note:- Cemen	as per app ork in trans pecified gra e of laying, tures in rec ability with t content of	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in	n mix, manuall leads, had broad ceme e cost of coroportions strength ar this item is	ufactured in aving contin nt concrete entering, sho as per IS: S ad durability is @330 kg/o	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching matching pumpinhing and reisterate/ retartion of the E	g plant a anufactur g of R.M nforcement d setting ngineer
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works	as per app ork in trans pecified gra e of laying, tures in rec ability with t content of	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in	n mix, manual leads, had broad ceme e cost of coroportions strength an this item is tely. All wion	ufactured in aving contin nt concrete entering, sho as per IS: S ad durability is @330 kg/o	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching matching pumpinhing and reisterate/ retartion of the E	g plant a anufactur g of R.M nforcement d setting ngineer -
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works charge. Note:- Cemen per design mix is payal	as per app ork in trans pecified gra e of laying, tures in rec ability with t content of	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in	n mix, manuall leads, had broad ceme e cost of coroportions strength ar this item is	ufactured in aving contin nt concrete entering, sho as per IS: S ad durability is @330 kg/o	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching matching pumpinhing and reisterate/ retartion of the E	g plant a anufactur g of R.M nforcement d setting ngineer -
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works-charge. Note:- Cemen per design mix is payal	as per app ork in trans pecified gra e of laying, tures in rec ability with t content of ble/recove	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in rable separa	n mix, manual leads, had reed ceme e cost of coroportions strength and this item is tely. All wion	ufactured in aving contin nt concrete entering, sho as per IS: \$ ad durability \$ @330 kg/o k upto plint	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching ding pumpinhing and reighterate/ retartion of the Est/less ceme	g plant a anufactur g of R.M nforcement d setting ngineer
	Providing and laying in using cement content a transported to site of we as per mix design of sp from transit mixer to site including cost of admixt concrete, improve works charge. Note:- Cemen per design mix is payal	as per app ork in trans pecified gra e of laying, tures in red ability with t content of ble/recove	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in rable separar	all leads, had proced ceme e cost of certain strength and this item is telly. All wion FOOTING	ufactured in aving contin nt concrete entering, she as per IS: 9 d durability is @330 kg/6 k upto plint	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching d mixer, maling pumpinhing and reisterate/ retartion of the Estates cement	g plant a anufactur g of R.M nforcement d setting ngineer -
	Providing and laying in using cement content a transported to site of we as per mix design of specific from transit mixer to site including cost of admixt concrete, improve works charge. Note:- Cemen per design mix is payal CORNER COLUMN FOOTING	as per app ork in trans pecified gra e of laying, tures in red ability with t content of ble/recove	roved design sit mixer for a ade for reinfo excluding the commended pout impairing considered in rable separated 1.400  (0.2+1.4)/ 2	n mix, manual leads, had reed ceme e cost of corroportions strength and this item is tely. All wion 1.400	ufactured in aving continuit concrete entering, should be as per IS: \$\frac{1}{2}\$ as per IS: \$\frac{1}{2}\$ as \$\frac{1}{2}\$ durability \$\frac{1}{2}\$ @ 330 kg/c k upto plint \$\frac{1}{2}\$ 0.750	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching d mixer, maling pumpinhing and reighberate/ retartion of the Estables cemes 1.176	g plant a anufactur g of R.M nforcement d setting ngineer -
	Providing and laying in using cement content a transported to site of we as per mix design of specific from transit mixer to site including cost of admixt concrete, improve works charge. Note:- Cemen per design mix is payal CORNER COLUMN FOOTING	as per app ork in trans pecified gra e of laying, tures in red ability with t content of ble/recove	roved design sit mixer for a ade for reinfor excluding the commended pout impairing considered in rable separare 1.400  (0.2+1.4)/ 2  1.700	n mix, manual leads, had proced ceme e cost of corroportions strength and this item is telly. All wind footnoted and the footnoted footn	ufactured in aving continuit concrete entering, she as per IS: \$\frac{9}{2}\$ d durability \$\frac{9}{2}\$ @ 330 kg/\$\frac{9}{2}\$ k upto plint 0.150	fully automations agitate work include uttering finised 103 to access per directum. Excess	atic batching and reighbors certain and reighbors certain of the Earless certain 1.176  3.360	g plant a anufactur g of R.M nforcement d setting ngineer -

	PEDESTAL COLUMN	16	0.500	0.200	0.500		0.800			
					То	tal Quantity	25.073 cur	n		
				Т	otal Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	25.073 cum	1		
	Say 25.073 cum @ Rs 9947.98 / cum Rs 249425.70									
5	Providing and laying in position machine batched and machine mixed design mix M-20 grade ceme concrete for reinforced cement concrete work, using cement content as per approved design mix including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate retard setting of concrete, improve workability without impairing strength and durability as per direction Engineer-in-charge. Note:- Cement content considered in this item is @ 330 kg/cum. Excess or less cement used as per design mix is payable or recoverable separately. All work above plinth level up									
	floor V level	1	Р	LINTH SLA	В					
		1	10.400	8.400	0.200		17.473			
		18	Р	LINTH BEA	M	1				
		1	37.800	0.250	0.500		4.725			
	RAMP									
		Ker	5.000	2.000	0.200		2.000			
	7				То	tal Quantity	24.198 cur	n		
		2	R	Т	otal Deduct	ed Quantity	0.000 cum			
	Net Total Quantity 24.198 cum									
	Say 24.198 cum @ Rs 11135.00 / cum Rs 269444.73									
6	5.37.2 Providing and laying in using cement content a transported to site of was per mix design of sprom transit mixer to site including cost of admixed concrete, improve works -charge. Note:- Cemen per design mix is payal	as per approork in transpecified grade of laying, cures in recability without toontent content of	roved designate it mixer for a lade for reinforce excluding the commended put impairing considered in	n mix, manuall leads, had proper ced ceme ne cost of ce proportions strength and this item is	factured in aving continuent concrete entering, shu as per IS: 9 d durability 6 @ 330 kg/c	fully automations agitate work include uttering finise 103 to access per directum. Excess	atic batching of mixer, ma- ling pumping hing and rei elerate/ retar tion of the E	g plant and unufactured g of R.M.C onforcemend setting or ongineer - in the used as		
	Beam (0.20 * 0.50)	2	8.200	0.200	0.500		1.640			
	,	2	10.200	0.200	0.500		2.040			
	Column (0.2 * 0.50)	16	0.200	0.500	5.200		8.320			

	Lintel	1	37.600	0.200	0.200		1.505	
	SUNSHADE	1	(11.6+9.6) *2	0.600	0.100		2.544	
					To	tal Quantity	27.929 cur	n
				7	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	27.929 cum	)
			Say	27.929 cun	n @ Rs 116	10.43 / cum	Rs 324	267.70
7	5.22.6 Steel reinforcement fo binding all complete u		-	_		• .		
			100	FOOTING				
	CORNER COLUMN FOOTING	8	1.400	1.400	0.150	100.0	235.200	
		8	(0.2+1.4)/	1.400	0.750	100.0	672.000	
	INSIDE COLUMN FOOTING	4	1.700	1.700	0.150	100.0	173.400	
		4	(0.2+1.7)/	1.700	0.750	100.0	484.500	
	INTERMEDIATE COLUMN FOOTING	Ker 8	ala Wate	er Auth 1.700	0.150	100.0	346.800	
	_	8	(0.2+1.7)/	1.700	0.750	100.0	969.000	
	PEDESTAL COLUMN	20	0.500	0.200	0.500	100.0	100.000	
	Beam (0.20 * 0.50)	2	8.200	0.200	0.500	100.0	164.000	
		2	10.200	0.200	0.500	100.0	204.000	
	Column (0.2 * 0.50)	16	0.200	0.500	5.200	100.0	832.000	
	Roof slab	1	11.000	9.000	0.120	100.0	1188.000	
	Lintel	1	37.600	0.200	0.150	75.0	84.601	
	SUNSHADE	1	(11.6+9.6)	0.600	0.150	75.0	286.200	
			PI	LINTH SLA	В	T	T	
		1	10.400	8.400	0.200	100.0	1747.201	
				RAMP		T	T	
		1	5.000	2.000	0.200	75.0	150.000	
			PL	INTH BEA	М			

				1				
		1	37.800	0.250	0.500	100.0	472.500	
					To	tal Quantity	8109.402 I	kilogram
				Т	otal Deduct	ed Quantity	0.000 kilog	ram
					Net To	tal Quantity	8109.402 k	ilogram
			Say 8109.4	02 kilogram	@ Rs 98.9	2 / kilogram	Rs 802	182.05
8	5.9.1 Centering and shutterin columns, etc for mass of	-	strutting, etc	c. and remo	oval of form	for:Foundat	ions, footing	js, bases
			COL	UMN FOOT	ING			
	COLUMN AT CORNER	4	(1.4+1.4)*	60.	0.150		3.360	
	INTERMEDIATE COLUMN	8	(1.7+1.7)*	N.	0.150		8.160	
	INSIDE COLUMN	4	(1.7+1.7)*	SX	0.150		4.080	
		1 A			To	tal Quantity	15.600 sqr	n
					otal Deduct	ed Quantity	0.000 sqm	
				10.00	Net To	tal Quantity	15.600 sqm	1
		TZ a sa	1 W/ S	ay 15.600 s	qm @ Rs 3	37.42 / sqm	Rs 52	263.75
9	5.9.6 Centering and shutter Abutments, Posts and		ing strutting		removal of	form for:C	olumns, Pil	lars, Pie
	PEDESTAL COLUMN	16	(0.2+0.5)* 2		0.500		11.200	
			(0.2+0.5)*					
	COLUMN	16	2		5.200		116.480	
	COLUMN	16	, ,			tal Quantity		m
	COLUMN	16	, ,	T	To	tal Quantity	127.680 so	mp
	COLUMN	16	, ,	Т	To otal Deduct		127.680 sc 0.000 sqm	•
	COLUMN	16	2		To otal Deduct Net To	ed Quantity	127.680 sq 0.000 sqm 127.680 sq	•
10	5.9.5 Centering and shuttering	ng includin	Say	y 127.680 s	To otal Deduct Net To qm @ Rs 8	ed Quantity tal Quantity 69.05 / sqm	127.680 sq 0.000 sqm 127.680 sq Rs 110	m 9960.30
10	5.9.5	ng includin	Say g strutting, e	y 127.680 s tc. and rem	Total Deduct Net To qm @ Rs 8	ed Quantity tal Quantity 69.05 / sqm	127.680 sq 0.000 sqm 127.680 sq Rs 110	m 9960.30
10	5.9.5 Centering and shuttering	ng includin	Say g strutting, e	y 127.680 s	Total Deduct Net To qm @ Rs 8	ed Quantity tal Quantity 69.05 / sqm	127.680 sq 0.000 sqm 127.680 sq Rs 110	m 9960.30

	SIDE	2*2	10.200		0.500		20.400	
	воттом	1*2	10.200	0.200			4.080	
			PI	INTH SLA	В			
		1	37.600		0.200		7.521	
				LINTEL			1	
	INSIDE	1	(10+8)*2		0.200		7.200	
	OUT SIDE	1	(10.4+8.4) *2		0.200		7.521	
			S	SUNSHADE				
		1	(11.6+9.6) *2		0.750		31.800	
				RAMP	0			
		1	2.000	5.000			10.000	
		2	2.000	37/1	0.200		0.800	
		1	5.000		0.200		1.000	
		104	PL	INTH BEA	М	lan.		
	INSIDE	1	35.800		0.500		17.900	
	OUT SIDE	1	37.800	A 11+16	0.500		18.900	
		Ne	rara wate	er Auth	Tot	al Quantity	146.802 sc	ηm
		D		Т	otal Deducte	ed Quantity	0.000 sqm	
		1	<u> </u>		Net Tot	al Quantity	146.802 sq	m
			Say	/ 146.802 s	qm @ Rs 65	3.89 / sqm	Rs 959	992.36
11	5.9.3 Centering and shu landings, balconies	=		etc. and r	emoval of f	orm for:Su	ispended flo	oors, ro
			R	OOF SLAE	3		T	
	воттом	1	11.000	9.000			99.000	
	SIDE	2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
					Tot	al Quantity	103.800 sc	ım
					100			1
				Т	otal Deducte			1
				7	otal Deducte	ed Quantity		-

	charges etc.				r two level incl			
	LONG WALL	2	10.400	0.200	5.200		21.632	
	SHORT WALL	2	8.000	0.200	5.200		16.640	
			PA	RAPET WA	ALL .			
		2	11.000	0.200	0.800		3.521	
		2	9.000	0.200	0.800		2.881	
	ROLLING SHUTTER	1	2.000		3.000		-6.000	
	Window	4	1.500		1.500		-9.000	
			Ba	B.	Tota	l Quantity	44.674 cur	n
					Total Deducted	d Quantity	-15.000 cur	n
		1	336	10	Net Tota	l Quantity	29.674 cum	1
		11	Sa	y 29.674 cu	ım @ Rs 7968	3.75 / cum	Rs 236	464.69
13	13.1.1 12 mm cement plaster of	of mix:1:4 (	1 cement : 4	fine sand)				
	Outside	1	36.000		5.200		187.201	
	Inside	1	37.600	ALESS AND	5.200		195.520	
	ROLLING SHUTTER	Kera	al <sub>2.000</sub> at	er Auth	013.000		-6.000	
	Window	4	1.500		1.500	l	-9.000	
			PA	RAPET WA	ALL C			
		2	11.000		0.800		17.600	
		2	11.000	0.150			3.300	
		2	9.000		0.800		14.400	
		2	9.000	0.150			2.700	
	SUNSHADE TOP	1	(11.6+9.6) *2		0.600		25.440	
				COLUMN				
		16	0.500	0.200	5.200		8.320	
				BEAM				
		2	0.900	8.200			14.760	
		1	0.900	10.200			9.180	

					Net To	otal Quantity	463.421 sq	m
			Say	/ 463.421 s	sqm @ Rs 3	16.06 / sqm	Rs 146	6468.84
14	13.16.1 6 mm cement plaster of	f mix:1:3 ( 1	1 cement : 3 fi	ne sand)				
	Roof slab	1	11.000	9.000			99.000	
		2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
	S U N S H A D E B O T T O M	1	(9.6+11.6)		0.600		25.440	
					To	tal Quantity	129.240 so	qm
			Ca	12	Total Deduct	ed Quantity	0.000 sqm	
			J/W	M.S	Net To	tal Quantity	129.240 sq	m
			Say	/ 129.240 s	sqm @ Rs 2	69.26 / sqm	Rs 34	799.16
15	13.43.1 Applying one coat of surface:Water thinnak			nt primer o	of approved	d brand and	I manufacti	ure on w
	Outside	1	36.000		5.200		187.201	
	Inside	1	37.600	TEPE/	5.200		195.520	
	Roof slab	Ker	111.000	9,000	ority		99.000	
		2	11.000		0.120		2.640	
		2	9.000		0.120	1	2.160	
	ROLLING SHUTTER	1	2.000		3.000		-6.000	
	Window	4	1.500		1.500		-9.000	
	SUNSHADE TOP & BOTTOM	2	(11.6+9.6)		0.600		50.880	
				COLUMN		T	Γ	I
		16	0.500	0.200	5.200		8.320	
				BEAM	T	T	Г	
		2	0.900	8.200			14.760	
		1	0.900	10.200			9.180	
					To	otal Quantity	569.661 sc	qm
				-	Total Deduct	ed Quantity	-15.000 sqı	m
					Net To	otal Quantity	554.661 sq	m
			Sa	ay 554.661	sqm @ Rs	71.09 / sqm	Rs 39	430.85

16	13.82.2 Wall painting with acrylic grams/ litre, of approved		•	`	ŭ	•	,			
	achieve even shade and			J	117 3			•		
	Outside	1	36.000		5.200		187.201			
	Inside	1	37.600		5.200		195.520			
	Roof slab	1	11.000	9.000			99.000			
		2	11.000		0.120		2.640			
		2	9.000		0.120		2.160			
	ROLLING SHUTTER	1	2.000		3.000		-6.000			
	Window	4	1.500	65	1.500		-9.000			
	SUNSHADE TOP & BOTTOM	2	(11.6+9.6) *2		0.600		50.880			
				COLUMN	10					
		16	0.500	0.200	5.200		8.320			
		155		BEAM	3 10	L				
	46	2	0.900	8.200			14.760			
		1	0.900	10.200			9.180			
		Ke	rala Wate	er Auth	ority To	tal Quantity	569.661 sc	m		
					otal Deduct	ed Quantity	-15.000 sqr	n		
			K		Net To	tal Quantity	554.661 sq	m		
	_		Sa	y 554.661 s	sqm @ Rs 1	26.55 / sqm	Rs 70	192.35		
17	11.41.2 Providing and laying vitr with water absorption less shades, laid on 20 mm to with white cement and response.	s than 0 hick cen	.08% and conf nent mortar 1:	forming to I 4(1 cement	S : 15622, c t : 4 coarse	of approved i sand), inclu	make, in all ding groutin	colours		
		1	10.000	8.000			80.000			
	SKIRTING	1	36.000		0.100		3.600			
					Тс	tal Quantity	83.600 sqr	n		
				7	Total Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	83.600 sqm	1		
			Sa	y 83.600 so	լm @ Rs 17	77.34 / sqm	Rs 148	585.62		
18	Say 83.600 sqm @ Rs 1777.34 / sqm  Rs 148585.62  10.4  Providing and fixing 1 mm thick M.S. sheet sliding- shutters, with frame and diagonal braces of 40x40 mm angle iron, 3 mm M.S. gusset plates at the junction and corners, 25 mm dia pulley, 40x40x6 r									

	steel primer.			T	T	T		
	Window	4	1.500		1.500		9.000	
					To	otal Quantity	9.000 sqm	
				Т	Γotal Deduc	ted Quantity	0.000 sqm	
					Net To	otal Quantity	9.000 sqm	
			S	Say 9.000 so	qm @ Rs 59	12.90 / sqm	Rs 53	216.10
19	10.6.1 Supplying and fix together through to designed pipe shat and pull operation springs manufacturand M.S. top covers.	their entire leng off with brackets n complete, inc ured from high	oth and jointe of, side guides cluding the c tensile steel	ed together a and arrange cost of provi wire of ade	at the end be ements for i iding and fi quate stren	by end locks nside and ou xing necess gth conform	, mounted outside locking ary 27.5 cring to IS: 44	on speci g with po n long w 154 - pa
	top cover		1 0 000	507	1		0.000	
		1	2.000		3.000		6.000	
		15)	LAS.			otal Quantity		
		ALC:	명도 4.00년 1982년 - 1		275	ted Quantity		
			1000	4 300		otal Quantity	-	
		Kei	ala Wat	say 6.000 so	qm @ Rs 34	87.20 / sqm	Rs 20	923.20
20	od327850/2021_2 Supplying and fixir		Chain Pully	Block	T	7		
	117 3	1					1.000	
		<u> </u>			To	tal Quantity	1.000 kg	
				Т		ted Quantity		
						otal Quantity		
				Sav 1.000		3227.39 / kg		227.39
SI No	Description	No	L	В	D	CF	Quantity	Remar
		5Chlorination	on Building	(Cost In	dex:36.44 °	%)		
	2.8.1		chanical me	` •		•		
1	Earth work in exc trenches or drains ramming of botton excavated soil as	s (not exceedin	5 m, includir	ng getting o	out the exca	,	_	
1	trenches or drains	s (not exceedin	5 m, includir	ng getting o	out the exca	,	_	
1	trenches or drains	s (not exceeding ms, lift up to 1.	5 m, includir n a lead of 5	ng getting o 50 m.All kind	ds of soil	,	nd disposa	

					To	tal Quantity	35.623 cui	m
				٦	Total Deduc	ed Quantity	0.000 cum	
					Net To	otal Quantity	35.623 cun	n
			S	Say 35.623 d	cum @ Rs 2	98.80 / cum	Rs 10	644.15
2	4.1.5 Providing and laying in shuttering - All work up nominal size)	•		•	ū	J		· ·
		10	1.400	1.400	0.200		3.920	
			NEUT	RALIZATIO	N PIT			
		1	2.700	2.700	0.100		0.730	
			JAN		To	tal Quantity	4.650 cum	1
		-	£ 2 1	W 25. 3	Total Deduc	ted Quantity	0.000 cum	
		619	X 2	5. N	Net To	tal Quantity	4.650 cum	
		1 1	S	Sav 4.650 cu	ım @ Rs 74	13.74 / cum	Rs 34	473.89
3	50.2.26.1 Filling with contractor of consolidating each dep direction of site Engine	osited laye	er by rammin	ck) in open	ring, lead up		d lift up to 1	•
3	Filling with contractor consolidating each dep	osited laye er-in-charg	er by rammin	ck) in open	236		_	•
3	Filling with contractor consolidating each dep	osited laye er-in-charg	er by rammin	ck) in open	ring, lead up		d lift up to 1	.5 m as pe
3	Filling with contractor consolidating each dep	osited laye er-in-charg	er by rammin	ck) in open g and water	ring, lead up	to 50 m an	40.000 d lift up to 1	.5 m as pe
3	Filling with contractor consolidating each dep	osited laye er-in-charg	er by rammin	ck) in open g and water	ring, lead up  0.500  Total Deduc	to 50 m and	40.000 40.000 cur 0.000 cum	.5 m as pe
	Filling with contractor of consolidating each dep direction of site Engine	osited laye er-in-charg	er by rammin je.	ck) in open g and water	Total Deductions	to 50 m and the state of the st	40.000 40.000 cur 0.000 cur 40.000 cur	.5 m as pe
4	Filling with contractor consolidating each dep	posited layer er-in-charger position reas per appropriate of laying, tures in recapility without content of	er by ramminge.  10.000  20  20  20  20  20  20  20  20  2	ck) in open g and water 8.000 cm. Say 40.000 cm. M-25 grade in mix, manual leads, had breed cement cost of cemproportions strength arm this item is	Total Deduction (Course of Course of	o to 50 m and otal Quantity sed Quantity otal Quantity 97.37 / cum or reinforced fully automous agitate work includentering finis 9103 to access per direction. Excess	40.000 cum 40.000 cum 40.000 cum 40.000 cum 40.000 cum atic batching and regelerate/ retailers to the Elerate retailers to the Elevate retailers t	m  894.80  ncrete work g plant an anufacture g of R.M.C inforcement rd setting of Engineer - i
	5.37.1  Providing and laying in using cement content a transported to site of w as per mix design of sp from transit mixer to site including cost of admixing concrete, improve work -charge. Note:- Cemen	posited layer er-in-charger position reas per appropriate of laying, tures in recapility without content of	er by ramminge.  10.000  20  20  20  20  20  20  20  20  2	ck) in open g and water 8.000 cm. Say 40.000 cm. M-25 grade in mix, manual leads, had breed cement cost of cemproportions strength arm this item is	Total Deduction (Course of Course of	o to 50 m and otal Quantity sed Quantity otal Quantity of tal	40.000 cum 40.000 cum 40.000 cum 40.000 cum 40.000 cum atic batching and regelerate/ retailers to the Elerate retailers to the Elevate retailers t	m  894.80  ncrete work g plant and anufactured g of R.M.C inforcement rd setting of Engineer - in

			1				
INTERMEDIATE COLUMN FOOTING	6	(0.25+1.4) /2	1.400	0.750		5.198	
		NEUT	RALIZATIO	N PIT			
	1	2.600	2.600	0.200		1.353	
	2	2.500	0.200	1.500		1.500	
		PED	ESTAL COL	UMN			
	10	0.500	0.250	0.500		0.625	
				То	tal Quantity	9.852 cum	
			Т	otal Deduct	ed Quantity	0.000 cum	
		2		Net To	tal Quantity	9.852 cum	
		S	Say 9.852 cu	m @ Rs 99	47.98 / cum	Rs 980	007.50
Providing and laying in concrete for reinforce including pumping of cand reinforcement, incretard setting of concre Engineer-in-charge.No cement used as per defloor V level	d cement of concrete to cluding adm te, improve ote:- Ceme	concrete wo site of laying nixtures in r workability nt content of a payable of	pork, using congressions by the ecommendations without impact considered in recoverable PLINTH SLAI  8.400	ement cont ling the cos ed proportic airing streng n this item e separatel	tent as per t of centerir ons as per l th and dura is @ 330 k	approved ong, shuttering IS: 9103 to bility as per g/cum. Except	design mix, g, finishing accelerate, direction of ess or less
	1	5.000	2.000	0.200		2.000	
	1	1				2.000	
	1	1	2.000			2.000	
		Р	2.000 LINTH BEAI	O.500	tal Quantity		n
		Р	2.000 LINTH BEAI 0.250	M 0.500 To	tal Quantity	4.725 24.198 cun	n
		Р	2.000 LINTH BEAI 0.250	M 0.500 To otal Deduct	ed Quantity	4.725 24.198 cun	
		37.800	2.000 LINTH BEAI 0.250	M 0.500 To otal Deduct Net To	ed Quantity tal Quantity	4.725 24.198 cun 0.000 cum 24.198 cum	1

	-charge. Note:- Cemer				•					
	por doorgir mix to paya	.510/100040	•	UMN (0.25	·	in lover upt	0 11001 1 101	-01		
		10	0.500	0.250	5.000		6.250			
			ВЕ	AM (0.25*0	.5)					
		2	8.200	0.200	0.500		1.640			
		1	10.200	0.200	0.500		1.020			
				LINTEL	I	T				
		1	37.600	0.200	0.200		1.505			
			5	SUNSHADE		1				
		1	(11.6+9.6) *2	0.600	0.100		2.544			
			F	ROOF SLAE	3					
		1	11.000	9.000	0.120		11.880			
		1 150			To	tal Quantity	24.839 cur	n		
		1226	PACE.	J	otal Deduct	ed Quantity	0.000 cum			
	Total Deducted Quantity 0.000 cum									
					Net To	tal Quantity	24.839 cum	1		
		Ker	Say	24.839 cun	n @ Rs 116	•				
7	5.22.6 Steel reinforcement fo	r R.C.C w	ork including	er Auth straighten	n @ Rs 116	tal Quantity 10.43 / cum , bending, p	Rs 288	391.47 osition a		
7	Steel reinforcement fo	r R.C.C w	ork including	er Auth straighten	n @ Rs 116	tal Quantity 10.43 / cum , bending, p	Rs 288	391.47 osition a		
7	Steel reinforcement fo	r R.C.C w	ork including	straighten - Mechanic	n @ Rs 116	tal Quantity 10.43 / cum , bending, p	Rs 288	391.47 osition a		
7	Steel reinforcement for binding all complete u	r R.C.C w pto plinth I	ork including	straighten - Mechanic	n @ Rs 116 IOTILY ing, cutting cally Treate	tal Quantity 10.43 / cum , bending, p d bars of g	Rs 288	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I	ork including levelThermo 1.400 (0.25+1.4) /2	straighten - Mechanic FOOTING 1.400	ing, cutting cally Treate 0.150	tal Quantity 10.43 / cum , bending, p d bars of g	Rs 288  placing in parade Fe-500  117.600	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I	ork including levelThermo 1.400 (0.25+1.4) /2	straighten - Mechanic FOOTING 1.400	ing, cutting cally Treate 0.150	tal Quantity 10.43 / cum , bending, p d bars of g	Rs 288  placing in parade Fe-500  117.600	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	Pr R.C.C w pto plinth I	ork including levelThermo  1.400  (0.25+1.4) /2  PL  37.800	straighten - Mechanic FOOTING 1.400 1.400 LINTH BEA	ing, cutting cally Treate 0.150  0.750  M  0.500	tal Quantity 10.43 / cum , bending, ped bars of gr	Rs 288  placing in parade Fe-500  117.600  519.750	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	Pr R.C.C w pto plinth I	ork including levelThermo  1.400  (0.25+1.4) /2  PL  37.800	straighten - Mechanic FOOTING 1.400 1.400 LINTH BEA 0.250	ing, cutting cally Treate 0.150  0.750  M  0.500	tal Quantity 10.43 / cum , bending, ped bars of gr	Rs 288  placing in parade Fe-500  117.600  519.750	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I	ork including levelThermo  1.400  (0.25+1.4) /2  Pl 37.800  COL 0.500	straighten - Mechanic FOOTING 1.400 1.400 LINTH BEA 0.250 UMN (0.25	0.150 0.500 0.500	tal Quantity 10.43 / cum , bending, ped bars of great the second	Rs 288  placing in parade Fe-500  117.600  519.750	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I	ork including levelThermo  1.400  (0.25+1.4) /2  Pl 37.800  COL 0.500	straighten - Mechanic FOOTING 1.400 1.400 LINTH BEA 0.250 UMN (0.25	0.150 0.500 0.500	tal Quantity 10.43 / cum , bending, ped bars of great the second	Rs 288  placing in parade Fe-500  117.600  519.750	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I 4 6	ork including levelThermo  1.400  (0.25+1.4) /2  Pl 37.800  COL 0.500  BE	straighten - Mechanic FOOTING  1.400  1.400  INTH BEA  0.250  UMN (0.25*0  AM (0.25*0	0.150 0.500 0.500 0.5)	tal Quantity 10.43 / cum , bending, ped bars of great distribution of the control	Rs 288  placing in parade Fe-500  117.600  519.750  472.500	391.47 osition a		
7	Steel reinforcement for binding all complete under the complete under the control of the control	r R.C.C w pto plinth I  4  6  1  10	1.400 (0.25+1.4) /2 PI 37.800 COL 0.500 BE 8.200	straighten - Mechanic FOOTING  1.400  1.400  LINTH BEA  0.250  UMN (0.25*0  0.200	0.150 0.500 0.500 0.500	10.43 / cum  , bending, ped bars of grading and grading an	Rs 288  placing in parade Fe-500  117.600  519.750  472.500  164.000	391.47 osition a		

			S	SUNSHADE						
		1	(11.6+9.6)	0.600	0.100	75.0	190.800			
			PEDE	STAL COL	UMN					
		10	0.500	0.250	0.500	100.0	62.500			
			Pl	LINTH SLA	В					
		1	10.400	8.400	0.200	100.0	1747.201			
			R	OOF SLAE	3	T				
		1	11.000	9.000	0.120	100.0	1188.000			
			NEUTI	RALIZATIO	N PIT					
		1	2.600	2.600	0.200	100.0	135.201			
		2	2.500	0.200	1.500	100.0	150.000			
			CH2 5	RAMP	200	ı	T			
		1	5.000	2.000	0.200	75.0	150.000			
					То	tal Quantity	5737.353 I	kilogram		
	Total Quantity 5737.353 kilogram									
			<b>1000</b>	2007	otal Deduct	ed Quantity	0.000 kilog	am		
	~		ACCO POSSES	T	10%		0.000 kilogi 5737.353 k			
	~	Ker	Say 5737.3	10/22/	Net To	tal Quantity	5737.353 k			
8	5.9.1 Centering and shutterin	g including		53 kilogram	Net To @ Rs 98.9	tal Quantity 2 / kilogram	5737.353 k	ilogram 538.96		
8	Centering and shutterin	g including	g strutting, etc	53 kilogram	Net To @ Rs 98.9 val of form	tal Quantity 2 / kilogram	5737.353 k	ilogram 538.96		
8	Centering and shutterin	g including	g strutting, etc	53 kilogram	Net To @ Rs 98.9 val of form	tal Quantity 2 / kilogram	5737.353 k	ilogram 538.96		
8	Centering and shuttering columns, etc for mass of COLUMN AT	g including	COLU	53 kilogram	Net To @ Rs 98.9 val of form	tal Quantity 2 / kilogram	5737.353 k  Rs 567  ions, footing	ilogram 538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete 4	COLU (1.4+1.4)* 2 (1.4+1.4)* 2	53 kilogram	Net To @ Rs 98.9 val of form  TING  0.150	tal Quantity 2 / kilogram	5737.353 k  Rs 567  ions, footing  3.360	ilogram 538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete 4	COLU (1.4+1.4)* 2 (1.4+1.4)* 2	53 kilogram c. and remo	Net To @ Rs 98.9 val of form  TING  0.150	tal Quantity 2 / kilogram	5737.353 k  Rs 567  ions, footing  3.360	ilogram 538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete 4	COLU (1.4+1.4)* 2 (1.4+1.4)* 2 NEUTI	53 kilogram c. and remo	Net To  @ Rs 98.9  val of form  TING  0.150  N PIT	tal Quantity 2 / kilogram	5737.353 k  Rs 567  ions, footing  3.360  5.040	ilogram 538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete  4  6	COLU (1.4+1.4)* 2 (1.4+1.4)* 2 NEUTI 2.600	53 kilogram c. and remo	Net To  @ Rs 98.9  val of form  TING  0.150  N PIT  0.200  1.500	tal Quantity 2 / kilogram	5737.353 k Rs 567 sions, footing 3.360 5.040 2.080 15.000	538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete  4  6	COLU (1.4+1.4)* 2 (1.4+1.4)* 2 NEUTI 2.600	53 kilogram c. and remo	Net To  @ Rs 98.9  val of form  TING  0.150  N PIT  0.200  1.500  To	tal Quantity 2 / kilogram  for:Foundat	5737.353 k Rs 567 sions, footing 3.360 5.040 2.080 15.000 25.480 sqr	538.96		
8	Centering and shuttering columns, etc for mass of the columns of t	g including concrete  4  6	COLU (1.4+1.4)* 2 (1.4+1.4)* 2 NEUTI 2.600	53 kilogram c. and remo	Net To  @ Rs 98.9  val of form  TING  0.150  N PIT  0.200  1.500  To  Total Deduct	tal Quantity 2 / kilogram  for:Foundat  tal Quantity ed Quantity	5737.353 k Rs 567 sions, footing 3.360 5.040 2.080 15.000 25.480 sqr	ilogram '538.96 is, bases		

	Abutments, Posts and S	Siluis						
	PEDESTAL COLUMN	10	(0.25+0.5) *2		0.500		7.500	
	COLUMN	10	(0.25+0.5) *2		5.000		75.000	
					Tot	al Quantity	82.500 sqr	n
				٦	Total Deducte	d Quantity	0.000 sqm	
					Net Tot	al Quantity	82.500 sqn	1
			Sa	ay 82.500 s	sqm @ Rs 86	9.05 / sqm	Rs 71	696.63
10	5.9.5 Centering and shuttering girders bressumers an		777	tc. and rem	noval of form	for:Lintels	, beams, pl	inth be
			Pl	_INTH SLA	ιB		T	ı
		1	10.450	S. 7	0.200		2.090	
		1	8.450		0.200		1.690	
		155	BE	AM (0.25*0	).5)		Т	
	SIDE	2*2	8.200		0.500		16.400	
	воттом	2*1	8.200	0.250			4.100	
	SIDE	1 <b>*</b> 2er	10.200	er Auth	0.500		10.200	
	ВОТТОМ	P1	10.200	0.200 LINTEL	F	1	2.040	
	INSIDE	1	(10+8)*2		0.200	4	7.200	
	OUT SIDE	1	(10.4+8.4) *2		0.200		7.521	
			S	SUNSHADE	<b>=</b>			
		1	(11.6+9.6) *2		0.700		29.680	
				RAMP				
		1	2.000	5.000			10.000	
		2	2.000		0.200		0.800	
		1	5.000		0.200		1.000	
			PL	INTH BEA	M			ı
	INSIDE	1	35.800		0.500		17.900	
	OUT SIDE	1	37.800		0.500		18.900	

				-	Total Deduct	ted Quantity	0.000 sqm	
					Net To	tal Quantity	129.521 sq	m
			Sa	y 129.521 s	sqm @ Rs 6	53.89 / sqm	Rs 84	692.49
11	5.9.3 Centering and shutte landings, balconies a			, etc. and	removal of	form for:Su	spended flo	oors, roo
				ROOF SLA	В	1		1
	воттом	1	11.000	9.000			99.000	
	SIDE	2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
			100	12.0	To	tal Quantity	103.800 so	mp
					Total Deduct	ed Quantity	0.000 sqm	
			23 8	8 2	Net To	tal Quantity	103.800 sq	m
			Sa	y 103.800 s	sqm @ Rs 8	20.89 / sqm	Rs 85	208.38
	charges etc.	2-	10-400	0.200	5.200		21.632	
	LONG WALL	<del>Z</del> Ker	10.400 ala vv at	0.200 er Autl	5.200 1011ty		21.632	
		Ker 2	8.000	0.200	5.200	4	21.632 16.640	
	LONG WALL	2	8.000 PA	0.200 RAPET WA	5.200 ALL		16.640	
	LONG WALL	2 2	8.000 PA	0.200 RAPET WA	5.200 ALL 0.800		16.640 3.521	
	LONG WALL	2	8.000 PA 11.000 9.000	0.200 RAPET WA 0.200 0.200	5.200 ALL 0.800 0.800		16.640	
	LONG WALL SHORT WALL	2 2 2	8.000 PA 11.000 9.000	0.200 RAPET WA 0.200 0.200	5.200 ALL 0.800 0.800		3.521 2.881	
	LONG WALL SHORT WALL ROLLING SHUTTER	2 2 2	8.000 PA 11.000 9.000	0.200 RAPET WA 0.200 0.200 EDUCTION 0.200	5.200 ALL 0.800 0.800 NS 3.000		3.521 2.881 -1.800	
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2	8.000 PA 11.000 9.000 D 3.000 1.500	0.200 RAPET WA 0.200 0.200 EDUCTION 0.200 0.200	5.200 ALL 0.800 0.800 NS 3.000 1.500		3.521 2.881 -1.800 -1.800	
	LONG WALL SHORT WALL ROLLING SHUTTER	2 2 2	8.000 PA 11.000 9.000	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	5.200 ALL 0.800 0.800 NS 3.000		3.521 2.881 -1.800	
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2 2 1 4	9.000 9.000 1.500 1.500	0.200 RAPET WA 0.200 0.200 0.200 0.200 0.200 STEP	5.200 ALL 0.800 0.800 NS 3.000 1.500 2.100		16.640 3.521 2.881 -1.800 -1.800 -0.630	
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2	8.000 PA 11.000 9.000 D 3.000 1.500	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	5.200 ALL 0.800 0.800 NS 3.000 1.500 2.100	otal Quantity	16.640  3.521 2.881  -1.800 -0.630  0.135	m
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2 2 1 4	9.000 9.000 1.500 1.500	0.200 0.200 0.200 0.200 0.200 0.200 0.200 STEP 0.150	5.200 ALL 0.800 0.800 NS 3.000 1.500 2.100  0.300  To	etal Quantity	16.640  3.521 2.881  -1.800 -1.800 -0.630  0.135  44.809 cur	
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2 2 1 4	9.000 9.000 1.500 1.500	0.200 0.200 0.200 0.200 0.200 0.200 0.200 STEP 0.150	5.200 ALL 0.800 0.800 NS 3.000 1.500 2.100  Total Deduct	ed Quantity	16.640  3.521 2.881  -1.800 -1.800 -0.630  0.135 44.809 cur -4.230 cum	l
	LONG WALL SHORT WALL  ROLLING SHUTTER WINDOW	2 2 2 2 1 4	8.000 PA 11.000 9.000 3.000 1.500 1.500	0.200 0.200 0.200 0.200 0.200 0.200 0.200 STEP 0.150	5.200 ALL 0.800 0.800 NS 3.000 1.500 2.100  Total Deduct	ted Quantity	3.521 2.881 -1.800 -1.800 -0.630  0.135 44.809 cur -4.230 cum 40.579 cum	l

	Wall Outside	1	36.000		5.000		180.000	
	Wall Inside	1	37.600		5.000		188.000	
		T.	DI	EDUCTION	IS			1
	ROLLING SHUTTER	1	3.000		3.000		-9.000	
	WINDOW	4	1.500		1.500		-9.000	
	DOOR	1	1.500		2.100		-3.150	
		T.	PA	RAPET WA	<b>ALL</b>			
	SIDE	2	11.000		0.800		17.600	
	TOP	2	11.000	0.150			3.300	
	SIDE	2	9.000	400	0.800		14.400	
	TOP	2	9.000	0.150			2.700	
			SU	NSHADE T	OP			
		1	(11.6+9.6) *2	52	0.600		25.440	
		1 AT		COLUMN	3 380	1		
		10	0.500	0.250	5.000		6.250	
			MARKET THE	BEAM	port.			
		2 er	1.000 at	8.200	ority		16.400	
	-	1	1.000	10.200			10.200	
		P	NEUT	RALIZATIO	N PIT	1		
	_	2	2.500		1.500		7.500	
		1	2.500	2.500			6.250	
					То	tal Quantity	478.040 so	m
				Т	Total Deduct	ed Quantity	-21.150 sqr	m
					Net To	tal Quantity	456.890 sq	m
			Sa	y 456.890 s	sqm @ Rs 3	16.06 / sqm	Rs 144	404.65
14	13.16.1 6 mm cement plaster of	f mix:1:3(1	I cement : 3 f	ine sand)				
	Roof slab	1	11.000	9.000			99.000	
		2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
	S U N S H A D E B O T T O M	1	(9.6+11.6) *2		0.600		25.440	
		1			Т.	tal Quantity	129.240 sc	1

					Total Deduct	ted Quantity	0.000 sqm	
						<u>_</u>	129.240 sq	m
			Sa	y 129.240 s	sqm @ Rs 2	69.26 / sqm	Rs 347	799.16
15	13.43.1 Applying one coat of surface:Water thinnal			nt primer o	of approved	d brand and	I manufactu	ire on w
	Wall Outside	1	36.000		5.000		180.000	
	Wall Inside	1	37.600		5.000		188.000	
			D	EDUCTION	IS			
	ROLLING SHUTTER	1	3.000		3.000		-9.000	
	WINDOW	4	1.500	B.	1.500		-9.000	
	DOOR	1	1.500		2.100		-3.150	
			PA	RAPET WA	<u>LL</u>			
	SIDE	2	11.000	51/1	0.800		17.600	
	TOP	2	11.000	0.150	10	4	3.300	
	SIDE	2	9.000	35.7	0.800	and the second	14.400	
	TOP	2	9.000	0.150	2		2.700	
		17	SU	NSHADE T	OP .			
		Ker 1	(11.6+9.6) *2	er Auth	0.600		25.440	
				COLUMN				
		10	0.500	0.250	5.000		6.250	
				BEAM				
		2	1.000	8.200			16.400	
		1	1.000	10.200			10.200	
	Roof slab	1	11.000	9.000			99.000	
		2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
	S U N S H A D E B O T T O M	1	(9.6+11.6) *2		0.600		25.440	
					To	tal Quantity	593.530 sc	ηm
				7	otal Deduct	ed Quantity	-21.150 sqr	n
					Net To	tal Quantity	572.380 sq	m
			S	ay 572.380	sqm @ Rs	71.09 / sqm	Rs 400	690.49

16	13.82.2 Wall painting with acrylic	c emulsio	on paint, havin	g VOC (Vo	latile Organi	c Compoun	d) content le	ess tha
	grams/ litre, of approved achieve even shade and			e including	applying add	ditional coat	ts wherever	require
	Wall Outside	1	36.000		5.000		180.000	
	Wall Inside	1	37.600		5.000		188.000	
			DE	EDUCTION	IS			
	ROLLING SHUTTER	1	3.000		3.000		-9.000	
	WINDOW	4	1.500		1.500		-9.000	
	DOOR	1	1.500		2.100		-3.150	
			PAI	RAPET WA	ALL			
	SIDE	2	11.000	19	0.800		17.600	
	ТОР	2	11.000	0.150			3.300	
	SIDE	2	9.000	5. 7	0.800		14.400	
	ТОР	2	9.000	0.150	1-2		2.700	
		101	SUI	NSHADE T	OP	L		
		1	(11.6+9.6)		0.600		25.440	
		Ke	rala Wate	COLUMN	ority			
		10	0.500	0.250	5.000		6.250	
			K	BEAM		1		
		2	1.000	8.200			16.400	
		1	1.000	10.200			10.200	
	Roof slab	1	11.000	9.000			99.000	
		2	11.000		0.120		2.640	
		2	9.000		0.120		2.160	
	S U N S H A D E B O T T O M	1	(9.6+11.6) *2		0.600		25.440	
					To	al Quantity	593.530 sq	lm
				T	Total Deduct	ed Quantity	-21.150 sqr	n
					Net To	al Quantity	572.380 sqı	m
			Say	/ 572.380 s	sqm @ Rs 12	26.55 / sqm	Rs 724	134.69
17	10.4 Providing and fixing 1 m	ım thick l	M.S. sheet slid	ing- shutte	rs, with fram	e and diag	onal braces	of 40x

	angle and T-iron guid steel primer.				I	T	-	·
	Window	4	1.500		1.500		9.000	
					То	tal Quantity	9.000 sqm	
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	9.000 sqm	
			S	ay 9.000 sq	m @ Rs 59	12.90 / sqm	Rs 532	216.10
18	10.5.1 Providing and fixing 1 gusset plates at the justice coat of approved stee	unctions and	corners, all	necessary	fittings com	plete, includ	ding applyin	
			1/40	DOOR		I	I	I
		1	1.500		2.100		3.151	
		( )	X 3	K. W	То	tal Quantity	3.151 sqm	
		12	1 KV	733/AT	otal Deduct	ed Quantity	0.000 sqm	
		1/58			Net To	tal Quantity	3.151 sqm	
		400	S	Say 3.151 sq	m @ Rs 52	44 96 / sam	Rs 16	526 97
19	10.6.1 Supplying and fixing	K Ar	919 \// 91	ved make,	made of re	quired size	M.S. laths,	interlocl
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured and M.S. top cover of	r entire lengt ith brackets, omplete, incl I from high to	h and jointe side guides uding the c ensile steel	ved make, d together a and arrange ost of provi	made of reat the end be ements for inding and find quate streng	quired size y end locks nside and out ting necess gth conform	M.S. laths, , mounted outside locking ary 27.5 cn	interlock on speci g with p n long v 154 - pa
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured	r entire lengt ith brackets, emplete, incl I from high to f required thi	h and jointe side guides uding the c ensile steel ckness for r	ved make, d together a and arrange ost of provi	made of reat the end be ements for it ding and fit quate strent ers.80x1.25	quired size y end locks nside and out ting necess gth conform	M.S. laths, , mounted outside locking eary 27.5 cm ing to IS: 44 aths with 1.2	interlock on speci g with p n long v 154 - pa
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured and M.S. top cover of	r entire lengt ith brackets, omplete, incl I from high to	h and jointe side guides uding the c ensile steel	ved make, d together a and arrange ost of provi	made of reat the end bements for inding and fix quate strengers.80x1.25	quired size y end locks nside and out king necess gth conform mm M.S. la	M.S. laths, mounted cutside lockin ary 27.5 cm ing to IS: 44 aths with 1.2	interlock on speci g with pong volume 154 - pa 15 mm th
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured and M.S. top cover of	r entire lengt ith brackets, emplete, incl I from high to f required thi	h and jointe side guides uding the c ensile steel ckness for r	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of reat the end bements for inding and fix quate strengers.80x1.25	quired size y end locks nside and out ting necess gth conform mm M.S. la	M.S. laths, mounted cutside lockin ary 27.5 cm ing to IS: 44 ths with 1.2	interlocion speci g with p n long v 154 - pa
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured and M.S. top cover of	r entire lengt ith brackets, emplete, incl I from high to f required thi	h and jointe side guides uding the c ensile steel ckness for r	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of reat the end between the for indicate strengers.80x1.25  3.000  Total Deduct	quired size y end locks nside and outing necess gth conform mm M.S. la tal Quantity ed Quantity	M.S. laths, mounted outside locking 27.5 cm ing to IS: 44 aths with 1.2 9.000 9.000 sqm 0.000 sqm	interlocion speci g with p n long v 154 - pa
19	Supplying and fixing together through their designed pipe shaft wand pull operation cosprings manufactured and M.S. top cover of	r entire lengt ith brackets, emplete, incl I from high to f required thi	h and jointe side guides uding the c ensile steel ckness for r 3.000	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of reat the end between the for indicate strengers.80x1.25  3.000  Total Deduct	quired size y end locks nside and outing necess oth conform mm M.S. la tal Quantity ed Quantity tal Quantity	M.S. laths, mounted outside locking 27.5 cm ing to IS: 44 aths with 1.2 9.000 sqm 0.000 sqm 9.000 sqm	interlocl on speci g with po n long v 154 - pa 15 mm th
20	Supplying and fixing together through their designed pipe shaft wand pull operation consprings manufactured and M.S. top cover of top cover	r entire lengt ith brackets, pmplete, incl from high to frequired thi  1  vitrified floor less than 0.0 m thick ceme	h and jointe side guides uding the censile steel ckness for read 3.000	ved make, d together a and arrange ost of provi wire of adec olling shutte  ay 9.000 sq rent sizes (t forming to Is	made of recat the end between the end of the e	quired size y end locks nside and out king necess gth conform mm M.S. la tal Quantity ed Quantity tal Quantity 87.20 / sqm be specifie f approved r sand), inclu	M.S. laths, , mounted outside locking ary 27.5 cm ing to IS: 44 aths with 1.2  9.000  9.000 sqm  0.000 sqm  Rs 31:  d by the manake, in all ding grouting	interloc on speci g with p n long v 454 - pa 25 mm th 384.80
	Supplying and fixing together through their designed pipe shaft wand pull operation consprings manufactured and M.S. top cover of top cover	r entire lengt ith brackets, pmplete, incl from high to frequired thi  1  vitrified floor less than 0.0 m thick ceme	h and jointe side guides uding the censile steel ckness for read 3.000	ved make, d together a and arrange ost of provi wire of adec olling shutte  ay 9.000 sq rent sizes (t forming to Is	made of recat the end between the end of the e	quired size y end locks nside and out king necess gth conform mm M.S. la tal Quantity ed Quantity tal Quantity 87.20 / sqm be specifie f approved r sand), inclu	M.S. laths, , mounted outside locking ary 27.5 cm ing to IS: 44 aths with 1.2  9.000  9.000 sqm  0.000 sqm  Rs 31:  d by the manake, in all ding grouting	interlock on speci g with pen n long v 454 - pan 25 mm th

	OTED	_	4.500	0.000			0.000	
	STEP	2	1.500	0.300			0.900	
		2	1.500	0.150			0.450	
					To	otal Quantity	84.950 sq	m
					Total Deduc	ted Quantity	0.000 sqm	
					Net To	otal Quantity	84.950 sqr	n
			Sa	ay 84.950 so	ղm @ Rs 17	77.34 / sqm	Rs 150	0985.03
21	od327848/2021_202 Supplying and fixing							
		1					1.000	
					To	otal Quantity	1.000 kg	1
			100	ASS.	Fotal Deduc	ted Quantity	0.000 kg	
			1			otal Quantity		
			PG 7 9	Say 1.000	kg @ Rs 5	8227.39 / kg	Rs 58	227.39
SI No	Description	No	L	В	D	CF	Quantity	Remark
		6Compou	und Wall	(Cost Inde	x:36.44 %)			
	Earth work in exca- trenches or drains ( ramming of bottoms excavated soil as d	(not exceedin s, lift up to 1.	g 1.5 m in w 5 m, includir	vidth or 10 s	sqm on planut the exca	n), including	dressing o	of sides a
	trenches or drains (	(not exceedin s, lift up to 1.	g 1.5 m in w 5 m, includir	vidth or 10 s	sqm on planut the exca	n), including	dressing o	of sides a
	trenches or drains ( ramming of bottoms excavated soil as d	(not exceedin s, lift up to 1.: lirected, within	g 1.5 m in w 5 m, includir n a lead of 5	vidth or 10 s ng getting o 50 m.All kin	sqm on plan but the exca ds of soil 0.700	n), including	dressing of and disposa	of sides a
	trenches or drains ( ramming of bottoms excavated soil as d	(not exceedin s, lift up to 1.: lirected, within	g 1.5 m in w 5 m, includir n a lead of 5	vidth or 10 sing getting com.All kin 0.800	sqm on plan but the exca ds of soil 0.700	n), including avated soil a	179.200 c	of sides a
	trenches or drains ( ramming of bottoms excavated soil as d	(not exceedin s, lift up to 1.: lirected, within	g 1.5 m in w 5 m, includir n a lead of 5	vidth or 10 sing getting com.All kin 0.800	sqm on plan but the exca ds of soil 0.700 Total Deduc	n), including avated soil a otal Quantity	179.200 c 0.000 cum	of sides and of surp
	trenches or drains ( ramming of bottoms excavated soil as d	(not exceedin s, lift up to 1.: lirected, within	g 1.5 m in w 5 m, includir n a lead of 5 320.000	vidth or 10 sing getting com.All kin 0.800	sqm on plan but the exca ds of soil 0.700 Total Deduc Net To	n), including avated soil a contact Quantity ted Quantity	179.200 c 0.000 cum	of sides and of surp
2	trenches or drains ( ramming of bottoms excavated soil as d	(not exceedings, lift up to 1.) lirected, withing 1	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr	vidth or 10 sing getting of 50 m.All kin 0.800 ay 179.200 of sete of spec	sqm on planeut the excards of soil  0.700  Total Deduction  Net Total Coum @ Rs 2	n), including avated soil a cotal Quantity cotal Qu	179.200 c 0.000 cum 179.200 c Rs 53	of sides and of surplum  544.96
2	trenches or drains (ramming of bottoms excavated soil as decorated wall  4.1.8  Providing and laying shuttering - All work	(not exceedings, lift up to 1.) lirected, withing 1	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr	vidth or 10 sing getting of 50 m.All kin 0.800 ay 179.200 of sete of spec	sqm on planeut the excards of soil  0.700  Total Deduction  Net Total Coum @ Rs 2	n), including avated soil a cotal Quantity cotal Qu	179.200 c 0.000 cum 179.200 c Rs 53	of sides and of surpour sum sentering and
2	trenches or drains (ramming of bottoms excavated soil as dwall  4.1.8  Providing and laying shuttering - All work nominal size)	g in position ck up to plinth	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr level:1:4:8 (	or didth or 10 sing getting of 50 m.All king 0.800 ay 179.200 contests of special cement :	sqm on plan but the exca ds of soil 0.700  To Total Deduc  Net To cum @ Rs 2  ified grade 4 coarse sa  0.100	n), including avated soil a cotal Quantity cotal Qu	179.200 c  179.200 c  0.000 cum  179.200 cc  Rs 53  e cost of ceed stone as	um  544.96 entering a
2	trenches or drains (ramming of bottoms excavated soil as dwall  4.1.8  Providing and laying shuttering - All work nominal size)	g in position ck up to plinth	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr level:1:4:8 (	ay 179.200 cete of spec 0.800	sqm on plan but the exca ds of soil 0.700  To Total Deduc  Net To cum @ Rs 2  ified grade 4 coarse sa  0.100	n), including avated soil a btal Quantity btal Quantity btal Quantity 298.80 / cum excluding the and : 8 grad	179.200 c  179.200 c  0.000 cum  179.200 cc  Rs 53  e cost of ceed stone ag  25.600  25.600 cu	um  544.96 entering a
2	trenches or drains (ramming of bottoms excavated soil as dwall  4.1.8  Providing and laying shuttering - All work nominal size)	g in position ck up to plinth	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr level:1:4:8 (	ay 179.200 cete of spec 0.800	sqm on plan but the exca ds of soil 0.700  To Total Deduc  Net To cum @ Rs 2  ified grade 4 coarse sa  0.100  Total Deduc	n), including avated soil a btal Quantity btal Quantity 298.80 / cum excluding the and : 8 grad btal Quantity	179.200 c  179.200 c  0.000 cum  179.200 cc  Rs 53  e cost of ce ed stone ag  25.600  25.600 cu  0.000 cum	um  544.96 entering a ggregate
2	trenches or drains (ramming of bottoms excavated soil as dwall  4.1.8  Providing and laying shuttering - All work nominal size)	g in position ck up to plinth	g 1.5 m in w 5 m, includir n a lead of 5 320.000  Sa ement concr level:1:4:8 (	ay 179.200 cete of spect 1 cement :	sqm on plan but the exca ds of soil 0.700  Total Deduc  Net Total cum @ Rs 2  ified grade 4 coarse sa  0.100  Total Deduc  Net Total Deduc  Net Total Deduc	n), including avated soil a cotal Quantity etal Quantity excluding the and : 8 grades otal Quantity etal Quantity	179.200 cum 179.200 cum 179.200 cum 179.200 cum 179.200 cum 25.600 cum 25.600 cum 25.600 cum	um  544.96 entering a ggregate

	concrete 1:6:12 (1 cerevel with:Cement mo			_	ne aggrega	te 20 mm no	ominal size)	up to pl
	Wall	1	320.000	0.450	0.450		64.800	
					To	tal Quantity	64.800 cui	m
				Т	Total Deduct	ed Quantity	0.000 cum	
					Net To	otal Quantity	64.800 cun	n
			Sa	ıy 64.800 cu	ım @ Rs 72	49.94 / cum	Rs 469	9796.11
	Providing and laying using cement content transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve word-charge. Note:- Cemeper design mix is pay	t as per appr work in trans specified gra ite of laying, extures in rec kability without ent content co	roved designation in the control of	n mix, manuall leads, had broked ceme ne cost of coproportions strength and this item is	ufactured in aving continent concrete entering, sho as per IS: 9 ad durability s @330 kg/o	fully autom uous agitate work includuttering finis 103 to acceas per directum. Excess	atic batching mixer, material mixer, material mixer, material mixer mixer material mixer material mixer material mixer material mixer material mixer m	g plant anufactung of R.I inforcent rd settin Engineer
	For column footing	2	1.000	1.000	0.400	1	0.800	
	For column	2	0.300	0.300	1.000		0.180	
				HIND PART		otal Quantity		
		Kera	ala Wat	er Auth	otal Deduct	ed Quantity	0.000 cum	
		DI			Net To	otal Quantity	0.980 cum	
			S	ay 0.980 cu	ım @ Rs 99	47.98 / cum	Rs 97	749.02
5	5.37.2 Providing and laying a using cement content transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve worcharge. Note:- Cemeper design mix is pay	t as per appr work in trans specified gra ite of laying, extures in rec kability without ent content co	roved designation in the control of	n mix, manuall leads, had broked ceme ne cost of coproportions strength are this item is	ufactured in aving continent concrete entering, she as per IS: 9 and durability is @330 kg/d k above plir	fully autom uous agitate work includuttering finis 103 to accease per directum. Excess	atic batchined mixer, made mixer, made in the plenate of the Est o	ng plant anufacture og of R.M inforcent rd settin Engineer ent used vel
				7	Total Deduct	ed Quantity	0.000 cum	
				7		ted Quantity otal Quantity		

6	5.22.6 Steel reinforcemen binding all complet		_				•	
		1	1.600		100.000		160.000	
					To	al Quantity	160.000 ki	logram
				Т	otal Deducte	ed Quantity	0.000 kilog	ram
			2 400.0	.00 1 "	Net Tot n @ Rs 98.92		160.000 kil	ogram 827.20
7	5.9.1 Centering and shutt columns, etc for ma							
	Column footing	2	4.000		0.400		3.200	
			C. 1 1		Tot	al Quantity	3.200 sqm	
		1	30 3	8 77	otal Deducte	ed Quantity	0.000 sqm	
			LKVIE	78.3KA	Net To	al Quantity	3.200 sqm	
		155		Say 3.200 s	sqm @ Rs 33	37.42 / sqm	Rs 10	79.74
8	5.9.6 Centering and shu Abutments, Posts	=	ing strutting	, etc. and	removal of	form for:C	olumns, Pil	lars, Pie
	For column	Ker	ala <sub>1.200</sub> at	er Auth	4.000		9.600	
					Tot	al Quantity	9.600 sqm	
				1	otal Deducte	ed Quantity	0.000 sqm	
					Net To	al Quantity	9.600 sqm	
				Say 9.600 s	qm @ Rs 86	89.05 / sqm	Rs 83	42.88
9	50.6.7.2 Laterate masonry was mortar 1:6 for super charges etc.	•						
	Wall	1	280.000	0.200	1.800		100.800	
	Wall column	92	0.100	0.100	1.800		1.657	
	Gate	1	5.000	0.200	1.800		-1.800	
					To	al Quantity	102.457 cu	ım
				Т	otal Deducte	ed Quantity	-1.800 cum	
					Net To	al Quantity	100.657 cu	m
			Say	100.657 cu	ım @ Rs 796	88.75 / cum	Rs 802	110.47
	10.25.2							

	up sections/frame approved steel pr railings, brackets,	imer using stru	ctural steel	_	•			•
	Gate	1	5.000	2.400	40.000		480.000	
					To	tal Quantity	480.000 kg	]
				٦	Total Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	480.000 kg	
				Say 480.0	00 kg @ Rs	155.13 / kg	Rs 74	462.40
11	13.83.2 Wall painting with applying additiona			100	•	•	•	
	Gate	1	5.000	2.400	2		12.000	
		-	45 B	\$ S	To	tal Quantity	12.000 sqr	n
		11		$20/\lambda$	Total Deduct	ed Quantity	0.000 sqm	
		14	13.1%		Net To	tal Quantity	12.000 sqm	1
		J. Harris	S	ay 12.000 s	sqm @ Rs 1	34.94 / sqm	Rs 16	19.28
12	13.1.1 12 mm cement pla	ster of mix:1:4 (	1 cement : 4	fine sand)				
	Wall	Kera	280.000 t	er Auth	1011tV 1.800		1008.000	
	Wall top	1	280.000	0.200			56.000	
	Projection	92*2	0.100		1.800		33.121	
	Gate	1	5.000		1.800		-9.000	
					То	tal Quantity	1097.121 s	sqm
					Total Deduct	ed Quantity	-9.000 sqm	
					Net To	tal Quantity	1088.121 s	qm
			Say	1088.121	sqm @ Rs 3	16.06 / sqm	Rs 343	911.52
13	13.48.1 Finishing with De manufacturers special one coat of special	ecifications:Two	or more coa	ats applied			• .	
	Wall	2	280.000		1.800		1008.000	
			280.000	0.200			56.000	
	Wall top	1						
	Wall top Projection	92*2	0.100		1.800		33.121	

					Fatal Dadwat	o al Occasión d	0.000.000	
							-9.000 sqm 1088.121 sc	nm
			Sav	, 1088.121 s	sqm @ Rs 1			
SI No	Description	No	L	В	D	CF	Quantity	Remark
		7Internal	Roads	(Cost Index	c:36.44 %)			
1	16.91.2 Providing and laying falawns, drive ways or lig vibratory method using sand, compacting and layerthrough vibratory blocks as per required of Engineer-in-Charge pattern.	ght traffic page PU mould proper em compaction size and page Public Publ	arking etc, of I, laid inrequ bedding/lay I by using pla attern, finish	f required si iired colour ring of inter ate vibrator ing and swe	trength,thick & pattern or locking pa f, filling the jo eepingextra	ness & size ver 50mm t ver blocks oints with sa sand. comp	/ shape, ma hick compac into the sar and andcuttion lete all as po	de by table cted bed of nd bedding of paver er direction
	5m wide road	1	280.000	5.000	2		1400.000	
		6 1	Defi	20/2	To	tal Quantity	1400.000 s	qm
		125	DE		Total Deduct	ed Quantity	0.000 sqm	
				<b>达沙</b> 茨。	Net To	tal Quantity	1400.000 so	qm
			Say <sup>2</sup>	1400.000 so	qm @ Rs 11	28.84 / sqm	Rs 1580	376.00
2	Manufacturing, supplyiface to be fully covered conforming to type - IV subjectmatter, message by an adhesive backing ASTM-D-4956-01 and support frame of M.S. andfixed with 2 Nos M. 50x50x6 mm welded wholes in pipes, angles painted with two or manufacture over printle black and white colours over and including appropersion of the property of the colours over and including appropriate to be supplied to the colours over and including appropriate to be fully constituted to be supplied to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be fully covered to the colours over and including appropriate to be considered to the colours over and including appropriate to be considered to the colours over and including appropriate to the colours over an account of the colours over an account of the colours over a colour over a co	ng and fixing and fixing of ASTM-E e (bi-lingual g which share angle iron S. angles owith base porture coats owith coats owing coat owith share porture coats owith coats owing coat owing	n intensity en 14956-01 in l), symbols all be activated as a with sure of size 25x f size 35x35; late of size riding & fixing f synthetic of sinc chrome of aluminiuming coat in symbols.	ctive sign be necessary and borders and borders ed by apply uitable size 25x3 mm to a 100x100x and M.S. messenamel paid ate yellow promotes and sheet tobe necluding all	dtype heat ver white or etc. as per ving heatand daluminium along with the vertical post 5 mm at the sage plate int of requirer interpolation of the painted will leads and lead	activated resolvent of required ed shade a cal MS-Tees the two or motifts etc. con	etro reflective recombination of the content of appropriate to be content of appropriate to be content of appropriate to be content of appropriate as periodical properties and of appropriate as periodical properties and of appropriate as periodical properties as periodical properties and of appropriate as periodical properties as periodical properties as periodical properties are properties as periodical properties as periodical properties are properti	e sheeting in including in substrate or class-2 of c/c to back is, mounted ection ISMT ing making work to be eved brand expainted in epoxy paint or drawing in including in the context of
	triangular shape havi		de of 900 n	nm with su	=	h of 3650 r	mm	equilateral
	triangular shape havi	ng each si 2	de of 900 r	nm with su	ipport lengt		nm 2.000	equilateral
	triangular shape havi		de of 900 n		ipport lengt	tal Quantity	2.000 2.000 No	equilateral

	Say 2.000 No @ Rs 5370.69 /	No Rs 10741.38
3	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 face to be fully covered with high intensity encapsulatedtype heat activated conforming to type - IV of ASTM-D4956-01 in blue and silver white or other coll subjectmatter, message (bi-lingual), symbols and borders etc. as per IRC: 67-by an adhesive backing which shall be activated by applying heatand pressure ASTM-D-4956-01 and fixing the same withsuitable sized aluminium alloy riv support frame of M.S. angle iron of size 25x25x3 mm along with theft resist and fixed with 2 Nos M.S. angles of size 35x35x5 mm to a vertical post made up 50x50x6 mm welded with base plate of size 100x100x 5 mm at the bottom of holes in pipes, angles flats, providing & fixingM.S. message plate of require painted with two or morecoats of synthetic enamel paint of required shade &manufacture over priming coat of zinc chromate yellow primer (vertical MS-Toblack and white colours). Backside of aluminium sheet tobe painted with two or over and including appropriate priming coat including all leads and lifts etc. of specification and direction of Engineer-in-Charge. Mandatory / Regulatory	retro reflective sheeting our combination including 2001, pastedon substrate e conforming to class-2 of rets @ 20 cm c/c to back tant measures, mounted to M.S.Tee section ISMT and and including making ed size, steel work to be and of approved brand resupport to be painted in more coats of epoxy paint complete as per drawing,
	diametre with support length of 3750 mm	0.000
	Z Total Quant	2.000 lity 2.000 No
	Total Deducted Quant	
	Net Total Quant	
	Kerala Water Authority Say 2.000 No @ Rs 7103.70 / I	
4	Providing, laying and making kerb channel 30 cm wide and 50 mm thick with cement: 3 coarse sand: 6 graded stone aggregate 20 mm nominal size) over ballast 40 mm nominal size, well rammed and consolidated and grouted with find the top smooth etc. complete and as per direction Engineer - in-Charge.	er 75 mm bed of dry brick
	1 642.000 0.300	192.600
	Total Quant	ity 192.600 sqm
	Total Deducted Quant	ity 0.000 sqm
	Net Total Quant	ity 192.600 sqm
	Say 192.600 sqm @ Rs 572.09 / so	m Rs 110184.53
5	16.69 Providing and laying at or near ground level factory made kerb stone of M-25 position to the required line, level and curvature jointed with cement mortar sand), including making joints with or without grooves (thickness of joints exce to more than 5 mm), including making drainage opening wherever required con of Engineer-in-charge (length of finished kerb edging shall be measured for kerb stone shall be approved by Engineer-in-Charge)	1:3 ( 1 cement : 3 coarse pt at sharp curve shall not applete etc. as per direction

		1	560.000	0.200	0.300		33.600	
						tal Quantity		n
				٦		ed Quantity		
					Net To	tal Quantity	33.600 cun	1
			Sa	y 33.600 cu	ım @ Rs 99	21.30 / cum	Rs 333	355.68
SI No	Description	No	L	В	D	CF	Quantity	Remark
	8	Storm Wat	ter Drains	(Cost Inc	dex:36.44 %	b)		
1	2.8.1 Earth work in excavat trenches or drains (no ramming of bottoms, li excavated soil as dire	t exceeding	g 1.5 m in w 5 m, includin	idth or 10 s g getting o	sqm on plar out the exca	n), including	dressing o	f sides a
		1	280.000	0.700	0.600		117.600	
		1	347 9	2 St	To	tal Quantity	117.600 сเ	ım
		11		$20/\lambda$	Total Deduct	ed Quantity	0.000 cum	
		1A	DE		Net To	tal Quantity	117.600 cu	m
2	4.1.8 Providing and laying in shuttering - All work u	T7	ement concre	ete of speci	ified grade e	_	e cost of ce	-
2		T7	ement concre	ete of speci	ified grade e	excluding th	e cost of ce	ntering a
2	Providing and laying in shuttering - All work up	p to plinth I	ement concre evel:1:4:8 (1	ete of speci	ified grade e 4 coarse sa 0.100	excluding th nd:8 grad	e cost of ce ed stone ag	ntering a
2	Providing and laying in shuttering - All work up	p to plinth I	ement concre evel:1:4:8 (1	ete of speci Cement :	ified grade 6 4 coarse sa 0.100	excluding th nd:8 grad	e cost of ce ed stone ag 19.600	ntering a
2	Providing and laying in shuttering - All work up	p to plinth I	ement concre evel:1:4:8 (1	ete of speci Cement :	offied grade of the desired for the desired fo	excluding the nd: 8 grade tall Quantity ed Quantity	e cost of ce ed stone ag 19.600	ntering a gregate n
2	Providing and laying in shuttering - All work up	p to plinth I	ement concre evel:1:4:8 (1 280.000	ete of speci Cement :	offied grade of the following of the following for the following f	excluding the nd: 8 grade tall Quantity ed Quantity	e cost of ce ed stone ag 19.600 19.600 cur 0.000 cum	ntering a gregate
3	Providing and laying in shuttering - All work up	p to plinth 1	ement concre evel:1:4:8 (1 280.000 Sa	0.700  1 0.700  2 19.600 cuete of speci	o.100 Total Deduct Net To Im @ Rs 68	excluding that it al Quantity ed Quantity otal Quantity 57.61 / cum	e cost of ce ed stone ag  19.600  19.600 cum  19.600 cum  Rs 134	ntering a gregate of the state
	Providing and laying in shuttering - All work up nominal size)  4.1.5 Providing and laying in shuttering - All work up	p to plinth 1	ement concre evel:1:4:8 (1 280.000 Sa	0.700  1 0.700  2 19.600 cuete of speci	o.100 Total Deduct Net To Im @ Rs 68	excluding that it al Quantity ed Quantity otal Quantity 57.61 / cum	e cost of ce ed stone ag  19.600  19.600 cum  19.600 cum  Rs 134	ntering a gregate of the state
	Providing and laying in shuttering - All work up nominal size)  4.1.5 Providing and laying in shuttering - All work up nominal size)	p to plinth 1	Sament concre evel:1:4:8 (1 280.000	0.700  y 19.600 cuete of speciement : 3 cerement : 3 cere	0.100 To Otal Deduct Net To Otal Grade & Coarse sand 0.500	excluding that it al Quantity ed Quantity otal Quantity 57.61 / cum	e cost of ce ed stone ag  19.600  19.600 cum  0.000 cum  Rs 134  e cost of ce stone aggreg  14.000	ntering a gregate of the state
	Providing and laying in shuttering - All work up nominal size)  4.1.5 Providing and laying in shuttering - All work up nominal size)	p to plinth 1	Sament concre evel:1:4:8 (1 280.000	0.700  1 0.700  1 0.700  2 1 0.700  2 1 0.700  2 1 0.700  3 1 0.700	0.100 To Total Deduct Net To Im @ Rs 68 Ified grade 6 coarse sand 0.500	excluding the nd: 8 graded sexcluding the description of the control of the contr	e cost of ce ed stone ag  19.600  19.600 cum  0.000 cum  19.600 cum  Rs 134  e cost of ce stone aggreg  14.000  14.000 cur	ntering a gregate of the state
	Providing and laying in shuttering - All work up nominal size)  4.1.5 Providing and laying in shuttering - All work up nominal size)	p to plinth 1	Sament concre evel:1:4:8 (1 280.000	0.700  1 0.700  1 0.700  2 1 0.700  2 1 0.700  2 1 0.700  3 1 0.700	0.100 Total Deduct  Res 68  ified grade 6 coarse sand  0.500 Total Deduct	excluding the nd: 8 gradestal Quantity ed Quantity 57.61 / cum excluding the control of the cont	e cost of ce ed stone ag  19.600  19.600 cum  0.000 cum  19.600 cum  Rs 134  e cost of ce stone aggreg  14.000  14.000 cur	ntering a gregate of the state
	Providing and laying in shuttering - All work up nominal size)  4.1.5 Providing and laying in shuttering - All work up nominal size)	p to plinth 1	Sament concrevel:1:3:6 (1 concre	0.700  1 0.700  1 0.700  2 1 0.700  2 1 0.700	O.100 To O.1	excluding the nd: 8 gradestal Quantity ed Quantity 57.61 / cum excluding the control of the cont	e cost of ce ed stone ag  19.600  19.600 cum  19.600 cum  Rs 134  e cost of ce stone aggreg  14.000  14.000 cum  14.000 cum	ntering a gregate of the state

	nominal size)				Jaise sailu		tone aggreo	
	Wearing coat	1	280.000	0.500	0.050		7.000	
					Тс	tal Quantity	7.000 cum	
				7	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	7.000 cum	
			S	ay 7.000 cu	ım @ Rs 80	40.95 / cum	Rs 56	286.65
5	5.9.2 Centering and shutte attached pilasters, be	_	linth and strin		etc.	for:Walls (a	-	s) incluc
	Wall-outside	1	280.000		0.600		168.000	
	Inside	1	280.000		0.500		140.000	
				5. 7	To	tal Quantity	308.000 sc	mŗ
		12	4100		Total Deduct	ed Quantity	0.000 sqm	
		155			Net To	tal Quantity	308.000 sq	m
		400	Sa	y 308.000 s	sqm @ Rs 7	21.70 / sqm	Rs 222	283.60
SI No	Description	No	L	В	D	CF	Quantity	Remar
1	281	Kei						
1	2.8.1 Earth work in excav trenches or drains (ramming of bottoms excavated soil as di	not exceeding, lift up to 1.	g 1.5 m in w 5 m, includin	idth or 10 s	sqm on plar ut the exca	n), including	dressing o	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms	not exceeding, lift up to 1.	g 1.5 m in w 5 m, includin	idth or 10 s	sqm on plar ut the exca	n), including	dressing o	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms	not exceeding, lift up to 1.	g 1.5 m in w 5 m, includin n a lead of 5	idth or 10 s g getting o 0 m.All kin	sqm on plar ut the exca ds of soil	n), including	dressing o	f sides a
1	Earth work in excav trenches or drains (in ramming of bottoms excavated soil as di	not exceeding, lift up to 1. rected, within	g 1.5 m in w 5 m, includin n a lead of 5	idth or 10 s g getting o 0 m.All kin 0.800	sqm on plar ut the exca ds of soil 0.900	n), including	dressing o and disposa 17.281	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms excavated soil as dientification).  For ramp	not exceeding, lift up to 1. rected, within 1	1.5 m in w 5 m, includin n a lead of 5 24.000 4.000	g getting o 0 m.All kin 0.800 1.500	sqm on plar ut the exca ds of soil 0.900 0.100	n), including	dressing o and disposa 17.281 0.601	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms excavated soil as dispersional for ramputation of the second soil as dispersional for ramputatio	not exceeding, lift up to 1. rected, within 1	1.5 m in w 5 m, includin n a lead of 5 24.000 4.000 1.000	g getting o 0 m.All kin 0.800 1.500 0.500	on plar ut the exca ds of soil 0.900 0.100 0.800	n), including	17.281 0.601 0.050 9.416	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms excavated soil as dispersional for ramputation of the second soil as dispersional for ramputatio	not exceeding, lift up to 1. rected, within 1	1.5 m in w 5 m, includin n a lead of 5 24.000 4.000 1.000	g getting o 0 m.All kin 0.800 1.500 0.500 1.100	on plar ut the exca ds of soil 0.900 0.100 0.800	n), including vated soil a	17.281 0.601 0.050 9.416 27.348 cur	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms excavated soil as dispersional for ramputation of the second soil as dispersional for ramputatio	not exceeding, lift up to 1. rected, within 1	1.5 m in w 5 m, includin n a lead of 5 24.000 4.000 1.000	g getting o 0 m.All kin 0.800 1.500 0.500 1.100	on plar ut the excards of soil  0.900  0.100  0.800  Total Deduct	n), including vated soil a tal Quantity ed Quantity	17.281 0.601 0.050 9.416 27.348 cur	f sides a
1	Earth work in excave trenches or drains (in ramming of bottoms excavated soil as dispersional for ramputation of the second soil as dispersional for ramputatio	not exceeding, lift up to 1. rected, within 1	1.5 m in w 5 m, includin n a lead of 5 24.000 4.000 1.000	g getting of 0 m.All kin 0.800 1.500 0.500 1.100	or on plan ut the excards of soil  0.900  0.100  0.800  Total Deduct	n), including vated soil a tal Quantity ed Quantity	17.281 0.601 0.050 9.416 27.348 cur 0.000 cum	f sides a

			1					
		1	21.400	0.100	1.000		2.140	
		1	10.700	0.900	0.100		0.963	
		1	24.800	0.800	0.100		1.985	
	Ramp	1	4.000	0.700	0.075		0.210	
	Floor	1	6.500	5.500	0.075		2.682	
	Step	1	1.000	0.500	0.100		0.050	
	Wire duct	1	10.700	1.100	0.075		-0.882	
					To	tal Quantity	8.030 cum	
				Т	otal Deduct	ed Quantity	-0.882 cum	
			-0	65	Net To	tal Quantity	7.148 cum	
			S	ay 7.148 cu	ım @ Rs 72	56.36 / cum	Rs 51	868.46
	concrete 1:6:12 ( level with:Cemen	t mortar 1:6 (1 ce			0.450	25	5.022	
		1	24.800	0.450	0.450	la de	5.022	
	Ramp	2*5	1.500	0.400	0.450		2.701	
			1.000	01100	0.100			
	· camp		VA.	HE 24/	To	tal Quantity	7.723 cum	
			ala Wat	HE 24/	To	ed Quantity	7.723 cum 0.000 cum	
			ala Wat	er Auth	otal Deduct	ed Quantity	7.723 cum 0.000 cum 7.723 cum	
4			ala Wat	er Auth	otal Deduct	ed Quantity	7.723 cum 0.000 cum 7.723 cum	991.29
4	50.6.7.2	Ker P	ala Wat	er Auth	Total Deduct Net To Im @ Rs 72	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 559	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc.	Ker P  ry with neatly dreper structure above	ala Wat	er Auth	otal Deduct Net To m @ Rs 72 size 40x20 two level in	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 55	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc.	Ty with neatly dreper structure above	ala Wat  Sessed latera ve plinth leve	er Auth	otal Deduct Net To m @ Rs 72 size 40x20 two level in	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet	Ty with neatly dreper structure above	ala Wat  sessed latera ve plinth leve  24.800  27.200	er Auth	otal Deduct Net To me Rs 72 size 40x20 two level in 3.050 0.600	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet	ry with neatly dreper structure above	ala Wat  Sessed latera ve plinth leve  24.800  27.200  1.000	er Auth ay 7.723 cu te stone of el up to floor 0.200 0.100 0.250	otal Deduct Net To me Rs 72 size 40x20 two level in 3.050 0.600 0.150	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate 15.129 1.633 0.038	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet step	ry with neatly dreper structure above	ala Wat  Sessed latera ve plinth leve  24.800  27.200  1.000  1.000	er Auth ay 7.723 cu te stone of el up to floor 0.200 0.100 0.250 0.500	otal Deduct Net To m @ Rs 72 size 40x20 two level in 3.050 0.600 0.150	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate 15.129 1.633 0.038 0.075	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet step Shutter	Ty with neatly dreper structure above 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24.800 27.200 1.000 4.000	er Auth ay 7.723 cu te stone of lup to floor 0.200 0.100 0.250 0.500 0.200	To otal Deduct Net To me Rs 72 size 40x20 two level in 3.050 0.600 0.150 0.150 2.100	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate 15.129 1.633 0.038 0.075 -1.680	991.29
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet step Shutter Door	Ty with neatly dreper structure above 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24.800 27.200 1.000 4.000 1.000	er Auth ay 7.723 cu te stone of lup to floor 0.200 0.100 0.250 0.500 0.200 0.200	To otal Deduct Net To me Rs 72 size 40x20 two level in 3.050 0.600 0.150 2.100 2.100 1.500	ed Quantity tal Quantity 49.94 / cum	7.723 cum 0.000 cum 7.723 cum Rs 555 nearest size cost of mate 15.129 1.633 0.038 0.075 -1.680 -0.420	991.29 in cemrials, lab
4	50.6.7.2 Laterate masonr mortar 1:6 for sup charges etc. Wall Parapet step Shutter Door	Ty with neatly dreper structure above 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24.800 27.200 1.000 4.000 1.000	er Auth ay 7.723 cu te stone of lup to floor 0.200 0.100 0.250 0.500 0.200 0.200 0.200	To otal Deduct Net To me Rs 72 size 40x20 two level in 3.050 0.600 0.150 2.100 2.100 1.500 To	ed Quantity tal Quantity 49.94 / cum 0x15cm or recluding all c	7.723 cum 0.000 cum 7.723 cum Rs 559 nearest size cost of mate 15.129 1.633 0.038 0.075 -1.680 -0.420 -0.450 16.875 cur	991.29 in cem rials, lab

	Sa	ıy 14.325 cu	ım @ Rs 790	68.75 / cum	Rs 114	152.34				
4.1.3  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:2:4 (cement : 2 coarse sand : 4 graded stone aggregate 20 mr nominal size)										
1	4.000	1.500	0.050		0.301					
			То	tal Quantity	0.301 cum					
		7	Total Deduct	ed Quantity	0.000 cum					
Net Total Quantity 0.301 cum										
Say 0.301 cum @ Rs 8040.95 / cum										
g in position named to concrete to including admirate, improve a. Note:- Cement of design mix is	concrete wo site of laying nixtures in re workability nt content c	ork, using of g but exclude ecommend without impo onsidered	cement cont ding the cos ed proportic airing streng in this item	ent as per t of centerir ons as per I th and dura is @ 330 k	approved ong, shuttering S: 9103 to bility as per g/cum. Exc	design mix og, finishing accelerate direction o ess or less				
1	7.500	6.500	0.100		4.875					
Ker	24.800	er0,200th	0.150		0.745					
1 1	1.700	0.600	0.075		0.077					
$\mathbb{Z}$	K		То	tal Quantity	5.697 cum					
		7	Total Deduct	ed Quantity	0.000 cum					
			Net To	tal Quantity	5.697 cum					
Say 5.697 cum @ Rs 11135.00 / cum Rs 63436.10										
ng in position s g, finishing and ne aggregate 20	reinforceme	ent - All worl			_					
1	5.000	2.000	0.100		1.000					
			To	tal Quantity	1.000 cum					
		7	Γotal Deduct	ed Quantity	0.000 cum					
			Net To	tal Quantity	1.000 cum					
	S	ay 1.000 cu	um @ Rs 91	42.09 / cum	Rs 91	42.09				
		nt for R.C.C work including	nt for R.C.C work including straighter	Say 1.000 cum @ Rs 914	Say 1.000 cum @ Rs 9142.09 / cum	Net Total Quantity 1.000 cum  Say 1.000 cum @ Rs 9142.09 / cum  Rs 91  nt for R.C.C work including straightening, cutting, bending, placing in p te upto plinth levelThermo - Mechanically Treated bars of grade Fe-500				

			0.007		00.000		505 700		
		1	6.697		80.000		535.760		
						tal Quantity			
				Т	Total Deduct				
						<u>-</u>	535.760 kil		
			Say 535.7	'60 kilogram	n @ Rs 98.9	2 / kilogram	Rs 52	997.38	
9	5.9.5 Centering and shutte girders bressumers	•	•	etc. and rem	noval of form	n for:Lintels	, beams, pli	nth bea	
	Lintel outside	1	25.600		0.150		3.840		
	Inside	1	24.000		0.150		3.600		
			1Ca	M.	То	tal Quantity	7.440 sqm		
			-//	W.	Total Deduct	ed Quantity	0.000 sqm		
			C 3 6	\$ 50	Net To	tal Quantity	7.440 sqm		
		16	MAR	Say 7.440 s	sqm @ Rs 6	53.89 / sqm	Rs 48	64.94	
	Roof slab	1	6.500	5.500			35.750		
	landings, balconies	and access	platform						
	Slab edge	Ker	al25.600at		010.100		2.561		
	Sunshade	1	1.700	0.600	7 7		1.020		
	Sunshade edge	1	2.900	0.100		1,	0.290		
	3				То	tal Quantity	39.621 sqr	n	
				Т	Fotal Deduct	<u>-</u>			
					Net To	tal Quantity	39.621 sqm	1	
			S	ay 39.621 s					
11	Say 39.621 sqm @ Rs 820.89 / sqm								
	Outside	1	25.600		3.200		81.921		
	Inside	1	24.000		3.200		76.801		
		4	28.000		0.600		16.800		
	Parapet outside	1			1				
	Parapet outside Parapet inside	1	27.200		0.600		16.320		
	·		27.200 27.600	0.100	0.600		16.320 2.761		
	Parapet inside	1		0.100 0.250	0.600				

14	10.6.1 Supplying and fixing r together through their designed pipe shaft wi and pull operation co springs manufactured and M.S. top cover of top cover	entire leng th brackets, mplete, inc from high t	ters of appro th and jointer side guides sluding the co tensile steel	y 38.151 so ved make, d together and arrang ost of prov wire of ade	Net To Total Deduct Net To Total Deduct Total Deduct Total Deduct Made of re- at the end be ements for indicated in the strength quate strength	tal Quantity 97.86 / sqm quired size y end locks nside and out king necess gth conform	0.000 sqm  38.151 sqn  Rs 41  M.S. laths, mounted cutside locking ary 27.5 cring to IS: 44	n 884.46 interlock on special og with pu m long w 454 - par		
14	10.6.1 Supplying and fixing r together through their designed pipe shaft wire and pull operation consprings manufactured	rolling shutt entire leng th brackets, mplete, inc from high t	Sa ters of appro th and jointer side guides cluding the co	y 38.151 so ved make, d together and arrang ost of prov wire of ade	Total Deduct  Net Total Met Total  Total Deduct  Res 10  Made of relation and become the end bec	ed Quantity tal Quantity 97.86 / sqm quired size y end locks nside and out	38.151 sqn 0.000 sqm 38.151 sqn Rs 41 M.S. laths, mounted cutside locking ary 27.5 cring to IS: 44	n 884.46 interlock on special og with pu m long w 454 - pai		
14	10.6.1 Supplying and fixing r together through their designed pipe shaft wi	rolling shutt entire leng th brackets,	Sa ters of appro th and jointer , side guides	y 38.151 so ved make, d together and arrang	Total Deduct  Net Total  Qm @ Rs 10  made of reat the end beements for in	ed Quantity tal Quantity 97.86 / sqm quired size y end locks nside and or	38.151 sqn 0.000 sqm 38.151 sqn Rs 41 M.S. laths, mounted cutside locking	n 884.46 interlock on specia		
14	10.6.1 Supplying and fixing r	rolling shutt	Sa ters of appro	y 38.151 so	To Fotal Deduct Net To qm @ Rs 10 made of re	ed Quantity tal Quantity 97.86 / sqm	38.151 sqn 0.000 sqm 38.151 sqn <b>Rs 41</b> M.S. laths,	n <b>884.46</b> interlock		
14	10.6.1		Sa	y 38.151 so	To Fotal Deduct Net To qm @ Rs 10	ed Quantity tal Quantity 97.86 / sqm	38.151 sqr 0.000 sqm 38.151 sqn Rs 41	n <b>884.46</b>		
	Skirting	1			To Total Deduct Net To	ed Quantity tal Quantity	38.151 sqr 0.000 sqm 38.151 sqn	n		
	Skirting	1	24.000	7	To	ed Quantity	38.151 sqr 0.000 sqm			
	Skirting	1	24.000	7	То		38.151 sqr	m		
	Skirting	1	24.000			tal Quantity		m		
	Skirting	1	24.000		0.100		2.401			
	Transformer room	1	6.500	5.500			35.750			
	Providing and laying of manufacturer), of 1st of Grey, Fume Red Brown pointing the joints with	uality confo vn, laid on 2	orming to IS : 20 mm thick	15622, of a cement mo	approved ma rtar 1:4 (1 C	ike, in colou ement : 4 C	rs such as \	White, Iv		
13	Say 45.990 sqm @ Rs 403.73 / sqm Rs 18567.54									
	Net Total Quantity 45.990 sqm  Say 45.990 sqm @ Rs 403.73 / sqm									
	Total Deducted Quantity 0.000 sqm									
		1	1 1/2	57/1	11 /4 1	tal Quantity		TI .		
	Roof top	1	7.300	6.300	7	tal Ouantit	45.990	<u> </u>		
	12 mm cement plaster		100	100 1 100	cement of m	nix:1:3 ( 1 ce		e sand)		
12	13.7.1			.60.						
	Say 174.628 sqm @ Rs 316.06 / sqm									
				tal Quantity	174.628 sqm					
				7	Γotal Deduct	ed Quantity	ty -21.150 sqm			
		1			To	tal Quantity	195.778 so	qm		
	Window	1	1.500		1.500		-2.250			
	Door	1	1.000		2.100		-2.100			
	Shutter	1*2	4.000		2.100		-16.800			
		2	0.250		0.150		0.075 0.150			

					То	tal Quantity	8.400 sqm	
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	8.400 sqm	
			S	Say 8.400 sq	m @ Rs 34	87.20 / sqm	Rs 292	292.48
15	10.7 Providing and fixing ba	ll bearing for	r rolling shut	tters.				
		1					1.000	
					То	tal Quantity	1.000 Nos	
				Т	otal Deduct	ed Quantity	0.000 Nos	
			el 36		Net To	tal Quantity	1.000 Nos	
			160	Say 1.000 I	Nos @ Rs 4	97.32 / Nos	Rs 49	97.32
	Providing and fixing all standard tubular section 733 and IS: 1285, fixing gaps at junctions, i.e. Aluminium sections some required including clear screws, all complete a paneling and dash fast transparent or dyed to For window frame	ns/ appropring with dash at top, bo hall be smoot angle, Aluras per architeners to be	ate Z section fasteners of toom and sooth, rust from the control of the control o	ons and other of required of ides with rece, straight up beading fewings and teparately):For ing to IS: 1	r sections or dia and size equired EPI t, mitred and or glazing /properties or fixed porter fixed porter fixed porter 4.500  Total Deduct	f approved of appr	make confornecessary finecessary finecessary finechanically contact and aluminium oating of grant 10.125 kg 0.000 kg	rming to IS: Illing up the gasket etc. y wherever inless steel ge.(Glazing, n (anodised
				Sav 10 1		502.17 / kg		84 47
17	21.1.2.1 For shutters of doors, provision for fixing of required (Fittings shall required shade according to the s	fittings whe I be paid fo	rever requir r separately	including pr ed including y)Anodised	oviding and g the cost o aluminium	I fixing hing of EPDM rul ( anodised	es / pivots a bber/ neopro transparent	and making ene gasket
	For window frame	1	1.500	1.500	4.500		10.125	
					To	tal Quantity	10.125 kg	
				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	10.125 kg	
				Say 10.12	25 kg @ Rs	608.11 / kg	Rs 61	57.11
18	21.3.1							

	Providing and fixing gla rubber / neoprene gask in -Charge. ( Cost of al mm thickness	et etc. com	plete as per	the archite	ctural drawii	ngs and the	directions o	f Engineer		
	For window shutter	3	0.500		1.500		2.250			
					To	otal Quantity	2.250 sqm			
				-	Total Deduc	ted Quantity	0.000 sqm			
					Net To	otal Quantity	ty 2.250 sqm			
	Say 2.250 sqm @ Rs 1184.03 / sqm Rs 2664.07									
19	9.48.2 Providing and fixing M. round bars etc. including frames with rawl plugs s	g priming o	coat with app	roved steel	primer all c		ed to openin	-		
	For window frame	1	1.500	1.500	4.500	l l	10.125			
					100	otal Quantity				
		ted Quantity								
		otal Quantity								
				Say 10.1	25 kg @ Rs	217.35 / kg	Rs 22	200.67		
20	13.43.1 Applying one coat of water thinnable cement primer of approved brand and manufacture on w surface:Water thinnable cement primer									
	surface:Water thinnab			at brinter o	or approved	J Dianu and	i manufacti	ure on wa		
	surface:Water thinnab			or burner	3.200	Diana and	81.921	ure on wa		
		le cemen	primer	at printer i	T	brand and		ure on wa		
	Outside	le cemen	25.600	at printer of	3.200	brand and	81.921	are on wa		
	Outside Inside	le cement 1 1	25.600 24.000	at printer of	3.200 3.200	brand and	81.921 76.801	are on wa		
	Outside Inside Parapet outside	le cement 1 1 1	25.600 24.000 28.000	0.100	3.200 3.200 0.600	brand and	81.921 76.801 16.800	are on wa		
	Outside Inside Parapet outside Parapet inside	le cement  1  1  1  1	25.600 24.000 28.000 27.200		3.200 3.200 0.600	brand and	81.921 76.801 16.800 16.320	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top	le cement  1  1  1  1  1  1	25.600 24.000 28.000 27.200 27.600	0.100	3.200 3.200 0.600	brand and	81.921 76.801 16.800 16.320 2.761	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom	1 1 1 1 1 1	25.600 24.000 28.000 27.200 27.600 6.500	0.100 5.500	3.200 3.200 0.600		81.921 76.801 16.800 16.320 2.761 35.750	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom	1 1 1 1 1 2	25.600 24.000 28.000 27.200 27.600 6.500 7.500	0.100 5.500 0.400	3.200 3.200 0.600		81.921 76.801 16.800 16.320 2.761 35.750 6.000	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom Projection Sunshade top and	1 1 1 1 1 2 2 2	25.600 24.000 28.000 27.200 27.600 6.500 7.500 5.900	0.100 5.500 0.400 0.400	3.200 3.200 0.600		81.921 76.801 16.800 16.320 2.761 35.750 6.000 4.721	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom Projection  Sunshade top and bottom	1 1 1 1 1 2 2 2 2	25.600 24.000 28.000 27.200 27.600 6.500 7.500 5.900	0.100 5.500 0.400 0.400	3.200 3.200 0.600 0.600		81.921 76.801 16.800 16.320 2.761 35.750 6.000 4.721 2.040	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom Projection  Sunshade top and bottom Edge	1 1 1 1 2 2 2 1 1	25.600 24.000 28.000 27.200 27.600 6.500 7.500 5.900 1.700 2.900	0.100 5.500 0.400 0.400	3.200 3.200 0.600 0.600		81.921 76.801 16.800 16.320 2.761 35.750 6.000 4.721 2.040 0.290	are on wa		
	Outside Inside Parapet outside Parapet inside Parapet top Roof slab bottom Projection  Sunshade top and bottom Edge Shutter	le cement  1  1  1  1  1  2  2  1  1*2	25.600 24.000 28.000 27.200 27.600 6.500 7.500 5.900 1.700 2.900 4.000	0.100 5.500 0.400 0.400	3.200 3.200 0.600 0.600 0.100 2.100		81.921 76.801 16.800 16.320 2.761 35.750 6.000 4.721 2.040 0.290 -16.800	ure on w		

				7	Fotal Deducte	ed Quantity	-21 150 sar	m
							222.254 sq	
			S	Say 222.254	sqm @ Rs 7		-	800.04
21	13.82.2 Wall painting with acryling grams/ litre, of approved achieve even shade and	l brand and	paint, havir I manufactu	ng VOC (Vo	latile Organi	c Compoun	d) content le	ess than 50
	Outside	1	25.600		3.200		81.921	
	Inside	1	24.000		3.200		76.801	
	Parapet outside	1	28.000		0.600		16.800	
	Parapet inside	1	27.200	B.	0.600		16.320	
	Parapet top	1	27.600	0.100	1		2.761	
	Roof slab bottom	1	6.500	5.500	3		35.750	
	Projection	2	7.500	0.400	1 1		6.000	
		2	5.900	0.400	I a	\	4.721	
	Sunshade top and bottom	2	1.700	0.600		lar.	2.040	
	Edge	1	2.900	HIE PAN	0.100		0.290	
	Shutter	1/2er	11 <b>4.00</b> 0at	er Auth	012.100		-16.800	
	Door	1	1.000		2.100	7	-2.100	
	Window	1	1.500		1.500		-2.250	
					Tot	tal Quantity	243.404 sc	mp
				٦	Total Deducte	ed Quantity	-21.150 sqr	m
					Net To	tal Quantity	222.254 sq	m
			Sa	y 222.254 s	sqm @ Rs 12	26.55 / sqm	Rs 28	126.24
22	13.16.1 6 mm cement plaster of	mix:1:3 ( 1	cement : 3	fine sand)				
	Roof slab bottom	1	6.500	5.500			35.750	
	Projection	2	7.500	0.400			6.000	
		2	5.900	0.400			4.721	
	Sonshade top and bottom	2	1.700	0.600			2.040	
	Edge	1	2.900		0.100		0.290	
					Tot	tal Quantity	48.801 sqr	m

Net Total Quantity   0.000 sqm   Net Total Quantity   48.801 sqm   Rs 269.26 / sqm   Rs 13140.16											
Say 48.801 sqm @ Rs 269.26 / sqm Rs 13140.16  23 10.2 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, holisting, fixing in position and applying a priming coat of approved steel primer all complete.  Grill 1 10.700 1.100 10.000 117.700 kg  Total Deducted Quantity 117.700 kg  Net Total Quantity 117.700 kg  Rs 118.756 Rs 118.756 Rs 117.700 kg @ Rs 120.54 / kg Rs 118.756 Rs					Т	Total Deduct	ted Quantity	0.000 sqm			
23 Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.  Grill 1 10.700 1.100 10.000 1177.700 kg  Total Deducted Quantity 117.700 kg  Total Deducted Quantity 117.700 kg  Net Total Quantity 117.700 kg  Say 117.700 kg @ Rs 120.54 / kg  Rs 14187.56  Si No Description No t B D CF Quently Remark  10DG Room (Cost Index;36.44 %)  1 2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6*4 0.600 0.700 7.728  Kerala Water Authority Total Quantity 7.728 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 7.728 cum  Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 16:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plinth level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						Net To	otal Quantity	48.801 sqm	1		
Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.  Grill 1 10.700 1.100 10.000 117.700 kg  Total Quantity 117.700 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 117.700 kg  Say 117.700 kg ® Rs 120.54 / kg Rs 14187.56  SI No Description No L B D CF Quantity Remark  10DG Room (Cost Index:36.44 %)  1 2.8.1  Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6°4 0.600 0.700 7.728  Kerala Water Authority Total Quantity 7.728 cum  Total Deducted Quantity 7.728 cum  Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6°4 0.600 0.100 1.104 cum  Total Quantity 1.104 cum  Total Quantity 1.104 cum  Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand)				S	ay 48.801 s	sqm @ Rs 2	69.26 / sqm	Rs 13	140.16		
Total Quantity 117.700 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 117.700 kg  Rs 14187.56  SI No Description No L B D CF Quantity Remark  10DG Room (Cost Index:36.44 %)  1 2.8.1  Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6°4 0.600 0.700 7.728    Verala Water Authority Total Quantity 7.728 cum	23	Structural steel work							_		
Total Deducted Quantity 0.000 kg  Net Total Quantity 117.700 kg  Say 117.700 kg @ Rs 120.54 / kg  Rs 14187.56  Si No Description No L B D CF Quantity Remark  10DG Room (Cost Index:36.44 %)  1 2.8.1  Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6*4 0.600 0.700 7.728 cm  Rerala Water Authority Total Quantity 7.728 cm  Total Deducted Quantity 0.000 cmm  Net Total Quantity 7.728 cmm  Say 7.728 cm @ Rs 298.80 / cm Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cmm  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)		Grill	1	10.700	1.100	10.000		117.700			
Net Total Quantity 117.700 kg  Say 117.700 kg @ Rs 120.54 / kg  Rs 14187.56  Si No Description No L B D CF Quantity Remark  10DG Room (Cost Index:36.44 %)  1 2.8.1  Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6*4 0.600 0.700 7.728  Kerala Water Authority Total Quantity 7.728 cum  Total Deducted Quantity 7.728 cum  Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand)						To	otal Quantity	117.700 kg	)		
Say 117.700 kg @ Rs 120.54 / kg  Rs 14187.56  SINO  Description  No  L  B  D  CF  Quantity  Remark  10DG Room  (Cost Index:36.44 %)  1  2.8.1  Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation  1  4.6°4  0.600  0.700  7.728  Kerala Water Authority Total Quantity  Net Total Quantity  7.728 cum  Say 7.728 cum @ Rs 298.80 / cum  Rs 2309.13  2  4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation  1  4.6°4  0.600  0.100  1.104  Total Quantity  1.104 cum  Total Deducted Quantity  Net Total Quantity  1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum  Rs 7570.80  3  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plintilevel with:Cement mortar 1:6 (1 cement : 6 coarse sand)					Т	Total Deduct	ted Quantity	0.000 kg			
10DG Room   10DG		Net Total Quantity 117.700 kg									
10DG Room (Cost Index:36.44 %)  2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation  1				100	Say 117.7	00 kg @ Rs	120.54 / kg	Rs 14	187.56		
2.8.1 Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundatio trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation 1 4.6*4 0.600 0.700 7.728    Foundation 1 4.6*4 0.600 0.700 7.728	SI No	Description	No	1/10	В	D	CF	Quantity	Remark		
Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundatio trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides an ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplu excavated soil as directed, within a lead of 50 m.All kinds of soil  Foundation  1			10DG F	Room (C	ost Index:3	86.44 %)					
Total Deducted Quantity 0.000 cum  Net Total Quantity 7.728 cum  Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand)		excavated soil as d	irected, withir	n a lead of 5	0 m.All kin	ds of soil	vated soil a		l of surplus		
Total Deducted Quantity 0.000 cum  Net Total Quantity 7.728 cum  Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  2 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  3 7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand)			Ker	ala Wat	er Auth	Ority To	otal Quantity	7.728 cum			
Say 7.728 cum @ Rs 298.80 / cum Rs 2309.13  4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)			DI								
2 4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)			P	K		Net To	otal Quantity	7.728 cum			
2 4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  Foundation 1 4.6*4 0.600 0.100 1.104  Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)					Say 7.728 c	cum @ Rs 2	98.80 / cum	Rs 23	09.13		
Total Quantity 1.104 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)	2	Providing and laying shuttering - All work	•	ement concr	ete of speci	ified grade e	excluding the	e cost of ce	•		
Total Deducted Quantity 0.000 cum  Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)		Foundation	1	4.6*4	0.600	0.100		1.104			
Net Total Quantity 1.104 cum  Say 1.104 cum @ Rs 6857.61 / cum Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						To	otal Quantity	1.104 cum			
Say 1.104 cum @ Rs 6857.61 / cum  Rs 7570.80  7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)					Т	Total Deduct	ted Quantity	0.000 cum			
7.1.1  Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)						Net To	otal Quantity	1.104 cum			
Random rubble masonry with hard stone in foundation and plinth including levelling up with cemer concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to plint level with:Cement mortar 1:6 (1 cement : 6 coarse sand)				S	ay 1.104 cu	ım @ Rs 68	57.61 / cum	Rs 75	70.80		
Foundation 1 4.6*4 0.600 0.600 6.624	3	7.1.1 Random rubble masonry with hard stone in foundation and plinth including levelling up with cen concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) up to p									
		level with:Cement m	ortar 1:6 (1 ce		•	55 5			ap to piliti		

	Basement	1	4.45*4	0.450	0.300		2.403			
					To	tal Quantity	9.027 cum			
				Т	otal Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	9.027 cum			
			S	Say 9.027 cu	ım @ Rs 72	49.94 / cum	Rs 65	445.21		
4	5.9.5 Centering and shur girders bressumers		•	etc. and rem	noval of forr	n for:Lintels	, beams, pli	nth bea		
	Plinth Belt	4*4	4.200		0.200		13.441			
	Lintel	4*4	4.200		0.150		10.080			
	Shade	3	1.700	B.	0.600		3.060			
	,,	1	2.400		0.600		1.440			
			43 6	8 4	To	tal Quantity	28.021 sqr	n		
		FL"	The state of	SA AT	otal Deduct	ed Quantity	0.000 sqm			
	Total Deducted Quantity 0.000 sqm  Net Total Quantity 28.021 sqm									
		1 12		is the last	Net To	tal Quantity	28.021 sqm	1		
5	5.37.1 Providing and laying using cement content transported to site.	ent as per appi	eady mixed f	M-25 grade	eqm @ Rs 6 concrete fo	53.89 / sqm r reinforced fully autom	Rs 18.	322.65 acrete w		
5	Providing and layin using cement conto	ent as per apportunition of work in transformation of specified graphs of site of laying, dmixtures in reconstruction workability without the content of the	eady mixed for the commended but impairing the commended but impairing	M-25 grade n mix, manu all leads, ha orced ceme ne cost of ce proportions strength an	concrete for a concrete for a concrete in a concrete concrete contenting, shown as per IS: 9 and durability	r reinforced fully automous agitate work includattering finis 103 to access per direct	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement content transported to site as per mix design of from transit mixer to including cost of acconcrete, improve to	ent as per applied work in trans of specified gra o site of laying, dmixtures in recoverkability without ment content c	eady mixed for sit mixer for ade for reinfor excluding the commended out impairing considered in	M-25 grade n mix, manuall leads, ha orced ceme ne cost of ce proportions strength an	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability as @330 kg/d	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement content transported to site as per mix design of from transit mixer to including cost of acconcrete, improve vecharge. Note:- Ce	ent as per applied work in trans of specified gra o site of laying, dmixtures in recoverkability without ment content c	eady mixed for sit mixer for ade for reinfor excluding the commended out impairing considered in	M-25 grade n mix, manuall leads, ha orced ceme ne cost of ce proportions strength an	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability as @330 kg/d	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement content transported to site as per mix design of from transit mixer to including cost of acconcrete, improve vecharge. Note:- Ceper design mix is per sign and laying and laying transported to sign mix is per design mix is per desi	ent as per appropriate of work in transformation of specified graphs of site of laying, dmixtures in recoverkability without ment content cont	eady mixed for oved design sit mixer for excluding the commended out impairing considered in table separa	M-25 grade n mix, manuall leads, had orced ceme ne cost of corproportions strength and this item is	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability as @330 kg/c/k upto plint	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement content transported to site as per mix design of from transit mixer to including cost of acconcrete, improve verbarge. Note:- Ceper design mix is per per beautiful part of the per design mix is per	ent as per applied work in transformation of specified gradients of laying, dmixtures in recover applied to the second of the se	eady mixed for oved design sit mixer for excluding the commended out impairing considered in table separate.	M-25 grade n mix, manuall leads, had orced ceme ne cost of corproportions strength and this item is stely.All wion 0.250	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability is @330 kg/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement content transported to site as per mix design of from transit mixer to including cost of acconcrete, improve we-charge. Note:- Ceper design mix is published.  Lintel	ent as per applion of work in transformation of specified gradules on site of laying, dmixtures in recovery workability without content content content content of ayable/recovery 4	eady mixed for oved design sit mixer for excluding the commended out impairing considered in rable separated 4.200	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is stely.All wion 0.250 0.200	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability is @330 kg/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c/c	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme  0.630  0.504	acrete w g plant a anufactu g of R.M nforcem d setting		
5	Providing and laying using cement context transported to site as per mix design of from transit mixer to including cost of acconcrete, improve we-charge. Note:- Ceper design mix is publicated.  Plinth beam  Lintel  Shade	ent as per applion of work in transformation of specified graduous of site of laying, dmixtures in recovery applications of the second of the	eady mixed for roved design sit mixer for ade for reinfor excluding the commended out impairing considered in rable separated 4.200 4.200 1.500	M-25 grade n mix, manuall leads, had orced ceme ne cost of cereore proportions strength and this item is stelly. All wion 0.250 0.200 0.600	concrete for ufactured in aving continuit concrete entering, should be as per IS: 9 and durability is @330 kg/ork upto plint 0.150 0.150 0.100 0.100	r reinforced fully automous agitate work includattering finise 103 to access per directum. Excess	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme  0.630  0.504  0.270  0.132	acrete w g plant a anufactu g of R.M nforcem d setting ngineer ent used		
5	Providing and laying using cement context transported to site as per mix design of from transit mixer to including cost of acconcrete, improve we-charge. Note:- Ceper design mix is publicated.  Plinth beam  Lintel  Shade	ent as per applion of work in transformation of specified graduous of site of laying, dmixtures in recovery applications of the second of the	eady mixed for roved design sit mixer for ade for reinfor excluding the commended out impairing considered in rable separated 4.200 4.200 1.500	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is stely.All wion 0.250 0.200 0.600 0.600	concrete for ufactured in aving continuit concrete entering, shown as per IS: 9 and durability is @330 kg/ork upto plint 0.150 0.150 0.100 0.100	r reinforced fully automous agitate work include attering finis 103 to access per direction. Excess h level	Rs 18:  cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme  0.630  0.504  0.270  0.132  1.536 cum	acrete w g plant a anufactu g of R.M nforcem d setting ngineer ent used		
5	Providing and laying using cement context transported to site as per mix design of from transit mixer to including cost of acconcrete, improve we-charge. Note:- Ceper design mix is publicated.  Plinth beam  Lintel  Shade	ent as per applion of work in transformation of specified graduous of site of laying, dmixtures in recovery applications of the second of the	eady mixed for roved design sit mixer for ade for reinfor excluding the commended out impairing considered in rable separated 4.200 4.200 1.500	M-25 grade n mix, manuall leads, had orced ceme ne cost of ce proportions strength and this item is stely.All wion 0.250 0.200 0.600 0.600	concrete for ufactured in aving continuit concrete entering, shown as per IS: 9 and durability is @330 kg/ork upto plint 0.150 0.150 0.100 Total Deduct	r reinforced fully automous agitate work includattering finise 103 to access per direction. Excess h level	cement cor atic batchin ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E s /less ceme 0.630 0.504 0.270 0.132 1.536 cum	acrete w g plant a anufactu g of R.M nforcem d setting ngineer ent used		

	Slab	1	4.000	4.000			16.000					
	Proj.	4	5.000	0.600			12.000					
	Slab Edge	4	5.600	0.120			2.688					
					То	tal Quantity	30.688 sqn	n				
				Т	otal Deduct	ed Quantity	0.000 sqm					
					Net To	tal Quantity	30.688 sqm	1				
			S	ay 30.688 s	qm @ Rs 9	23.02 / sqm	Rs 283	325.64				
	Providing and laying concrete for reinforcincluding pumping of and reinforcement, if retard setting of concenting endineer-in-charge, cement used as perfloor V level	ced cement f concrete to including adr crete, improve Note:- Ceme	concrete wo site of laying mixtures in re workability ent content o	ork, using or g but exclude ecommendowithout impa onsidered i	ement cont ling the cos ed proportic airing streng n this item	ent as per t of centerir ons as per I th and dura is @ 330 k	approved on approv	design m g, finishir accelerat direction ess or les				
	Roof	1	5.600	5.600	0.120	4	3.764					
	Rooi	100	3.000	3.000	7-25/2/2	tal Quantity	3.764 cum					
		0.000 cum										
		17	1 337	4 3 5 6								
		Net Total Quantity 3.764 cum  Say 3.764 cum @ Rs 11135.00 / cum  Rs 41912.14										
8	50.6.7.2 Laterate masonry w mortar 1:6 for super s charges etc.	-										
	wall	4	4.200	0.200	5.000		16.800					
	Door	1	2.000	0.200	2.400		-0.960					
	Window	3	1.200	0.200	1.500		-1.080					
	Window	3	1.200	0.200		tal Quantity	-1.080 16.800 cur	n				
	Window	3	1.200		То							
	Window	3	1.200		To otal Deduct	ed Quantity	16.800 cun					
	Window	3		Ţ	To otal Deduct	ed Quantity tal Quantity	16.800 cum -2.040 cum 14.760 cum	1				
9	5.22.6 Steel reinforcement binding all complete	for R.C.C w	Sa ork including	T y 14.760 cu g straighten	To otal Deduct Net To m @ Rs 790 ing, cutting	ed Quantity tal Quantity 68.75 / cum	16.800 cum -2.040 cum 14.760 cum Rs 117	618.75 osition a				

					To	tal Quantity	424.081 ki	logram	
				-	Total Deduct	ed Quantity	0.000 kilog	ram	
					Net To	tal Quantity	424.081 kil	ogram	
			Say 424.0	81 kilogran	n @ Rs 98.9	2 / kilogram	ram <b>Rs 41950.09</b>		
10	13.1.1 12 mm cement plas	ter of mix:1:4 (	1 cement : 4	I fine sand)					
	Outside-wall	4	4.400		5.000		88.000		
	Inside	4	4.000		5.000		80.000		
	Door	1*2	2.000		2.400		-9.600		
	Window	3	1.200		1.500		-5.399		
			160	165	To	tal Quantity	168.000 s	mp	
		-14.999 sq	m						
					Net To	tal Quantity	153.001 sq	m	
		11	Sa	y 153.001 s	sqm @ Rs 3	16.06 / sqm	Rs 48	357.50	
11	13.7.1 12 mm cement plas	ter finished wit	h a floating o	coat of neat	cement of m	nix:1:3 ( 1 ce	ment : 3 fin	e sand)	
	Roof Top	1	5.600	5.600	25		31.360		
		Vor	olo Wot	or Autl	To	tal Quantity	31.360 sqı	n	
		Kel	ara vv at	el Auu	Total Deduct	ed Quantity	0.000 sqm		
		D			Net To	tal Quantity	31.360 sqn	า	
			s	ay 31.360 s	sqm @ Rs 4	03.73 / sqm	Rs 12	660.97	
12	13.16.1 6 mm cement plaster of mix:1:3 ( 1 cement : 3 fine sand)								
	Roof slab	1	4.000	4.000			16.000		
	Proj.	4	5.000	0.600			12.000		
	Roof edge	4	5.600		0.120		2.688		
					To	tal Quantity	30.688 sqı	n	
				-	Total Deduct	ed Quantity	0.000 sqm		
					Net To	tal Quantity	30.688 sqn	า	
			S	ay 30.688	sqm @ Rs 2	69.26 / sqm	Rs 82	263.05	
13	Say 30.688 sqm @ Rs 269.26 / sqm Rs 8263.05  11.41.2  Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufactur with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours shades, laid on 20 mm thick cement mortar 1:4(1 cement: 4 coarse sand), including grouting the jowith white cement and matching pigments etc., complete. Size of Tile 600 x 600 mm.						colours ar		

	Floor	1	4.000	4.000			16.000			
	Skirting	1	16.000		0.100		1.600			
					То	tal Quantity	17.600 sqr	n		
				Т	otal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	17.600 sqm			
			Sa	y 17.600 sq	ım @ Rs 17	77.34 / sqm	Rs 31	281.18		
14	13.43.1 Applying one coat surface:Water thir			nt primer c	of approved	brand and	d manufactu	ure on wa		
	Outside-wall	4	4.400		5.000		88.000			
	Inside	4	4.000	B.	5.000		80.000			
	Door	1*2	2.000		2.400		-9.600			
	Window	3	1.200	6 34	1.500		-5.399			
	Roof slab	1	4.000	4.000	1 4 1		16.000			
	Proj.	4	5.000	0.600	10	4	12.000			
	Roof edge	4	5.600		0.120	e de la constitución de la const	2.688			
					То	tal Quantity	198.688 sc	mp		
		Total Deducted Quanti								
		Ker	ala Wat	er Auth	Net To	tal Quantity	183.689 sq	m		
		D	D s	ay 183.689	sqm @ Rs	71.09 / sqm	Rs 13	058.45		
15	13.82.2 Wall painting with a grams/ litre, of apprachieve even shade	oved brand an	d manufactu	•	_	•	•			
	Outside-wall	4	4.400		5.000		88.000			
	Inside	4	4.000		5.000		80.000			
	Door	1*2	2.000		2.400		-9.600			
	Window	3	1.200		1.500		-5.399			
	Roof slab	1	4.000	4.000			16.000			
	Proj.	4	5.000	0.600			12.000			
	Roof edge	4	5.600		0.120		2.688			
					То	tal Quantity	198.688 sc	mp		
				Т	otal Deduct	ed Quantity	-14.999 sqr	m		
					Net To	tal Quantity	183.689 sq	m		
				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·					

	Say 183.689 sqm @ Rs 126.55 / sqm Rs 23245.84									
16	Providing and fixing 1 mm thick M.S. sheet sliding- shutters, with frame and diagonal braces of 40x40x6 mm angle iron, 3 mm M.S. gusset plates at the junction and corners, 25 mm dia pulley, 40x40x6 mm angle and T-iron guide at the top and bottom respectively, including applying a priming coat of approved steel primer.									
	Window	3	1.200		1.500		5.400			
					То	tal Quantity	5.400 sqm			
				Т	otal Deduct	ed Quantity	0.000 sqm			
					Net To	tal Quantity	5.400 sqm			
	Say 5.400 sqm @ Rs 5912.90 / sqm Rs 31929.66									
	Providing and fixing gusset plates at the coat of approved sto	junctions and eel primer.Usir	corners, all	necessary	fittings com	plete, includ	ding applying			
	Door	1 1	2.000		1 575	tal Ouantitu				
		1///			ACCESS OF	tal Quantity	·			
				HI OLD Z	otal Deduct					
	Net Total Quantity 4.800 sqm									
	13.61.1 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two of more coats on new work									
18	Painting with synthe		nt of approv	ed brand a	nd manufac	ture to give	an even sha	ade:Two d		
18	Painting with synthe		nt of approv	red brand a	nd manufac	ture to give	an even sha	ade:Two c		
18	Painting with synthe more coats on new	work			nd manufac	ture to give		ade:Two d		
18	Painting with synthemore coats on new	work 3	1.200	1.500			5.400			
18	Painting with synthemore coats on new	work 3	1.200	1.500		2.0	5.400 9.600 15.000 sqn			
18	Painting with synthemore coats on new	work 3	1.200	1.500	To	2.0 tal Quantity	5.400 9.600 15.000 sqn	n		
18	Painting with synthemore coats on new	work 3	1.200	1.500 2.400	To	2.0 tal Quantity ed Quantity tal Quantity	5.400 9.600 15.000 sqn 0.000 sqm 15.000 sqm	n		
18 SI No	Painting with synthemore coats on new	work 3	1.200	1.500 2.400	To Total Deduct	2.0 tal Quantity ed Quantity tal Quantity	5.400 9.600 15.000 sqn 0.000 sqm 15.000 sqm	n		
	Painting with synthemore coats on new For window Door	work 3	1.200 2.000	1.500 2.400 T ay 15.000 s	To Total Deduct Net To	2.0 tal Quantity ed Quantity tal Quantity 43.94 / sqm	5.400 9.600 15.000 sqn 0.000 sqm 15.000 sqm	n 59.10		
	Painting with synthemore coats on new For window Door	No  11Centrifuge  vation by mediator exceedings, lift up to 1.5	1.200 2.000 S L Building hanical me 1.5 m in w m, includir	1.500 2.400  Total 15.000 s  B  (Cost Inc.)  ans (Hydra.)  idth or 10 s  ig getting o	To Total Deductor Net To Total Deductor Officer (Total	2.0 tal Quantity ed Quantity tal Quantity 43.94 / sqm CF tor) /manua	5.400 9.600 15.000 sqm 0.000 sqm 15.000 sqm Rs 21 Quantity	59.10 Remark  foundation sides an		

					То	tal Quantity	64.000 cur	n
				7	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	64.000 cum	ı
			S	ay 64.000 d	cum @ Rs 2	98.80 / cum	Rs 19	123.20
2	4.1.6 Providing and laying i shuttering - All work up nominal size)	•		-	•	_		•
	Column Footing	10	2.000	2.000	0.100		4.000	
	Plinth Beam bottm	3*3	3.130	0.350	0.100		0.986	
	,,	2*2	2.800	0.350	0.100		0.392	
	,,	2*2	2.980	0.350	0.100		0.418	
	Floor PCC	6	3.130	3.330	0.100		6.254	
		619	X Z	5. 1	То	tal Quantity	12.050 cur	n
					Fotal Deduct	ed Quantity	0.000 cum	
		30 7.30	1 1 2 2 2 3 2					
		161			3 10	tal Quantity	12.050 cum	1
2	2.25		Sa		3 10			439.14
3	2.25 Filling available excavant exceeding 20 cm. 50 m and lift up to 1.5	in depth, co	(excluding ro	ny 12.050 cu ock) in trend	Net To um @ Rs 72 ches, plinth,	56.36 / cum	Rs 87	439.14 c. in layers
3	Filling available excav	in depth, co	(excluding ro	ny 12.050 cu ock) in trend	Net To um @ Rs 72 ches, plinth,	56.36 / cum	Rs 87	439.14 c. in layers
3	Filling available excavance exceeding 20 cm 50 m and lift up to 1.5	in depth, col	excluding ronsolidating e	ny 12.050 cu ock) in trend each deposi	Net To um @ Rs 72s ches, plinth, ted layer by 0.350	sides of for	Rs 876 undations et	439.14 cc. in layers , lead up to
3	Filling available excavance exceeding 20 cm 50 m and lift up to 1.5	in depth, col	excluding ronsolidating e	ock) in trendeach depositions 3.330	Net To um @ Rs 72s ches, plinth, ted layer by 0.350	sides of for ramming a	Rs 876 undations et and watering 21.889 21.889 cur	439.14 cc. in layers , lead up to
3	Filling available excavance exceeding 20 cm 50 m and lift up to 1.5	in depth, col	excluding ronsolidating e	ock) in trendeach depositions 3.330	Net To um @ Rs 72 ches, plinth, ted layer by 0.350 To Total Deduct	sides of for ramming a tal Quantity	Rs 876 undations et and watering 21.889 21.889 cur	tc. in layers , lead up to
3	Filling available excavance exceeding 20 cm 50 m and lift up to 1.5	in depth, col	(excluding ronsolidating e	ock) in trendeach deposi	Net To um @ Rs 72 ches, plinth, ted layer by 0.350 To Total Deduct	sides of for ramming a tal Quantity ed Quantity	Rs 876 undations et nd watering 21.889 21.889 cur 0.000 cum 21.889 cur	tc. in layers , lead up to
3	Filling available excavance exceeding 20 cm 50 m and lift up to 1.5	in depth, constant of the following including	(excluding rensolidating each 3.130	ock) in trendeach depositions 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct  Net To cum @ Rs 26	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	Rs 876 undations et and watering 21.889 21.889 cur 0.000 cum 21.889 cur Rs 56	tc. in layers, lead up to
	Filling available excave not exceeding 20 cm. 50 m and lift up to 1.5 inside plinth  5.9.5 Centering and shutter	in depth, constant of the following including	(excluding ronsolidating excluding and association of the second	ock) in trendeach depositions 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct Net To cum @ Rs 26 noval of form	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	Rs 876 undations et and watering 21.889 21.889 cur 0.000 cum 21.889 cur Rs 56	tc. in layers, lead up to
	Filling available excave not exceeding 20 cm. 50 m and lift up to 1.5 inside plinth  5.9.5 Centering and shutter	in depth, constant of the following including	(excluding ronsolidating excluding and association of the second	ay 12.050 cu ock) in trendeach deposi 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct Net To cum @ Rs 26 noval of form	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	Rs 876 undations et and watering 21.889 21.889 cur 0.000 cum 21.889 cur Rs 56	tc. in layers, lead up to
	Filling available excave not exceeding 20 cm. 50 m and lift up to 1.5 inside plinth  5.9.5 Centering and shutter girders bressumers at	ring including	(excluding ronsolidating excluding set 3.130	ay 12.050 cu ock) in trendeach deposi 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct Net To cum @ Rs 26 noval of form	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	Rs 876 undations et and watering 21.889 21.889 cur 0.000 cum 21.889 cur Rs 56	tc. in layers, lead up to
	Filling available excave not exceeding 20 cm. 50 m and lift up to 1.5 inside plinth  5.9.5 Centering and shutter girders bressumers at PB1	ring including nd cantileve	g strutting, ears	ay 12.050 cu ock) in trendeach deposi 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct Net To cum @ Rs 26 noval of form  0.450	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	21.889 cur 0.000 cum Rs 56	tc. in layers, lead up to
	Filling available excave not exceeding 20 cm. 50 m and lift up to 1.5 inside plinth  5.9.5 Centering and shutter girders bressumers at PB1 PB2	ring including and cantileve	g strutting, ears  3.130 2.800	ay 12.050 cu ock) in trendeach deposi 3.330	Net To um @ Rs 725 ches, plinth, ted layer by  0.350  To Total Deduct Net To cum @ Rs 26 noval of form  0.450  0.450	sides of for ramming a tal Quantity ed Quantity tal Quantity tal Quantity 50.19 / cum	21.889 cur 0.000 cum 21.889 cur Rs 56	tc. in layers, lead up to

	B2	2*2	2.800		0.950		10.640	
	B3	2*2	2.980		1.350		16.093	
	Rs Beam	1	3.330		0.850		2.831	
	Shade	1	3.500		0.600		2.100	
	shade edge	2	0.600		0.100		0.120	
		1	1	FF beam			I	
	B1	3*3	3.130		0.900		25.353	
	B2	2*2	2.800		0.900		10.080	
	В3	2*2	2.980		1.350		16.093	
			-0	40%	То	tal Quantity	156.665 sc	m
			JAB	<u></u>	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	156.665 sq	m
		6	Say	y 156.665 s	qm @ Rs 6	53.89 / sqm	Rs 102	2441.68
	columns, etc for mass	755.25				2		
	Column Footing	10*4	1.800		0.150		10.800	
		755.25	1.800	er Aut <u>h</u>	To	tal Quantity	10.800 sqr	m
		755.25	1.800	er Auth	To OTILY otal Deduct	ed Quantity	10.800 sqr 0.000 sqm	
		755.25	ala Wate		To OTILY otal Deduct	ed Quantity tal Quantity	10.800 sqr 0.000 sqm 10.800 sqn	
6	5.9.6 Centering and shutte Abutments, Posts an	10*4  Ker  ring includ d Struts	ala Wate	ay 10.800 s	otal Deduct Net To qm @ Rs 33 removal of	ed Quantity tal Quantity 37.42 / sqm	10.800 sqn 0.000 sqm 10.800 sqn Rs 36	1 644.14
6	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column	ring includ d Struts	ala Water San	ay 10.800 s	otal Deductory Net To qm @ Rs 33 removal of	ed Quantity tal Quantity 37.42 / sqm	10.800 sqn 0.000 sqm 10.800 sqn Rs 36 olumns, Pil	1 644.14
6	5.9.6 Centering and shutte Abutments, Posts an	10*4  Ker  ring includ d Struts	ala Wate	ay 10.800 s	otal Deductory Net To qm @ Rs 33 removal of 4.000 4.000	ed Quantity tal Quantity 37.42 / sqm form for:Co	10.800 sqm 0.000 sqm 10.800 sqm Rs 36 olumns, Pil 68.000 68.000	n 6 <b>44.14</b> Iars, Pie
6	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column	ring includ d Struts	ala Water San	ay 10.800 s	otal Deductory Net To qm @ Rs 33 removal of 4.000 4.000	ed Quantity tal Quantity 37.42 / sqm form for:Co	10.800 sqn 0.000 sqm 10.800 sqn Rs 36 olumns, Pil 68.000 68.000 136.000 sq	n 6 <b>44.14</b> Iars, Pie
6	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column	ring includ d Struts	ala Water San	ay 10.800 s	otal Deduct Net To qm @ Rs 33 removal of 4.000 To otal Deduct	ed Quantity tal Quantity 37.42 / sqm form for:Co	10.800 sqm 0.000 sqm 10.800 sqm Rs 36 olumns, Pil 68.000 68.000 136.000 sqm	ղ 6 <b>44.14</b> lars, Pie
6	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column	ring includ d Struts	ala Water Salar Salar Water Salar Sa	ay 10.800 s	otal Deduct Net To qm @ Rs 33 removal of 4.000 To otal Deduct Net To	ed Quantity tal Quantity 37.42 / sqm form for:Co	10.800 sqm 0.000 sqm 10.800 sqm Rs 36 olumns, Pil 68.000 68.000 136.000 sqm 136.000 sqm	n 644.14 Iars, Pie
7	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column	ring includ d Struts  10  10  10	ala Water Saying strutting,	ay 10.800 s , etc. and T y 136.000 s	To otal Deduct Net To qm @ Rs 3: removal of 4.000 4.000 To otal Deduct Net To qm @ Rs 86	ed Quantity tal Quantity 37.42 / sqm form for:Contain Quantity ed Quantity tal Quantity tal Quantity 59.05 / sqm	10.800 sqm 0.000 sqm 10.800 sqm Rs 36 olumns, Pil 68.000 68.000 136.000 sqm 136.000 sqm Rs 118	n 644.14 lars, Pie qm m 8190.80
	5.9.6 Centering and shutte Abutments, Posts an Column-GF Column Column-FF Column  5.9.3 Centering and shutte	ring includ d Struts  10  10  10	ala Water Saying strutting,	ay 10.800 s , etc. and T y 136.000 s	To otal Deduct Net To qm @ Rs 3: removal of 4.000 4.000 To otal Deduct Net To qm @ Rs 86	ed Quantity tal Quantity 37.42 / sqm form for:Contain Quantity ed Quantity tal Quantity tal Quantity 59.05 / sqm	10.800 sqm 0.000 sqm 10.800 sqm Rs 36 olumns, Pil 68.000 68.000 136.000 sqm 136.000 sqm Rs 118	n 644.14 lars, Pie qm m 8190.80

	FF Slab	6	3.130	3.330			62.538	
			8.660	0.150			1.299	
	Ope. Side Stair op	1	2.000	3.330			-6.660	
	Stall Op	ı	2.000	3.330	Т.	tal Quantity		ım.
						<u>-</u>		
						ted Quantity		
			Sa	nv 110 715 s		otal Quantity 20.89 / sqm		
8	5.37.1			iy 119.713 s	sqiii @ its o	20.03 / 3qm	13 30	272.03
	using cement content transported to site of as per mix design of from transit mixer to s including cost of adm concrete, improve wor- charge. Note:- Ceme	work in trans specified gra site of laying, ixtures in rec rkability withous ent content co	sit mixer for ade for reinforexcluding the ommended out impairing onsidered in	all leads, had breed ceme ne cost of coproportions strength are this item is	aving continent concrete entering, she as per IS: 9 and durability s @330 kg/	work include work include uttering finis 9103 to access per direction. Excess	ed mixer, ma ling pumpin hing and rei elerate/ retar tion of the E	anufactured g of R.M.C nforcement d setting o ngineer - ir
	per design mix is pay	/able/recover		umn footing	2 1637	in level		
	Column Footing	10	1.800	1.800	0.150		4.860	
	Isolated Portion	10/3	1.800	1.800	0.750		8.101	
	Grad Slab	Ker:	ala Wat 3.330	er Auth 3.130	0.150		9.381	
		DI	Colun	nn footing-C	olumn	7		
	Column Pedestal	10	0.250	0.600	0.400		0.600	
				Plinth beam	1			
	PB1	3*3	3.130	0.250	0.450		3.170	
	PB2	2*2	2.800	0.250	0.450		1.260	
	PB3	2*2	3.980	0.250	0.450		1.791	
					To	otal Quantity	29.163 cur	n
				7	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	29.163 cum	ı
			Sa	ıy 29.163 cı	ım @ Rs 99	47.98 / cum	Rs 290	112.94
9	50.5.33.2  Providing and laying concrete for reinforcincluding pumping of and reinforcement, in retard setting of conci	ed cement of concrete to ncluding adm	concrete wo site of laying nixtures in r	ork, using o g but exclud ecommend	ement con ding the cos ed proporti	tent as per st of centerir ons as per I	approved on approv	design mix g, finishinç accelerate

cement used as per floor V level	Note:- Ceme design mix is					_	
			Slab				
GF	4	4.700	5.800	0.150		16.357	
FF ( Roof)	4	4.700	5.800	0.120		13.085	
Slab Proj.	1	38.000	0.600	0.100		2.281	
RS beam	1	3.330	0.200	0.300		0.200	
Shade	1	3.500	0.600	0.100		0.211	
Stair case Portion	1	2.000	3.330	0.150		-0.999	
		Be	B.	То	tal Quantity	32.134 cui	m
				otal Deduct	ed Quantity	-0.999 cum	1
		33 6	8 4	Net To	tal Quantity	31.135 cun	n
		Say	31.135 cun	n @ Rs 111:	35.00 / cum	Rs 346	6688.23
using cement content transported to site of	work in trans	sit mixer for	all leads, ha	ving continu	uous agitate	atic batchined mixer, ma	g plant a anufactur
	work in trans specified gra site of laying, ixtures in rec rkability without ent content c	sit mixer for a de for reinforexcluding the commended out impairing onsidered in	all leads, had broked ceme cost of cemproportions strength and this item is	nving continu nt concrete entering, shu as per IS: 9 d durability s @330 kg/d	work include the work include the include	atic batching ding pumping and relerate/ retation of the Earless ceme	anufacture g of R.M. inforceme rd setting ingineer - ent used
transported to site of as per mix design of from transit mixer to s including cost of adm concrete, improve wo -charge. Note:- Ceme	work in trans specified gra site of laying, ixtures in rec rkability without ent content c	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separa	all leads, had broked ceme cost of cemproportions strength and this item is	nt concrete entering, shu as per IS: 9 d durability s @330 kg/d k above plin	work include the work include the include	atic batching ding pumping and relerate/ retation of the Earless ceme	g plant and anufacturing of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to s including cost of adm concrete, improve wo -charge. Note:- Ceme	work in trans specified gra site of laying, ixtures in rec rkability without ent content c	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separa	all leads, had briced ceme ne cost of coproportions strength and this item is tely. All work	nt concrete entering, shu as per IS: 9 d durability s @330 kg/d k above plin	work include the work include the include	atic batching ding pumping and relerate/ retation of the Earless ceme	g plant and anufacture g of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability with ent content c vable/recover	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separa	all leads, had orced ceme ne cost of cemproportions strength and this item is tely. All world Column-GF	nt continuent concrete entering, shu as per IS: 9 d durability a @330 kg/d k above plin	work include the work include the include	atic batchined mixer, made in mixer, made in mixer, made in mixer	g plant and anufacture g of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability with ent content c vable/recover	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separa	all leads, had orced ceme ne cost of cemproportions strength and this item is telly. All world Column-GF	nt continuent concrete entering, shu as per IS: 9 d durability a @330 kg/d k above plin	work include the work include the include	atic batchined mixer, made in mixer, made in mixer, made in mixer	g plant and anufacture g of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wordening. Note:- Cemer per design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without ent content c rable/recover	sit mixer for ade for reinforexcluding the commended out impairing onsidered in able separated to the commended of the commended on the commen	all leads, had orced ceme ne cost of ceme proportions strength and this item is tely. All world Column-GF 0.600  Beam-GF	nt continu nt concrete entering, shu as per IS: 9 d durability s @ 330 kg/o k above plin	work include the work include the include	atic batchined mixer, made mixer, made in grand restricted in the second of the East /less cembers of floor V less 6.000	g plant and anufacture g of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve word-charge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without content cover  10	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separated and the commended of the commended of the commended of the commended on the commended of the comm	all leads, had orced ceme ne cost of ceme proportions strength and this item is tely. All world Column-GF 0.600  Beam-GF 0.250	nt continu nt concrete entering, shu as per IS: 9 d durability s @ 330 kg/o k above plin 4.000	work include the work include the include	atic batchined mixer, made mixer, made mixer, made ling pumping and resterate/ retaction of the East /less cembers of floor V less 6.000	g plant and anufacture g of R.M. inforcement setting Engineer - ent used a
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wortharge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without content cover  10  3*3  2*2	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separated and the commended of the commended of the commended out impairing onsidered in table separated of the commended of	all leads, had orced ceme ne cost of ceme proportions strength and this item is telly. All world Column-GF 0.600  Beam-GF 0.250  0.250	aving continuent concrete entering, shu as per IS: 9 d durability is @ 330 kg/c k above plin 4.000	work include the work include the include	atic batchined mixer, made mixer, made mixer, made ling pumping and resterate/ retaction of the East /less cembers of floor V less 6.000	g plant and anufacture g of R.M. inforcement setting Engineer - ent used a
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve wortharge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without content cover  10  3*3  2*2	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separated and the commended of the commended of the commended out impairing onsidered in table separated of the commended of	all leads, had orced ceme ne cost of ceme proportions strength and this item is stelly. All world column-GF 0.600  Beam-GF 0.250  0.250  0.250	aving continuent concrete entering, shu as per IS: 9 d durability is @ 330 kg/c k above plin 4.000	work include the work include the include	atic batchined mixer, made mixer, made mixer, made ling pumping and resterate/ retaction of the East /less cembers of floor V less 6.000	g plant and anufacture g of R.M. inforcement setting Engineer - ent used a
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve word-charge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without ent content c rable/recover  10  3*3  2*2  2*2	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separated and the commended of the commended out impairing onsidered in table separated of the commended out impairing onsidered in table separated of the commended out impairing onsidered in table separated of the commended out impairing out the commended out the com	all leads, had proced ceme ne cost of ceme proportions strength and this item is stelly. All world column-GF 0.600  Beam-GF 0.250  0.250  Column-FF	as per IS: 9 d durability s @ 330 kg/c k above plin 4.000  0.350  0.550	work include the includent the	atic batchined mixer, made mixer, made mixer, made mixer, made mixer, made mixer made mixer made mixer made mixer made mixer made mixer mi	g plant and anufacture g of R.M. inforcement setting Engineer - ent used a
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve word-charge. Note:- Cemeper design mix is pay	work in trans specified gra site of laying, ixtures in rec rkability without ent content c rable/recover  10  3*3  2*2  2*2	sit mixer for ade for reinforexcluding the commended out impairing onsidered in table separated and the commended of the commended out impairing onsidered in table separated of the commended out impairing onsidered in table separated of the commended out impairing onsidered in table separated of the commended out impairing out the commended out the com	all leads, had proced ceme ne cost of ceme ne	as per IS: 9 d durability s @ 330 kg/c k above plin 4.000  0.350  0.550	work include the includent the	atic batchined mixer, made mixer, made mixer, made mixer, made mixer, made mixer made mixer made mixer made mixer made mixer made mixer mi	g plant and anufacture g of R.M. inforcement setting Engineer - ent used
transported to site of as per mix design of from transit mixer to sincluding cost of admiconcrete, improve word-charge. Note:- Cemeper design mix is pay  GF Column  B1  B2  B3  FF Column	work in trans specified grasite of laying, ixtures in recordant content content content content content at 2 at 2 at 2 at 2	sit mixer for ade for reinforexcluding the commended out impairing onsidered in able separated and all 2.800 2.800 2.980 0.250	all leads, had proced ceme ne cost of ceme ne	as per IS: 9 d durability s @ 330 kg/c k above plin 4.000  0.350  0.550  4.000	work include the includent the	atic batchined mixer, made mixer, made mixer, made mixer, made mixer, made mixer mix	g plant and anufacture g of R.M. inforcement setting Engineer - ent used

					To	otal Quantity	22.168 cui	m
				-	Total Deduct			11
						otal Quantity		n
			Sav	22 168 cur	m @ Rs 116			" 7380.01
11	5.22.6		•					
	Steel reinforcement fo binding all complete u		-	_	•	• .	• .	
	@120 Kg / Cum of Concrete Qty , ie	1	22.168+31 .14+29.16 3		120.000		9896.520	
					To	tal Quantity	9896.520	kilogram
			160		Total Deduct	ed Quantity	0.000 kilog	ram
			N</td <td></td> <td>Net To</td> <td>tal Quantity</td> <td>9896.520 k</td> <td>ilogram</td>		Net To	tal Quantity	9896.520 k	ilogram
		1	Say 9896.5	20 kilogran	n @ Rs 98.9	2 / kilogram	Rs 978	3963.76
12	50.6.7.2 Laterate masonry with mortar 1:6 for super strucharges etc.							
			Wall- C	GF &a	mp; FF	ı	I	ı
	GF wall	Ker	al <b>a.13</b> 0at	ero.200tl	013.650		11.425	
	,,	4	2.800	0.200	3.650		8.176	
	Over Rs	1	3.130	0.200	0.350		0.220	
	FF Wall	6	3.130	0.200	3.650		13.710	
	,,	4	2.800	0.200	3.650		8.176	
					To	otal Quantity	41.707 cui	m
				-	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	41.707 cun	n
			Sa	y 41.707 cı	um @ Rs 79	68.75 / cum	Rs 332	2352.66
13	11.41.2 Providing and laying virwith water absorption leshades, laid on 20 mm with white cement and	ss than 0.0 thick ceme	08% and conf ent mortar 1:	orming to 14(1 cemen	S : 15622, c t : 4 coarse	of approved i sand), inclu	make, in all ding groutir	colours and
	Floor Finishing	1	10.000	7.000			70.000	
					To	tal Quantity	70.000 sq	m
				-	Total Deduct	ed Quantity	0.000 sqm	

					Net Tota	l Quantity	70.000 sqn	า
			Sa	y 70.000 sc	րm @ Rs 1777	7.34 / sqm	Rs 124	413.80
14	13.1.1							
	12 mm cement plaste	er of mix:1:4 (		·				
				GF Plasterin	g			
	inside wall	2	10.000		4.000		80.000	
	,,	2	7.000		4.000		56.000	
	Column Portion	2*4	0.350		4.000		11.200	
	FF Inside	2	10.000		4.000		80.000	
	,,	2	7.000		4.000		56.000	
	Column Portion	2*4	0.350		4.000		11.200	
	Out Side wall	2	10.400		8.750		182.000	
		2	7.400	E X	8.750		129.500	
	Rolling Shutter	2	3.130	20/A	3.000		-18.780	
		11/5			Tota	l Quantity	605.900 sc	qm
		1			Total Deducted	d Quantity	-18.780 sqı	m
			FREE	HE PE	Net Tota	l Quantity	587.120 sq	m
		Ker	ala WS	y 587.120 s	sqm @ Rs 316	6.06 / sqm	Rs 185	565.15
15	13.7.1 12 mm cement plaste	er finished wit	h a floating o	coat of neat	cement of mix	(:1:3 ( 1 ce	ment : 3 find	e sand)
	Roof Top	1 1	11.600	8.600		1	99.760	
					Tota	l Quantity	99.760 sqr	n
				Т	Total Deducted	d Quantity	0.000 sqm	
					Net Tota	l Quantity	99.760 sqn	า
			S	Say 99.760 s	sqm @ Rs 403	3.73 / sqm	Rs 40	276.10
16	13.16.1 6 mm cement plaster	of mix:1:3 ( 1	cement: 3	fine sand)				
				slab-				
	GF	1	10.000	7.000			70.000	
	Beam Side	3*2	3.130	0.350			6.573	
	,,	4*2	2.980	0.550			13.112	
	FF	1	10.000	7.000			70.000	
	"Beam Side	3*2	3.130	0.350			6.573	
		4*2	2.980	0.550			13.112	

	Slab Prj.	1	38.000	0.600			22.800	
	Edge	1	40.400	0.120			4.848	
					To	otal Quantity	207.018 so	mp
				7	Total Deduc	ted Quantity	0.000 sqm	
					Net To	otal Quantity	207.018 sq	m
			Sa	y 207.018 s	sqm @ Rs 2	269.26 / sqm	Rs 55	741.67
17	13.43.1 Applying one coat of surface:Water thinn			nt primer o	of approved	d brand and	d manufacti	ure on
			C	GF Plasterin	g			
	inside wall	2	10.000	123	4.000		80.000	
	"	2	7.000		4.000		56.000	
	Column Portion	2*4	0.350	9 3	4.000		11.200	
	FF Inside	2	10.000	51/1	4.000		80.000	
	,,	2	7.000		4.000		56.000	
	Column Portion	2*4	0.350		4.000		11.200	
	Out Side wall	2	10.400		8.750		182.000	
		2 Ker	7.400	u = 1	8.750		129.500	
	Rolling Shutter	Kei 2	3.130	er Autr	3.000		-18.780	
				slab-				
	GF	1 1	10.000	7.000			70.000	
	Beam Side	3*2	3.130	0.350			6.573	
	,,	4*2	2.980	0.550			13.112	
	FF	1	10.000	7.000			70.000	
	"Beam Side	3*2	3.130	0.350			6.573	
	,,	4*2	2.980	0.550			13.112	
	Slab Prj.	1	38.000	0.600			22.800	
	Edge	1	40.400	0.120			4.848	
					To	otal Quantity	812.918 sc	mp
				٦	otal Deduc	ted Quantity	-18.780 sqı	m
					Net To	otal Quantity	794.138 sq	m
			S	av 794.138	sqm @ Rs	71.09 / sqm	Rs 56	455.27

	grams/ litre, of approve			re including	applying ad	ditional coat	s wherever	required,
	achieve even shade an	a colour. I v		GF Plasterin	a			
	inside wall	2	10.000	Fiasteiiii	4.000		80.000	
	iliside wali	2	7.000		4.000		56.000	
	Column Dartion		0.350		4.000		11.200	
	Column Portion FF Inside	2*4 2	10.000		4.000		80.000	
	rr iliside	2	7.000		4.000		56.000	
	Column Dartion							
	Column Portion	2*4	0.350		4.000		11.200	
	Out Side wall	2	10.400	·60	8.750		182.000	
		2	7.400		8.750		129.500	
	Rolling Shutter	2	3.130		3.000		-18.780	
		61		slab-	7-1-1			
	GF	1	10.000	7.000	1-8		70.000	
	Beam Side	3*2	3.130	0.350	5 20		6.573	
	,,	4*2	2.980	0.550	Obs		13.112	
	FF	1	10.000	7.000			70.000	
	,,Beam Side	3*2 <sub>er</sub>	ala <sup>3.130</sup> at	er <sup>0.350</sup> th	ority		6.573	
	,,	4*2	2.980	0.550	1 T	1	13.112	
	Slab Prj.	1	38.000	0.600			22.800	
	Edge	1	40.400	0.120			4.848	
					То	tal Quantity	812.918 so	qm
				7	otal Deduct	ed Quantity	-18.780 sqı	m
					Net To	tal Quantity	794.138 sq	m
			Sa	y 794.138 s	sqm @ Rs 12	26.55 / sqm	Rs 100	)498.16
19	10.25.1  Item Shifted to Sub hea up sections/framed wo approved steel primer cases, including use o	ork, includi using stru	ng cutting, h ctural steel	noisting, fixi etc. as requ	ng in positio uired.In strir	on and applagers, tread	lying a prim	ning coat
		Stair -	using MS C	hannel, MS	Angle and N	/IS Flat		
	Stair - Flight	2	2.500	0.900		30.0	135.000	
	Stair landing	1	2.000	1.000		30.0	60.000	
	Hand rails	1	9.000		0.900	15.0	121.500	

	Hand rail - Floor op side	1	5.500		0.900	15.0	74.250	
					То	tal Quantity	390.750 kg	3
				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	390.750 kg	
				Say 390.7	50 kg @ Rs	110.93 / kg	Rs 43	345.90
20	10.6.2 Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation comparings manufactured fand M.S. top cover of rotop cover	entire lengt n brackets, nplete, incl from high to	h and jointe side guides uding the c ensile steel	d together a and arrange ost of provi wire of ade	at the end be ments for ind ding and fix quate streng	by end locks  Inside and out  Inside and out	, mounted outside locking ary 27.5 cm ing to IS: 44	on specially g with push n long wire 154 - part 1
	GF Rolling shutter	1	3.130	3.000	1 0		9.390	
		11		20/1	То	tal Quantity	9.390 sqm	
		18	1100		otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	9.390 sqm	
					10%			
			5	Say 9.390 sq	m @ Rs 332	20.81 / sqm	Rs 31	182.41
21	13.48.3 Finishing with Deluxe manufacturers specification Two or more coat appliapproved brand and materials.	Multi sur ations:Pain ed @ 0.90	ala Wat face paint s ting Steel w	er Auth system for ork with Del	Ority interiors ar uxe Multi Su	nd exteriors	s using prir	mer as per even shade
21	Finishing with Deluxe manufacturers specificative or more coat appli	Multi sur ations:Pain ed @ 0.90 anufacture	ala Wat face paint s ting Steel w	er Auth system for ork with Del over an und	interiors ar uxe Multi Su er coat of p	nd exteriors urface Paint rimer applie	s using prir	mer as per even shade
21	Finishing with Deluxe manufacturers specificative or more coat appli	Multi sur ations:Pain ed @ 0.90 anufacture	ala Wat face paint s ting Steel we Itr/10 sqm	er Auth system for ork with Del over an und	interiors ar uxe Multi Su er coat of p	nd exteriors urface Paint rimer applie	s using prir	mer as per even shade.
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers	Multi suri ations:Pain ed @ 0.90 anufacture Stair -	face paint sting Steel we ltr/10 sqm using MS C	er Auth system for ork with Del over an und hannel, MS	interiors ar uxe Multi Su er coat of p	nd exteriors urface Paint rimer applie	s using print to give an ed @ 0.80 lt	mer as per even shade.
21	Finishing with Deluxe manufacturers specification Two or more coat appliance approved brand and materials and Figure 1. Stair - Flight	Multi suri ations:Pain ed @ 0.90 anufacture Stair -	face paint sting Steel we ltr/10 sqm using MS C	er Auth system for ork with Del over an und hannel, MS 0.900	interiors ar uxe Multi Su er coat of p	nd exteriors urface Paint rimer applie  MS Flat  2.0	s using print to give an ed @ 0.80 lt	mer as per even shade.
21	Finishing with Deluxe manufacturers specification Two or more coat appliance approved brand and materials.  Stair - Flight  Stair landing	Multi suri ations:Pain ed @ 0.90 anufacture Stair - 2	face paint sting Steel we ltr/10 sqm using MS C 2.500	er Auth system for ork with Del over an und hannel, MS 0.900	interiors ar uxe Multi Su er coat of p Angle and M	nd exteriors urface Paint rimer applie  MS Flat  2.0	s using print to give an end @ 0.80 lt  9.000  4.000	mer as per even shade.
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers.  Stair - Flight Stair landing Hand rails Hand rail - Floor op	Multi suri ations:Pain ed @ 0.90 anufacture Stair - 2 1	da Wat face paint sting Steel we Itr/10 sqm using MS C 2.500 2.000 9.000	er Auth system for ork with Del over an und hannel, MS 0.900	interiors ar uxe Multi Su er coat of p Angle and M	nd exteriors urface Paint rimer applie  MS Flat  2.0	9.000 4.000 8.100	mer as per even shade.
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers  Stair - Flight  Stair landing  Hand rails  Hand rail - Floor op side	Multi suri	using MS C 2.500 2.000 9.000 5.500	er Auth system for ork with Del over an und hannel, MS 0.900	interiors ar uxe Multi Suer coat of p  Angle and M  0.900  0.900  3.000	nd exteriors urface Paint rimer applie  MS Flat  2.0  2.0	9.000 4.000 4.950 23.475	mer as per even shade. r/10 sqm of
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers  Stair - Flight  Stair landing  Hand rails  Hand rail - Floor op side	Multi suri	using MS C 2.500 2.000 9.000 5.500	er Auth system for ork with Del over an und hannel, MS 0.900 1.000	interiors ar uxe Multi Suer coat of p  Angle and M  0.900  0.900  3.000	nd exteriors urface Paint rimer applie  MS Flat  2.0  2.0  2.5  tal Quantity	9.000 4.000 4.950 23.475 49.525 sqr	mer as per even shade. r/10 sqm of
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers  Stair - Flight  Stair landing  Hand rails  Hand rail - Floor op side	Multi suri	using MS C 2.500 2.000 9.000 5.500	er Auth system for ork with Del over an und hannel, MS 0.900 1.000	interiors ar uxe Multi Suer coat of p  Angle and M  0.900  0.900  To	nd exteriors urface Paint rimer applie  MS Flat  2.0  2.0  2.5  tal Quantity ed Quantity	9.000 4.000 4.950 23.475 49.525 sqr	mer as per even shade. r/10 sqm of
21	Finishing with Deluxe manufacturers specifica Two or more coat appli approved brand and manufacturers  Stair - Flight  Stair landing  Hand rails  Hand rail - Floor op side	Multi suri	using MS C 2.500 2.000 9.000 5.500 3.130	er Auth system for ork with Del over an und hannel, MS 0.900 1.000	interiors ar uxe Multi Suer coat of p  Angle and M  0.900  0.900  To	nd exteriors urface Paint rimer applie  MS Flat  2.0  2.0  2.5  tal Quantity ed Quantity tal Quantity	9.000 4.000 4.950 23.475 49.525 sqr 49.525 sqr	mer as per even shade. r/10 sqm of

	i e							
1	2.6.1 Earth work in excava (exceeding 30 cm in dearth, lead up to 50 m soil	epth, 1.5 m	in width as	well as 10	sqm on pla	n) including	disposal of	excavated
		1	12.200	8.200	0.300		30.012	
					То	tal Quantity	30.012 cur	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	30.012 cum	า
			S	Say 30.012 c	um @ Rs 2	15.37 / cum	Rs 64	63.68
2	4.1.6 Providing and laying in shuttering - All work up nominal size)	•		2012/2017	_	•		•
		1	12.200	8.200	0.150		15.006	
					То	tal Quantity	15.006 cur	n
		1/ST			otal Deduct	ed Quantity	0.000 cum	
	1	400	6000		Net To	tal Quantity	15.006 cum	า
			Sa	ıy 15.006 cu	m @ Rs 72	56.36 / cum	Rs 108	888.94
3	5.37.1 Providing and laying in using cement content transported to site of was per mix design of s from transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is paya	as per approork in transpecified grade of laying, attures in rectability without content conte	ady mixed oved design it mixer for a de for reinfor excluding the commended ut impairing considered in	n mix, manuall leads, had broked cemented cost of cemproportions strength and this item is	concrete for factured in aving continu nt concrete entering, shu as per IS: 9 d durability s @330 kg/o	fully automations agitate work include attering finish 103 to access per direction. Excess	atic batchined mixer, mading pumpinehing and reinglerate/ retaition of the E	g plant and anufactured g of R.M.C. inforcement d setting of ingineer - in
		1	12.000	8.000	0.300		28.800	
					То	tal Quantity	28.800 cur	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	28.800 cum	า
			Sa	ıy 28.800 cu	m @ Rs 99	47.98 / cum	Rs 286	5501.82
4	5.9.1 Centering and shuttering columns, etc for mass	-	strutting, et	c. and remo	oval of form	for:Foundati	ions, footing	ıs, bases of
		1	40.000		0.300		12.000	

					Т	otal Quantity	12.000 sqr	n
				-	Total Deduc	cted Quantity	0.000 sqm	
					Net T	otal Quantity	12.000 sqm	า
			S	ay 12.000 s	sqm @ Rs	337.42 / sqm	Rs 40	49.04
5	5.22.6 Steel reinforcement for binding all complete to				•	· · ·		
					T	otal Quantity	864.000 ki	logram
				-		ted Quantity		
			100	B.	Net T	otal Quantity	864.000 kile	ogram
			Say 864.0	00 kilogran	n @ Rs 98.	92 / kilogram	Rs 854	466.88
6	13.7.1 12 mm cement plaster	finished wit	h a floating c	oat of neat	cement of	mix:1:3 ( 1 ce	ement : 3 fine	e sand)
		1	12.000	8.000	1-8		96.000	
		1	40.000	0.300	والمؤويرا	450	12.000	
					SP-T	otal Quantity	108.000 sc	mp
			Variation			cted Quantity		
		Ker	ala Wat	er Autl	1011Net T	otal Quantity	108.000 sq	m
		D	Sa	y 108.000 s	sqm @ Rs	403.73 / sqm	Rs 430	602.84
SI No	Description	No	L	В	D	CF	Quantity	Remark
1	2.8.1 Earth work in excava trenches or drains (no ramming of bottoms, excavated soil as dire	ot exceeding	chanical mea g 1.5 m in w 5 m, includin	idth or 10 g getting o	nulic excav sqm on pla	ın), including	dressing o	f sides and
	Column Footing	4	1.700	1.700	1.600		18.496	
					Т	otal Quantity	18.496 cur	n
				-	Total Deduc	cted Quantity	0.000 cum	
					Net T	otal Quantity	18.496 cum	า
			S	ay 18.496	cum @ Rs	298.80 / cum	Rs 55	26.60
2	4.1.8 Providing and laying in shuttering - All work unominal size)	•		•	•	•		•

	Column Footing	4	1.700	1.700	0.100		1.156	
	Floor PCC	1	5.000	5.000	0.100		2.500	
	Plinth Bottom	2	5.000	0.350	0.100		0.351	
	,,	2	4.600	0.350	0.100		0.322	
					To	tal Quantity	4.329 cum	
				٦	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	4.329 cum	
			S	Say 4.329 cu	ım @ Rs 68	57.61 / cum	Rs 29	686.59
	not exceeding 20 cm ir 50 m and lift up to 1.5  Plinth inside filling	•	5.000	5.000	0.350	tal Quantity	8.750 8.750 cum	
		16			( )()	ed Quantity		
					A STATE OF THE STA	tal Quantity		
				Say 8.750 (	cum @ Rs 2	60.19 / cum	∣ RS 22	276.66
4	50.6.7.1	10000		Say 8.750 (	cum @ Rs 2	60.19 / cum	RS 22	276.66
4	50.6.7.1  Laterate masonry with mortar 1:6 for foundat	1101	essed latera	te stone of	size 40x20	x15cm or r	nearest size	e in cem
4	Laterate masonry with	1101	essed latera	te stone of	size 40x20	x15cm or r	nearest size	in cem
4	Laterate masonry with mortar 1:6 for foundat	ion and b	essed latera asement inc	ite stone of	size 40x20 ost of mate	x15cm or r	nearest size	in cem
4	Laterate masonry with mortar 1:6 for foundat  Outer wall	ion and back	essed latera asement incl 5.000	ite stone of luding all c	size 40x20 ost of mate 4.300	x15cm or r	nearest size r charges e 8.600	in cem
4	Laterate masonry with mortar 1:6 for foundat Outer wall	ion and back	essed latera asement incl 5.000 4.600	te stone of luding all c	size 40x20 ost of mate 4.300 4.300 3.000	x15cm or r	8.600 7.912 -1.440	e in cem tc.
4	Laterate masonry with mortar 1:6 for foundat Outer wall	ion and back	essed latera asement incl 5.000 4.600	0.200 0.200 0.200	size 40x20 ost of mate 4.300 4.300 3.000	0x15cm or r rials, labou	8.600 7.912 -1.440	e in cem tc.
4	Laterate masonry with mortar 1:6 for foundat Outer wall	ion and back	essed latera asement incl 5.000 4.600	0.200 0.200 0.200	size 40x20 ost of mate 4.300 4.300 3.000 Total Deduct	0x15cm or r rials, labour tal Quantity	nearest size r charges e 8.600 7.912 -1.440 16.512 cur	e in cem tc.
4	Laterate masonry with mortar 1:6 for foundat Outer wall	ion and back	essed latera asement incl 5.000 4.600 2.400	0.200 0.200 0.200	size 40x20 ost of mate 4.300 4.300 3.000  Total Deduct Net To	0x15cm or r rials, labour tal Quantity ed Quantity	nearest size charges e 8.600 7.912 -1.440 16.512 cur -1.440 cum	e in ceme tc.
5	Laterate masonry with mortar 1:6 for foundat Outer wall	a position of cement oncrete to cluding addite, improve the:- Cement ones.	essed lateral asement included 5.000 4.600 2.400  Samachine bate concrete we site of laying mixtures in reworkability ent content of the second of the secon	one of the stone of luding all control of the stone of luding all control of the stone of the st	size 40x20 ost of mate 4.300 4.300 3.000 Total Deduct Net To um @ Rs 72 hachine mixe cement conding the cose ed proportion airing strenge in this item	tal Quantity ed Quantity tal Quantity 16.83 / cum ed design material as per t of centering ons as per light and duratis @ 330 k	nearest size r charges e 8.600 7.912 -1.440 16.512 cur -1.440 cum 15.072 cun Rs 108  nix M-20 gra approved ong, shuttering, shutterings; 9103 to bility as per g/cum. Exceptions	m ade cem design n accelera direction ess or le

Column	4	0.200	0.400	4.500		1.441	
			Lintel		_		
over wall	2	4.600	0.200	0.200		0.368	
,,	1	5.000	0.200	0.200		0.200	
,,	1	5.000	0.200	0.300		0.300	
shade	1	5.400	0.600	0.100		0.325	
Tile beam	2	5.000	0.200	0.200		0.400	
,,	2	4.600	0.200	0.200		0.368	
				То	tal Quantity	3.402 cum	
		-0	// T	otal Deduct	ed Quantity	0.000 cum	
		JAN		Net To	tal Quantity	3.402 cum	
		Sa	y 3.402 cun	n @ Rs 111	35.00 / cum	Rs 378	881.27
as per mix design of from transit mixer to including cost of adm concrete, improve wo	site of laying, ixtures in rec	excluding the	ne cost of ce	entering, shu as per IS: 9	uttering finis 9103 to acce	hing and rei elerate/ retar	nforcen d settin
from transit mixer to	site of laying, ixtures in rec rkability with ent content c	excluding the ommended out impairing onsidered in	ne cost of conceptors of the conceptor of the conceptors of the conceptors of the conceptor of the concept	entering, shu as per IS: 9 ad durability s @330 kg/d	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E	nforcen d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve wo -charge. Note:- Cem	site of laying, ixtures in rec rkability with ent content c	excluding the ommended out impairing onsidered in able separa	ne cost of conceptors of the conceptor of the conceptors of the conceptors of the conceptor of the concept	entering, shu as per IS: 9 ad durability s @330 kg/o k upto plint	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E	nforcen d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve wo -charge. Note:- Cem	site of laying, ixtures in rec rkability with ent content c	excluding the ommended out impairing onsidered in able separa	ne cost of co proportions strength an this item is tely.All wion	entering, shu as per IS: 9 ad durability s @330 kg/o k upto plint	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E	nforcen d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve wo -charge. Note:- Cemper design mix is pay	site of laying, ixtures in rec rkability without ent content c yable/recover	excluding the ommended out impairing onsidered in able separated.	ne cost of co proportions strength an a this item is tely.All wion umn footing	entering, shu as per IS: 9 ad durability s @330 kg/d rk upto plint	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme	nforcem d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve wo -charge. Note:- Cemper design mix is pay	site of laying, ixtures in recordance in recordance in recordance in recovery able/recovery	excluding the ommended out impairing onsidered in able separated and the column of the	ne cost of ce proportions strength an a this item is tely.All wion umn footing	entering, shu as per IS: 9 ad durability s @ 330 kg/d k upto plint -raft 0.150 0.350	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350	nforcem d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve wo -charge. Note:- Cemper design mix is pay	site of laying, ixtures in recordance in recordance in recordance in recovery able/recovery	excluding the ommended out impairing onsidered in able separated and the column of the	ne cost of ce proportions strength an this item is tely.All wion umn footing 1.500	entering, shu as per IS: 9 ad durability s @ 330 kg/d k upto plint -raft 0.150 0.350	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350	nforcem d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay	site of laying, ixtures in recordance in recordance in recordance in recovery able/recovery 4  4 4/3	excluding the ommended out impairing onsidered in table separated and table separated are color of the color	ne cost of ce proportions strength an a this item is tely.All wion umn footing 1.500 1.500	entering, shu as per IS: 9 ad durability s @ 330 kg/o rk upto plint -raft 0.150 0.350 olumn 0.900	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350 1.050	nforcen d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay	site of laying, ixtures in recordance in recordance in recordance in recovery able/recovery 4  4 4/3	excluding the ommended out impairing onsidered in table separated and table separated are color of the color	ne cost of cerproportions strength and this item is telly. All wion umn footing 1.500 1.500 nn footing-C 0.400	entering, shu as per IS: 9 ad durability s @ 330 kg/o rk upto plint -raft 0.150 0.350 olumn 0.900	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350 1.050	nforcem d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay  Column Footing  Isolated Portion  Column Pedestal	site of laying, ixtures in recordance in recordance in recordance in recordance in recover able/recover 4 4/3	excluding the ommended out impairing onsidered in rable separated and the color of	ne cost of cerproportions strength and this item is tely. All wion umn footing 1.500 1.500 nn footing-C 0.400 Plinth beam	entering, shu as per IS: 9 ad durability s @ 330 kg/o k upto plint -raft 0.150 0.350 olumn 0.900	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350 1.050	nforcem d settin ngineer
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay  Column Footing  Isolated Portion  Column Pedestal	site of laying, ixtures in recordance in recordance in recordance in recordance in recover able/recover 4 4 4/3 4/3	excluding the ommended out impairing onsidered in able separated and the separated areas are and the separated areas and the separated areas are also are a separated areas and the separated areas are also are also are a separated areas and the separated areas are a separated	ne cost of cerproportions strength and this item is tely. All wion umn footing 1.500 1.500 nn footing-C 0.400 Plinth beam 0.200	entering, shu as per IS: 9 ad durability s @ 330 kg/c k upto plint -raft 0.150 0.350 olumn 0.900 0.450	uttering finis 103 to acce as per direc cum. Excess	hing and rei elerate/ retar tion of the E s /less ceme 1.350 1.050 0.289 0.900 0.828	nforcem d settin ngineer ent used
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay  Column Footing  Isolated Portion  Column Pedestal	site of laying, ixtures in recordance in recordance in recordance in recordance in recover able/recover 4 4 4/3 4/3	excluding the ommended out impairing onsidered in able separated and the separated areas are and the separated areas and the separated areas are also are a separated areas and the separated areas are also are also are a separated areas and the separated areas are a separated	ne cost of cerproportions strength and this item is tely. All wion umn footing 1.500	entering, shu as per IS: 9 ad durability s @ 330 kg/c k upto plint -raft 0.150 0.350 olumn 0.900 0.450 To	uttering finis 9103 to acce as per direc cum. Excess h level	1.350 1.050 0.289 0.900 0.828 4.417 cum	nforcem d settin ngineer ent used
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay  Column Footing  Isolated Portion  Column Pedestal	site of laying, ixtures in recordance in recordance in recordance in recordance in recover able/recover 4 4 4/3 4/3	excluding the ommended out impairing onsidered in able separated and the separated areas are and the separated areas and the separated areas are also are a separated areas and the separated areas are also are also are a separated areas and the separated areas are a separated	ne cost of cerproportions strength and this item is tely. All wion umn footing 1.500	entering, shu as per IS: 9 ad durability s @ 330 kg/c k upto plint -raft 0.150 0.350 olumn 0.900 1 0.450 To Total Deduct	uttering finis 2103 to acce as per direc cum. Excess h level	1.350 1.050 0.289 0.900 0.828 4.417 cum 0.000 cum	nforcemed setting
from transit mixer to sincluding cost of admiconcrete, improve work-charge. Note:- Cemper design mix is pay  Column Footing  Isolated Portion  Column Pedestal	site of laying, ixtures in recordance in recordance in recordance in recordance in recover able/recover 4 4 4/3 4/3	excluding the ommended out impairing onsidered in able separated and the separated areas are separated areas and the separated areas are separated areas are separated areas and the separated areas are separ	ne cost of cerproportions strength and this item is tely. All wion umn footing 1.500 1.500 nn footing-C 0.400 Plinth beam 0.200 0.200	entering, sho as per IS: 9 ad durability s @ 330 kg/o k upto plint -raft 0.150 0.350 olumn 0.900 1 0.450 To Total Deduct Net To	uttering finis 2103 to acce as per direc cum. Excess h level	1.350 1.050  0.289  0.900 0.828 4.417 cum 4.417 cum	nforce of sett ngine ent us

	@100 Kg / Cum of Concrete Qty , ie	1	3.402+4.4 17			100.0	781.900	
					То	tal Quantity	781.900 ki	logram
				7	Total Deduct	ed Quantity	0.000 kilog	ram
					Net To	tal Quantity	781.900 kil	ogram
			Say 781.9	00 kilogram	n @ Rs 98.9	2 / kilogram	Rs 77	345.55
8	5.9.1 Centering and shuttering columns, etc for mass c		g strutting, etc	c. and remo	oval of form	for:Foundat	ions, footing	js, base
	Column footing	4*4	1.500	0.150			3.600	
			Mis		То	tal Quantity	3.600 sqm	
		-	EL W	M. E.	Total Deduct	ed Quantity	0.000 sqm	
		61	SK 2	5 1	Net To	tal Quantity	3.600 sqm	
		B		Say 3.600 s	sqm @ Rs 3	37.42 / sqm	Rs 12	14.71
9	5.9.6 Centering and shutteri Abutments, Posts and		ling strutting	, etc. and	removal of	form for:C	olumns, Pil	lars, P
	Column	<del>Ker</del>	1.200 ala v at	er Auth	4.500		21.600	
					To	tal Quantity	21.600 sqr	n
			D					••
			$R \perp$	7	Total Deduct	ed Quantity	0.000 sqm	
			RJ		Total Deduct	ed Quantity tal Quantity	0.000 sqm 21.600 sqm	1
			R		Total Deduct	ed Quantity tal Quantity	0.000 sqm 21.600 sqm	
10	5.9.5 Centering and shuttering girders bressumers and	•	ng strutting, e	ay 21.600 s	Total Deduct  Net To  sqm @ Rs 86	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18	771.48
10	Centering and shuttering	•	ng strutting, e	ay 21.600 s	Total Deduct  Net To  sqm @ Rs 86	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18	771.48
10	Centering and shuttering	•	ng strutting, e	ay 21.600 s	Total Deduct  Net To  sqm @ Rs 86	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18	771.48
10	Centering and shuttering girders bressumers and	d cantileve	ng strutting, e	ay 21.600 s	Net To sqm @ Rs 86 noval of form	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm <b>Rs 18</b> , beams, pli	771.48
10	Centering and shuttering girders bressumers and over wall	d cantileve	ag strutting, erers	ay 21.600 s	Net To sqm @ Rs 86 noval of form	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18	771.48
10	Centering and shuttering girders bressumers and over wall	2*2 1*2	4.600 5.000	ay 21.600 s	Net To sqm @ Rs 86 noval of form 0.200 0.200	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18	771.48
10	Centering and shuttering girders bressumers and over wall	2*2 1*2 1*2	4.600 5.000 5.000 2.400 5.600	ay 21.600 s tc. and rem Lintel	Net To sqm @ Rs 86 noval of form 0.200 0.200 0.300	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18 , beams, pli 3.680 2.000 3.000	771.48
10	Centering and shuttering girders bressumers and over wall  ,, ,, Bottom	2*2 1*2 1*2	4.600 5.000 5.000 2.400	ay 21.600 stc. and rem Lintel	Net To sqm @ Rs 86 noval of form 0.200 0.200	ed Quantity tal Quantity 69.05 / sqm	0.000 sqm 21.600 sqm Rs 18  , beams, pli  3.680 2.000 3.000 0.480	771.48

	PB1	2*2	F 000		0.450		9.000	
			5.000					
	PB2	2*2	4.600		0.450		8.280	
				_		tal Quantity	37.480 sqr	n
				Т	otal Deduct	<u> </u>		
					Net To	tal Quantity	37.480 sqm	1
			S	ay 37.480 s	qm @ Rs 6	53.89 / sqm	Rs 24	507.80
11	12.1.1 Providing corrugate G. hooks, bolts and nuts filled with white lead, overlapping of sheets cost of purlins, rafters thick with zinc coating	8 mm diame including a complete ( u and trusses	eter with bitu coat of app op to any pito and includ	umen and Goroved stee ch in horizon ting cutting t	6.I. limpet w I primer an tal / vertical	ashers or w d two coats or curved s	ith G.I. limp of approve surfaces), ex	et washers ed paint on cluding the
	Roofing	2	4.000	6.600			52.800	
		613	Y 17	50 1	То	tal Quantity	52.800 sqr	n
		1 150	LINE.	T	otal Deduct	ed Quantity	0.000 sqm	
		101	L.		Net To	tal Quantity	52.800 sqm	1
			Sa	y 52.800 sq	m @ Rs 146	61.95 / sqm	Rs 77	190.96
12	13.1.1 12 mm cement plaster	of mix:1:4 (	1 cementa 4	(fine sand)	ority			
	inside wall	4	5.000	4.500	7 7	7	90.000	
	outside wall	4	5.400	4.500		1	97.200	
	basement	4	5.400	0.300			6.480	
	Tie beam top	4	5.200	0.200			4.160	
	Rolling shutter	2	2.400	3.000			-14.399	
					То	tal Quantity	197.840 sc	ım
				Т	otal Deduct	ed Quantity	-14.399 sqr	n
					Net To	tal Quantity	183.441 sq	m
			Sa	y 183.441 s	qm @ Rs 3	16.06 / sqm	Rs 579	978.36
13	13.9.2 Cement plaster 1:3 ( cement plaster	1 cement :	3 coarse sa	and) finishe	d with a flo	ating coat o	of neat cem	ent.20 mm
	Floor finishing	1	5.000	5.000			25.000	
					То	tal Quantity	25.000 sqr	n
				Т	otal Deduct	ed Quantity	0.000 sqm	
							25.000 sqm	

			5	Say 25.000	sqm @ Rs 5	45.69 / sqm	Rs 130	642.25
14	10.2 Structural steel work riv cutting, hoisting, fixing			•				
	For truss - 75x75mm IS angle	4*2	3.800			6.78	206.112	
	Horizontal Tie,	4*2	5.400			6.78	292.896	
	Brazing 45x45 mm MS Angle	4*2	2.000			3.95	63.200	
	,,	4*4	1.000			3.95	63.200	
	,, Vertical	4*1	2.000	65		3.95	31.600	
	Purlin 50x50 mm MS Tub 16g	2*5	6.500			4.42	287.300	
			Ch2 9	R X	To	tal Quantity	944.308 kg	9
		( b.		701/A	Total Deduct	ed Quantity	0.000 kg	
		18	1 DA		Net To	tal Quantity	944.308 kg	
	50			Say 944.3	308 kg @ Rs	120.54 / kg	Rs 113	826.89
15	13.43.1 Applying one coat of v	water thin	nable ceme	ent primer	of approved	I brand and	d manufactu	ire on
15	Applying one coat of v surface:Water thinnable	le cemen	taprimer at	er Autl	of approved	brand and		ure on
15	Applying one coat of visurface:Water thinnab	le cemen	5.000	4.500	of approved	brand and	90.000	ure on
15	Applying one coat of visurface:Water thinnable inside wall outside wall	le cemen	5.000 5.400	4.500 4.500	of approved	brand and	90.000	ure on
15	Applying one coat of visurface:Water thinnab	le cemen 4 4	5.000 5.400 5.400	4.500	of approved	brand and	90.000	ure on
15	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top	4 4 4	5.000 5.400	4.500 4.500 0.300	of approved	brand and	90.000 97.200 6.480	are on
15	Applying one coat of visurface:Water thinnable inside wall outside wall basement	4 4 4 4	5.000 5.400 5.200	4.500 4.500 0.300 0.200	nority T	brand and	90.000 97.200 6.480 4.160 -14.399	
15	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top	4 4 4 4	5.000 5.400 5.200	4.500 4.500 0.300 0.200 3.000	nority T	otal Quantity	90.000 97.200 6.480 4.160 -14.399 197.840 so	mp
15	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top	4 4 4 4	5.000 5.400 5.200	4.500 4.500 0.300 0.200 3.000	Total Deduct	ed Quantity	90.000 97.200 6.480 4.160 -14.399 197.840 so	ılm m
15	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top	4 4 4 4	5.000 5.400 5.400 5.200 2.400	4.500 4.500 0.300 0.200 3.000	Total Deduct	etal Quantity and Quantity	90.000 97.200 6.480 4.160 -14.399 197.840 so -14.399 sqr 183.441 sq	ılm m
	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top	de cemen  4  4  4  4  2  c emulsion di brand and	5.000 5.400 5.400 5.200 2.400	4.500 4.500 0.300 0.200 3.000 Say 183.441	Total Deduction Net Total Sqm @ Rs	etal Quantity and Quantity otal Quantity 71.09 / sqm	90.000 97.200 6.480 4.160 -14.399 197.840 sqr -14.399 sqr 183.441 sq Rs 136	ղm m <b>040.82</b>
	Applying one coat of visurface:Water thinnable inside wall outside wall basement Tie beam top Rolling shutter  13.82.2 Wall painting with acryling grams/ litre, of approved	de cemen  4  4  4  4  2  c emulsion di brand and	5.000 5.400 5.400 5.200 2.400	4.500 4.500 0.300 0.200 3.000 Say 183.441	Total Deduction Net Total Sqm @ Rs	etal Quantity and Quantity otal Quantity 71.09 / sqm	90.000 97.200 6.480 4.160 -14.399 197.840 sqr -14.399 sqr 183.441 sq Rs 136	qm m 040.82
16	Applying one coat of visurface:Water thinnable inside wall outside wall basement  Tie beam top  Rolling shutter  13.82.2  Wall painting with acryling grams/ litre, of approved achieve even shade and	d cement 4 4 4 4 2 c emulsior d brand and colour.Tv	5.000 5.400 5.400 5.200 2.400 San paint, havind manufactury coats	4.500 4.500 0.300 0.200 3.000 Say 183.441	Total Deduction Net Total Sqm @ Rs	etal Quantity and Quantity otal Quantity 71.09 / sqm	90.000 97.200 6.480 4.160 -14.399 197.840 sq -14.399 sqr 183.441 sq Rs 136	qm m 040.82

	Tie beam top	4	5.200	0.200			4.160	
	Rolling shutter	2	2.400	3.000			-14.399	
		,			To	tal Quantity	197.840 sc	m
				Т	otal Deduct	ed Quantity	-14.399 sqr	n
					Net To	tal Quantity	183.441 sq	m
			Sa	ay 183.441 s	qm @ Rs 1	26.55 / sqm	Rs 23	214.46
17	13.48.3 Finishing with Delumanufacturers specification or more coat apaperoved brand and	fications:Pain oplied @ 0.90	ting Steel wo ltr/10 sqm o	ork with Del	uxe Multi Sı	urface Paint	to give an e	even shad
	Rolling Shutter	1	2.400	3.000		2.5	18.000	
	Truss work	4*1/2	5.400	2.000		0.5	10.800	
	Purline	2*5	5.800	0.200	1		11.600	
		( k)			To	tal Quantity	40.400 sqr	n
		155			otal Deduct	ed Quantity	0.000 sqm	
		486			Net To	tal Quantity	40.400 sqm	1
			S	Say 40.400 s	qm @ Rs 1	49.06 / sqm	Rs 60	22.02
SI No	Description	No	ala <del>W</del> at	er Auth	ority	CF	Quantity	Remark
	14Lands	scaping, gree			/	ated water	<u> </u>	
		P	K		Lump	Sum Total	Rs 400	000.00
SI No	Description	No	L	В	D	CF	Quantity	Remark
		1	50dour Co	ntrol syste	m			
						o-Sum Total	Rs 880	00.000
SI No	Description	No No	·	В	D	CF	Quantity	Remark
		1620	oviding Sola	ar energy s		O T ( )	5 050	
					Lump	o-Sum Total	Rs 250	
						Total		474.40
						Centage @		0%
						age Amount		00
				ovision for G				.0%
			<i>P</i>	Amount rese			65391	
						I & Centage	42867	
					•	or round off		.00
					GRAND	TOTAL Rs	4286	7599.79

Rounded Grand Total Rs 4,28,67,600

Rupees Four Crore Twenty Eight Lakh Sixty Seven Thousand Six Hundred Only



## **Detailed Estimate**

## SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY -PHASE 2-CONSTRUCTION OF 3 MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NET WORK TO ZONE 2 OF KOYILANDY MUNICIPALITY-PART- C- ELECTRO-MECHANICAL-2

(Dsor year: 2018)

SI No	Description	No	L	В	D	CF	Quantity	Remark
	1 N	IECHANIC	AL WORKS	(Cost Ir	ndex:36.44	%)		
1	od336560/2021_2022 Supply at site,erection sewage transfer pump IS 1520 and conforming phase motor, SS shaft, bolts etc including Doul PN 1 rating NRVs with 50 HZ, AC power suppautomatic switch on & sas per technical specific high/ low level alarm. E	n, testing and for rated congression of the restriction of the restric	nd commiss ntinuous dute elevant star atic pedesta DI/CI PN 1 reconnecting collete in all restricted by directed by ntrol panel s	sioning of so ty and efficient ndards), CI I coupling, co ating sluice common deli- espects with by the standa Engineer In shall be supp	elf priming, ency (from re construction lelivery bene valves, Pres ivery suitable ind specifica Charge.Pui olied with th	non clog ceputed mann, bronze ind, required vessure gauge le for operate arrangementions complemps shall have pump as p	ufacturers conpeller, composite chain, wes, Double Fation on 415 /ents, level in ete with all a ave dry run poer the spec	omplying to blete with 3 rashers, SS lange DI/CI range volts, dicators for accessories protection & ifications in
	the Electrical BOQ The 25hp,79lps	ree phase I	R		To Total Deduct Net To	tal Quantity ed Quantity tal Quantity	2.000 2.000 No 0.000 No 2.000 No	
2	od336564/2021_2022 Supply,erection, testing required with the rotating motor, including rotary mechancial equipments with the pump as per the	ng arm for rapaddles, gos etc comple	nissioning o ated continu ear box, ca ete for the e	f direct drive lous duty mi bles, wall m	en floating r xing and eff nooring and ank . Electr	mixers of ap ficiency, cor anchoring ical Control	oproximately mplete set w system with panel shall I	3HP or as ith 3 phase all electro be supplied
		2					2.000	
					То	tal Quantity	2.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
						tal Quantity		
			S	Say 2.000 No	@ Rs 139	380.00 / No	Rs 278	760.00

3 od336565/2021\_2022 Supply at site, erection, testing and commissioning of self priming, non clog centrifugal submersible sewage transfer pump for rated continuous duty and efficiency (from reputed manufacturers complying to IS 1520 and conforming to other relevant standards), CI construction, bronze impeller, complete with 3 phase motor, SS shaft, with automatic pedestal coupling, delivery bend, required wire chain, washers, SS bolts etc including Double Flange DI/CI PN 1 rating sluice valves, Pressure gauges, Double Flange DI/CI PN 1 rating NRVs with DI/I/Pipes connecting common delivery suitable for operation on 415 /-10% volts, 50 HZ, AC power supply etc. complete in all respects with detachable arrangements, level indicators for automatic switch on & switch off as required by the standard specifications complete with all accessories as per technical specification or as directed by Engineer In Charge. Pumps shall have dry run protection & high/ low level alarm. Electrical Control panel shall be supplied with the pump as per the specifications in the Electrical BOQ<br>Motor: three phase motor with IP 68 Protection"-Sludge Thickener Feed Pump & Clarifier to sludge sump Sludge Thickener 2 2.000 Feed Pump Clarifier to sludge 2 2.000 sump Total Quantity 4.000 No Total Deducted Quantity 0.000 No Net Total Quantity 4.000 No Say 4.000 No @ Rs 87112.50 / No Rs 348450.00 Kerala Water Authority 4 od336568/2021 2022 Supply at site, erection, testing and commissioning of self priming, non clog centrifugal submersible sewage transfer pump for rated continuous duty and efficiency (from reputed manufacturers complying to IS 1520 and conforming to other relevant standards), CI construction, bronze impeller, complete with 3 phase motor, SS shaft, with automatic pedestal coupling, delivery bend, required wire chain, washers, SS bolts etc including Double Flange DI/CI PN 1 rating sluice valves, Pressure gauges, Double Flange DI/CI PN 1 rating NRVs with DI/I/Pipes connecting common delivery suitable for operation on 415 /-10% volts, 50 HZ, AC power supply etc. complete in all respects with detachable arrangements, level indicators for automatic switch on & switch off as required by the standard specifications complete with all accessories as per technical specification or as directed by Engineer In Charge. Pumps shall have dry run protection & high/ low level alarm. Electrical Control panel shall be supplied with the pump as per the specifications in the Electrical BOQ<br>>Motor: three phase motor with IP 68 Protection"- Sludge transfer to centrifuge pump 2 2.000 Total Quantity 2.000 No Total Deducted Quantity 0.000 No Net Total Quantity 2.000 No Say 2.000 No @ Rs 37168.00 / No Rs 74336.00 5 od336569/2021 2022 Supply at site, erection, testing and commissioning of self priming, non clog centrifugal submersible

sewage transfer pump for rated continuous duty and efficiency (from reputed manufacturers complying to IS 1520 and conforming to other relevant standards), CI construction, bronze impeller, complete with 3 phase motor, SS shaft, with automatic pedestal coupling, delivery bend, required wire chain, washers, SS bolts etc including Double Flange DI/CI PN 1 rating sluice valves, Pressure gauges, Double Flange DI/CI PN 1 rating NRVs with DI/I/Pipes connecting common delivery suitable for operation on 415 /-10% volts, 50 HZ, AC power supply etc. complete in all respects with detachable arrangements, level indicators for automatic switch on & switch off as required by the standard specifications complete with all accessories as per technical specification or as directed by Engineer In Charge. Pumps shall have dry run protection & high/ low level alarm. Electrical Control panel shall be supplied with the pump as per the specifications in the Electrical BOQ<br>Motor : three phase motor with IP 68 Protection"-Centrate sump to equalisation tank Pump 2 2.000 2.000 No **Total Quantity** Total Deducted Quantity 0.000 No Net Total Quantity 2.000 No Say 2.000 No @ Rs 74336.00 / No Rs 148672.00 6 od336571/2021 2022 Supplying and fixing of mono block centrifugal pump, for rated continuous duty and best efficiency CI construction, CI impeller, complete with 3 phase motor,FRP motor cover, pressure gauge, operation on 415 /-10% volts, 50 HZ, AC power supply etc including sluice valves, Pressure gauges, NRVs with DI/I/Pipes connecting common delivery suitable for complete in all respects as required by the standard specifications and shall suit following capacities complete with all accessories as per technical specification. Pumps shall have dry run protection & high/ low level alarm. Electrical Control panel shall be supplied with the pump as per the specifications in the Electrical BOQMotor: three phase motor with IP 68 Protection"- Pump for clarifier to PSF 3 3.000 Total Quantity 3.000 No Total Deducted Quantity 0.000 No Net Total Quantity 3.000 No Say 3.000 No @ Rs 511060.00 / No Rs 1533180.00 7 od336575/2021 2022 "Air Blower<br>Supply, erection, testing and commissioning of twin lobe air blower for indoor application complete with acoustic canopy, air filter, motor of 1500 rpm, pulleys, pressure gauges, pressure relief valve, acoustic hood, suction silencer with suitable flanges, common motor and compressor base frame with motor belt tightening arrangement interconnecting line with flanges including all accessories complete as per technical specification or as Directed by Engineer in Charge<br/>
chryCapacity: 2763 m3/hr.<br/>br>Pressure: 0.6 kg/sqcm<br/>br>Motor: three phase motor with IP 68 Protection (2W 1 S)"<br>46HP 4 4.000 Total Quantity 4.000 No

	Total Deducted Quantity	0 000 No
	Net Total Quantity	
	Say 4.000 No @ Rs 801435.00 / No	
8	od336578/2021_2022 "Bubble Diffuser for MBBR Tank Supplying at site, erection, testing & commissioning of Fine Bubble Diffuser (retri and pulley arrangement) for the aeration system of the MBBR Tansk (2Nos) wit size and length made of EPDM make with SS tee 1"" x 1 "", SS lifting hook 8 mm, SS C clamp suitable for 1"" O.D, hose, PP Rope, PP swivel nut, PP sleeve hose clamp, RCC block complete at a minimum rating of 95m/hr as per technical directed by the Engineer in Charge"	h diffusers of sufficien n, SS foundation bolt ( e, Silicone Washer, SS
	2	2.000
	Total Quantity	l l
	Total Deducted Quantity	
	Net Total Quantity	
	Say 2.000 No @ Rs 209070.00 / No	Rs 418140.00
	Supplying at site, erection, testing & commissioning of Coarse Bubble Diffuser rope and pulley arrangement) for the aeration system of the Equalization Tank wi size and length made of EPDM make with SS tee 1"" x 1 "", SS lifting hook 8 mm, SS C clamp suitable for 1"" O.D, hose, PP Rope, PP swivel nut, PP sleeve hose clamp, RCC block complete at a minimum rating of 95m/hr as per technical directed by the Engineer in Charge"	th diffusers of sufficier n, SS foundation bolt e, Silicone Washer, SS
	2	2.000
	Total Quantity	2.000 No
	Total Deducted Quantity	0.000 No
	Net Total Quantity	2.000 No
	Say 2.000 No @ Rs 80724.25 / No	Rs 161448.50
10	od336581/2021_2022 "Air Grid Pipe br>Supply and installation of air pipes (HDPE) aly into valves ar required for the blowers to various tanks as a complete unit"	nd other acessories a
	1	1.000
	Total Quantity	1.000 set
	Total Deducted Quantity	0.000 set
	Net Total Quantity	1.000 set
	Net Total Quantity Say 1.000 set @ Rs 290375.00 / set	

	"MBBR Media Supplying and fixing	of non- clo	gging freely	moving bi	omass med	lia of polyp	ropylene c	onstruct	
	Sp.Gravity 0.93 for MB					_	16-20 mm,	dia 22	
	complete as per techni	ical specification	ation or as c	lirected by E	ingineer in (	Charge"	Ι	1	
		1				200.0	200.000		
					То	tal Quantity	200.000 cu	ım	
				Т	otal Deduct	ed Quantity	0.000 cum		
	Net Total Quantity 200.  Say 200.000 cum @ Rs 10453.50 / cum								
			Say 2	200.000 cun	n @ Rs 104	53.50 / cum	Rs 209	0700.00	
12	od336586/2021_2022 "Gas Chlorinator system Supply at site, erection		and commis	ssioning of	electronic c	chlorine dos	sing system	ı (gas fi	
	Chlorine) with all wetto pumps, valves, suction repair kit, FRP motor of chlorine tonners"	ns and deliv	ery lines us	ing heavy d	uty PVC tul	oes, gas lin	e diffusers,	emerge	
		2	LOW.		18		2.000		
		1016	460		То	tal Quantity	2.000 set	1	
		TOP		T	otal Deduct				
			Variation of the last	d Mary	Net To	tal Quantity	2.000 set		
		Kera	ala Wat	er Auth ay 2.000 se	0111V t @ Rs 4640	600.00 / set	Rs 929	200.00	
	Say 2.000 set @ Rs 464600.00 / set Rs 929200.00 od336588/2021_2022								
13		meter							
13	"Electromagnetic flow results of the supply installation, teached and digital display arrologger, to save upto 20 600LPS, One display supplementary in the s	sting and co corder, digital rangements 000 linesof o	al flow indica and all acc data etc. cor	ator, flow inte cessories in nplete to fix	egrator with cluding hou as per the s	sensors, 7d using arrang	ligit totaliser gements, in	, transm iternal c	
13	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and co corder, digital rangements 000 linesof o	al flow indica and all acc data etc. cor	ator, flow inte cessories in nplete to fix	egrator with cluding hou as per the s	sensors, 7d using arrang	ligit totaliser gements, in	, transm iternal c	
13	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and co corder, digital rangements 000 linesof of shall be insta	al flow indica and all acc data etc. cor	ator, flow inte cessories in nplete to fix	egrator with cluding hou as per the s I centre"	sensors, 7d using arrang	ligit totaliser gements, in ns . Flow rar 2.000	, transm Iternal o	
13	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and co corder, digital rangements 000 linesof of shall be insta	al flow indica and all acc data etc. cor	etor, flow inte eessories in nplete to fix main contro	egrator with cluding hou as per the s I centre"	sensors, 7dusing arrang specification tal Quantity	ligit totaliser gements, in ns . Flow rar 2.000	, transm iternal c	
13	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and co corder, digital rangements 000 linesof of shall be insta	al flow indica and all acc data etc. cor	etor, flow inte eessories in nplete to fix main contro	egrator with cluding hou as per the statement of the stat	sensors, 7dusing arrang specification tal Quantity	igit totaliser gements, in ns . Flow rar 2.000 2.000 No 0.000 No	, transm Iternal o	
13	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and co corder, digital rangements 000 linesof of shall be insta	al flow indica and all acc data etc. cor	etor, flow inte eessories in nplete to fix main contro	egrator with cluding hou as per the s I centre"  To Total Deduct Net To	sensors, 7dusing arrangespecification tal Quantity ed Quantity tal Quantity	gements, in s. Flow rar 2.000 2.000 No 0.000 No 2.000 No	, transm iternal c	
14	"Electromagnetic flow r Supply, installation, ter flow meter with flow red and digital display arr logger, to save upto 20	sting and cocorder, digital rangements 2000 linesof coshall be installed 2	al flow indication and all accordate etc. con alled at the solution and all accordance at the solution accordance at the solution and all accordance at the solution ac	stor, flow interessories in applete to fix main control  T  Say 2.000 N	egrator with cluding hou as per the statement of the stat	sensors, 7dusing arrangespecification tal Quantity and Quantity tal Quantity 112.50 / No	igit totaliser gements, in ns . Flow rar 2.000 2.000 No 0.000 No 2.000 No Rs 174	, transmaternal conge of 1	

					То	tal Quantity	5.000 No	
				7	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	5.000 No	
			,	Say 5.000 l	No @ Rs 11	615.00 / No	Rs 58	075.00
15	od336590/2021_2022 "SS Gates Supplying at site, ins commissioning of spin 145LPS and velocity lesizes as per drawings,	dle operate ess than 1r	ed open cha m/s at the in	nnel sluice leta and ou	gates/shutt	ter of DI ma screen chan	nke with a p	eak flow of
		8					8.000	
			1Co	B.	То	tal Quantity	8.000 set	
					otal Deduct	ed Quantity	0.000 set	
		1	45 B	\$ 50	Net To	tal Quantity	8.000 set	
		( L		Say 8.000 s	set @ Rs 17	422.50 / set	Rs 139	9380.00
			g, fixing and flats having s					_
	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply with all accessories as	e made of fed type) at nated scrapetc. comple	flats having to the flats having to flat the flat flat flat flat flat flat flat flat	50mm x 10 on including d materials pects as rec	mm and 20 cost of me suitable for	mm clear spechanical so	pace across creen grab on 415+/-10	the screen bucket and 0% volts, 50
	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply	e made of fed type) at nated scrapetc. comple	flats having to the flats having to flat the flat flat flat flat flat flat flat flat	50mm x 10 on including d materials pects as rec	mm and 20 cost of me suitable for	mm clear spechanical so	pace across creen grab on 415+/-10	the screen bucket and 0% volts, 50
	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply	e made of fed type) at nated scrapetc. comple	flats having to the flats having to flat the flat flat flat flat flat flat flat flat	50mm x 10 on including d materials pects as rec	mm and 200 g cost of me suitable for guired by the	mm clear spechanical so	pace across creen grab on 415+/-10 specification	the screen bucket and % volts, 50
	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply	e made of fed type) at nated scrapetc. comple	flats having to the flats having to flat the flat flat flat flat flat flat flat flat	50mm x 10 on including d materials bects as rec tion"	mm and 200 g cost of me suitable for guired by the	mm clear spechanical so operation of standard s	pace across creen grab on 415+/-10 specification 1.000 1.000 set	the screen bucket and % volts, 50
	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply	e made of fed type) at nated scrapetc. comple	flats having to the flats having to flat the flat flat flat flat flat flat flat flat	50mm x 10 on including d materials bects as rec tion"	mm and 200 g cost of me suitable for guired by the To	mm clear spechanical so operation of standard setal Quantity	pace across creen grab on 415+/-10 specification 1.000 1.000 set	the screer bucket and % volts, 50
17	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply	e made of fed type) at nated scrapetc. comple per technice nated scrapetchice made of ed type) at nated scrapetc. comple per technice per technice nated scrapetchice nated nated scrapetchice nated scrapetchice nated nated nated nated scrapetchice nated nated nated nated nated nated nated nated nat	g, fixing and flats having to inclination to inclin	Say 1.000 s  commission 50mm x 10  Say 1.000 s  commission 50mm x 10  on including d materials bects as rec	mm and 200 g cost of me suitable for rotal Deduct Net To set @ Rs 69  ning of mechaning of mechaning of mechaning of mechaning of mechaning cost of measuitable for	echanical so estandard	1.000 set	of following the screer bucket and the screen bucket and the scree
17	or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply with all accessories as od336592/2021_2022 "Mechanical Fine Scree Supplying all materials or nearest suitable size chamber channel (fixe arrangement for autom HZ, AC power supply experience)	e made of fed type) at nated scrap etc. comple per technic 1  en fabricating e made of ed type) at nated scrap etc. comple etc. comple	g, fixing and flats having to inclination to inclin	Say 1.000 s  commission 50mm x 10  Say 1.000 s  commission 50mm x 10  on including d materials bects as rec	mm and 200 g cost of me suitable for rotal Deduct Net To set @ Rs 69  ning of mechaning of mechaning of mechaning of mechaning of mechaning cost of measuitable for	echanical so estandard	1.000 set 1.000 set 1.000 set Rs 69 Screen grab	of following the screer bucket and the screen bucket and the scree

				Т	Total Deduct	ed Quantity	0.000 set	
					Net To	tal Quantity	1.000 set	
			5	Say 1.000 se	et @ Rs 116	150.00 / set	Rs 110	6150.00
18	od336593/2021_202 "Manual Coarse Scr Supplying all mater nearest suitable siz chamber channel (fi manual scrapping c in Charge"	reen ials, fabricatin ze made of fla ixed type) at 4	ats having 5 5 inclination	0mm x 10m including co	nm and 20m ost of screei	nm clear sp n grab buck	ace across et and arra	the scree
		1					1.000	
			B	Pa-	То	tal Quantity	1.000 set	
			M		Total Deduct	ed Quantity	0.000 set	
			£3 6		Net To	tal Quantity	1.000 set	
				Say 1.000 s	set @ Rs 34	845.00 / set	Rs 34	845.00
	mechanism to suit Engineer in Charge	e."	ber sizes a	as per draw	1	_	•	•
		e."		er Auth	ority To Total Deduct	r specification tal Quantity ed Quantity	2.000 2.000 No 0.000 No	•
		e."	ber sizes a	er Auth	ority To Total Deduct	r specificati	2.000 2.000 No 0.000 No	•
20	Engineer in Charge	e."  Ker	ala Wat	ter Auth	ority To Total Deduct	r specification tal Quantity ed Quantity tal Quantity	2.000 2.000 No 0.000 No 2.000 No	•
20		e."  22 n rials, fabrication rake for the had chanism with	ala Wat	Say 2.000 Nond commiss of the Clarific scrappers as directed	ings, tender  Ority  To  Total Deduct  Net To  o @ Rs 545  ioning of Brier Tank as p with sufficide by Engine	tal Quantity ed Quantity tal Quantity 905.00 / No ridge mount per drawings ent 3phase er in Charg tal Quantity	2.000 No 2.000 No 2.000 No 2.000 No Rs 109 ted central s including a motor and ge" 1.000 1.000 No 0.000 No	directed  21810.00  driven ty all feed w
20	od336595/2021_202 "Clarifier Mechanism Supplying all mater clarifier mechanical drive and rake me	e."  22  rials, fabrication rake for the hander specific	ala Wat	Say 2.000 Nond commiss of the Clarific scrappers as directed	ings, tender  Ority  To  Total Deduct  Net To  o @ Rs 545  ioning of Brier Tank as p with sufficide by Engine	tal Quantity tal Quantity tal Quantity 905.00 / No ridge mount per drawings ent 3phase er in Charg tal Quantity ed Quantity	2.000 No 2.000 No 0.000 No 2.000 No Rs 109 ted central s including a motor and ge" 1.000 1.000 No 0.000 No	directed  01810.00  driven tylall feed we

	sludge thickening mech all feed well, drive and	anism for t		eter of the SI	udge Thicke	ener tank as	per drawin	gs includii
	etc complete as per ten	der specifi	cations and	as directed b	y Engineer	in Charge"		T
		1					1.000	
					То	tal Quantity	1.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	1.000 No	
			;	Say 1.000 No	@ Rs 313	605.00 / No	Rs 313	605.00
22	od336597/2021_2022 "Poly Electrolyte dosing Supplying and fixing of pumping Poly Electroly delivery lines using heat to prepare 5% solution	of electronic te solution avy duty P	including c /C tubes, HI	ost of suitab	le agitators	, control ge	ars, valve,	suction a
		2	Defi	20/2	441		2.000	
		165	1138		То	tal Quantity	2.000 No	
		lille.		The state of the s	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	2.000 No	
		Ker	ala Wai	Say 2.000 N	No @ Rs 92	920.00 / No	Rs 185	840.00
23	od336598/2021_2022 "High Pressure Jet Pun Supply and commission	ning of po	ounted on a			-		
	supply water to the pu pumps, and other equi standards"	ipments us	sing high pre	essure gaug	es, safety a	arrangemen	ts etc comp	-
	pumps, and other equi	pments us	sing high pre	essure gaug	es, safety a	arrangemen	ts etc comp	-
	pumps, and other equi		sing high pre	essure gaug	•	arrangemen		-
	pumps, and other equi		sing high pre		То	-	1.000 1.000 No	-
	pumps, and other equi		sing high pre		To otal Deduct	tal Quantity	1.000 1.000 No 0.000 No	-
	pumps, and other equi		sing high pre		To otal Deduct Net To	tal Quantity ed Quantity tal Quantity	1.000 1.000 No 0.000 No 1.000 No	-
24	pumps, and other equi	ning of por	table Monke	Say 1.000 Ney type Hoist	To otal Deduct Net To low Rs 34 with capacimedium ve	tal Quantity ed Quantity tal Quantity 845.00 / No	1.000 1.000 No 0.000 No 1.000 No Rs 34	845.00
24	pumps, and other equistandards"  od336599/2021_2022 "Portable Hoist - 500kg Supply and commission 6m, 5HP Motor, 415V	ning of por	table Monke	Say 1.000 Ney type Hoist	To otal Deduct Net To low Rs 34 with capacimedium ve	tal Quantity ed Quantity tal Quantity 845.00 / No	1.000 1.000 No 0.000 No 1.000 No Rs 34	845.00

				Т	otal Deduct	ed Quantity	0.000 No	
						tal Quantity		
				Say 1.000 No	o @ Rs 104	535.00 / No	Rs 104	4535.00
25	od336600/2021_2022 "Wheel Barrow Supply of three wheel		barrow of ca	apcity 200ltrs	ıı			
		1					1.000	
		·			То	tal Quantity	1.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	1.000 No	
			10	Say 1.000 N	No @ Rs 29	037.50 / No	Rs 29	037.50
	"Aluminium Ladder Supply, Installation of per the drawings or a					ed structure	s of require	ed height
		4	1			L.	4.000	
		4		<b>M</b>	То	tal Quantity	4.000 No	
			AND PARTY OF	SHI OLDEN	otal Deduct	ed Quantity	0.000 No	
		Kei	ala Wa	ter Auth	Net To	tal Quantity	4.000 No	
		<b>D</b>		Say 4.000	No @ Rs 6	969.00 / No	Rs 27	876.00
27	od336602/2021_2022	2	K			1		
	"FRP Ladder Supply, Installation of		ū	•	evated stru	ctures of red	quired heigh	nt as per
	"FRP Ladder		ū	•	evated stru	ctures of red		nt as per
	"FRP Ladder Supply, Installation of	ed by the Er	ū	•		ctures of rec	6.000	nt as per
	"FRP Ladder Supply, Installation of	ed by the Er	ū	harges"	То		6.000 6.000 No	nt as per
	"FRP Ladder Supply, Installation of	ed by the Er	ū	harges"	To otal Deduct	tal Quantity	6.000 6.000 No 0.000 No	nt as per
	"FRP Ladder Supply, Installation of	ed by the Er	ū	harges"	To otal Deduct Net To	tal Quantity ed Quantity tal Quantity	6.000 No 6.000 No 0.000 No 6.000 No	9070.00
28	"FRP Ladder Supply, Installation of drawings or as directed od336603/2021_2022 "Monorail Crane Supply, Installation ar capacity of 2tonnes so span upto 20m comp	ed by the Er  6  nd commissi uitable for opolete in all r	oning in postoeration on espects as	Say 6.000 N	To Total Deduct Net To No @ Rs 34 sically opera	tal Quantity ed Quantity tal Quantity 845.00 / No ted mono ra AC power s	6.000 No 0.000 No 6.000 No Rs 209	9070.00  oad bear vith 6m lif
28	"FRP Ladder Supply, Installation of drawings or as directed od336603/2021_2022 "Monorail Crane Supply, Installation ar capacity of 2tonnes significant contents of the content	ed by the Er  6  nd commissi uitable for opolete in all r	oning in postoeration on espects as	Say 6.000 N	To Total Deduct Net To No @ Rs 34 sically opera	tal Quantity ed Quantity tal Quantity 845.00 / No ted mono ra AC power s	6.000 No 0.000 No 6.000 No Rs 209	9070.00  oad bearivith 6m lif

				Т	otal Deduct	ed Quantity	0.000 No	
						tal Quantity		
			S	Say 1.000 N	o @ Rs 406	<u>-</u>		6525.00
29	od336604/2021_2022 "Pressure sand filter pressure vessel fabrication outside, two coats of pressure of 7.0Kg/cm wincluding graded pebb gauges, strainers, suptwice the working pressure of the wor	ated with Moaint outsid with as oper le and san porting strusure supposected by Er	S constructi e ( pain qua rating pressu d and antra ucture, back rted over pe	on with epo lity as instr re of 3.5 Kg cite , fronta wash arrar bble/gravel harge. The	xy coating in ucted by Er /cm, complet piping, but agement, etching with inspect scope shall	nside and a agineer) with the with valveteryfly valved and all other tion manholed include co	anti corrosivenstand a mines and duales, internales her accesses etc company of the modern accesses and the modern accesses etc company of the modern accesses and the modern accesses and the modern accesses accesses accesses and the modern accesses accesses and the modern accesses accesses and the modern accesses accesses accesses accessed accesses accesses accesses accesses and the modern accesses	e treatment inimum test filter media s, pressure ories tested plete as per ng with MS
		3	CLA				3.000	
		61	SK Z	N. B	То	tal Quantity	3.000 No	
		B	<b>FINE</b>		otal Deduct	ed Quantity	0.000 No	
		101	Lk/ai		Net To	tal Quantity	3.000 No	
		TUE	9	Say 3.000 N	@ Rs 522	675.00 / No	Rs 156	8025.00
30	od336605/2021_2022 "Activated Carbon filter type pressure vessel treatment outside, two minimum test pressure filter media including a internals, pressure gau accessories tested twic etc complete as per spe piping with MS fabrica 2.6m. br>Height - 2.5	fabricated of coats of of 7.0Kg/continued cauges, strain ce the workerification of ted pipes a	with MS copaint outsidem with as operation of apportance, supportance, as directed	nstruction ve ( pain que perating pre roved grade ting structure supported by Engine	with epoxy ality as insussure of 3.5 and quality re, back was over pebbler in Charge	coating ins tructed by Kg/cm, cooy, frontal pish arranger e/gravel with The scope	ide and an Engineer) with iping, butte ment, etc ath inspections shall include	ti corrosive withstand a valves and ryfly valves, and all other manholes de complete
		3					3.000	
					То	tal Quantity	3.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	3.000 No	
			S	Say 3.000 N	o @ Rs 551	712.50 / No	Rs 165	5137.50
31	od336606/2021_2022 "Centrifuge System Supply at site, installa automated, recessed ty with PP cloth. Filter ope	pe press w	vith SS fabrio	cated structu	ıre pipe butt	on surface	and SS flat	parallel bar

Total Quantity 2.000 No  Total Deducted Quantity 2.000 No  Net Total Quantity 2.000 No  Say 2.000 No ® Rs 348450.00 / No  Rs 696900.00  Say 2.000 No ® Rs 348450.00 / No  Rs 696900.00  Say 2.000 No ® Rs 348450.00 / No  Rs 696900.00  Say 2.000 No ® Rs 348450.00 / No  Rs 696900.00  Rs 696900.00  Rs 696900.00  Rs 696900.00  Say 2.000 No ® Rs 348450.00 / No  Rs 696900.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Say 2.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Total Quantity 2.000 Ls ® Rs 240000.00  Say 8.000 Ls ® Rs 120000.00 / Ls ® Rs 240000.00  Total Cuantity 8.000 kg  Say 8.000 kg ® Rs 681.59 / kg Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to 18: 8329 :100 mm dia Ductile Iron Double Flanged		platform and all arour entire surroundings a	•	•	•				
Total Deducted Quantity 0.000 No  Net Total Quantity 2.000 No  Say 2.000 No @ Rs 348450.00 / No  Rs 696900.00  32  33  34  35  36  36  37  38  38  38  38  38  38  38  38  38			2					2.000	
Net Total Quantity 2.000 No Say 2.000 No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Say 2.000 No Rs 348450.00 / No Rs 696900.00  Total Quantity No No No Ls Notal Quantity 2.000 Ls  Total Deducted Quantity 2.000 Ls  Say 2.000 Ls Rs 1200000.00 / Ls Rs 2400000.00  Say 2.000 Ls Rs 1200000.00 / Ls Rs 2400000.00  Say 2.000 Ls Rs 1200000.00 / Ls Rs 2400000.00  Total Quantity 2.000 Ls Rs 2400000.00 / Ls Rs 2400000.00  Say 2.000 Ls Rs 1200000.00 / Ls Rs 2400000.00 / Ls Rs 24000000.00 / Ls Rs 2400000000 / Ls Rs 2400000000 / Ls Rs 24000000000 / Ls Rs 24000000000000 / Ls Rs 2400000000 / Ls Rs 24000000000000000000000000000000000000						То	tal Quantity	2.000 No	
Say 2.000 No @ Rs 348450.00 / No Rs 696900.00  32 od336607/2021_2022  SLUDGE DEWATERING and Packing UNIT -Volute is a dewatering unit for convenient slud dewatering. Machine is available for dry sludge (DS) output of 1.0kg/hr to 750kg/hr the Sludge to be of from 70% moisture content to 10%. The similar type can be suggested. The Packing of the dried sludg be packed in the packing machine. The necessary electrification civil works, cost of packing machine, of gunny bags for 6months. The machines suggested should be cost effective  2					Т	otal Deduct	ed Quantity	0.000 No	
32 od336607/2021_2022 SLUDGE DEWATERING and Packing UNIT -Volute is a dewatering unit for convenient slud dewatering. Machine is available for dry sludge (DS) output of 1.0kg/hr to 750kg/hr the Sludge to be of from 70% moisture content to 10%. The similar type can be suggested. The Packing of the dried sludge be packed in the packing machine. The necessary electrification civil works, cost of packing machine, of gunny bags for 6months. The machines suggested should be cost effective  2 2.000 LS  Total Quantity 2.000 L.S  Net Total Quantity 2.000 L.S  Net Total Quantity 2.000 L.S  Say 2.000 L.S @ Rs 1200000.00 / L.S  Rs 2400000.00  33 10.28 Kerala Water Authority  Providing and fixing stainless steel (Grade-304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, l/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fit accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000  Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329:100 mm dia Ductile Iron Double Flanged						Net To	tal Quantity	2.000 No	
SLUDGE DEWATERING and Packing UNIT -Volute is a dewatering unit for convenient sludewatering. Machine is available for dry sludge (DS) output of 1.0kg/hr to 750kg/hr the Sludge to be of from 70% moisture content to 10%. The similar type can be suggested. The Packing of the dried sludg be packed in the packing machine. The necessary electrification civil works, cost of packing machine, of gunny bags for 6months. The machines suggested should be cost effective  2 .000 L.S  Total Quantity 2.000 L.S  Net Total Quantity 2.000 L.S  Say 2.000 L.S @ Rs 1200000.00 / L.S Rs 2400000.00  Say 2.000 L.S @ Rs 1200000.00 / L.S Rs 2400000.00  Research Water Authority  Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete. i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fit accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000  Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged					Say 2.000 No	o @ Rs 348	450.00 / No	Rs 696	900.00
Total Quantity 2.000 L.S  Total Deducted Quantity 0.000 L.S  Net Total Quantity 2.000 L.S  Net Total Quantity 2.000 L.S  Res 2400000.00  Say 2.000 L.S ® Rs 1200000.00 / L.S Res 2400000.00  Res 24000000.00  Res 24000000.00  Res 240000000  Res 240000000  Res 240000000  Res 240000000  Res 2400000000  Res 24000000000  Res 24000000000  Res 240000000000000000  Res 2400000000000000000  Res 24000000000000000000000000000000000000		dewatering.Machine is from 70% moisture co be packed in the pack	s available f ontent to 109 king machin	or dry sludgo %.The simila e.The neces	e (DS) outpu ir type can be sary electrific	t of 1.0kg/hr suggested cation civil w	to 750kg/hı The Packin vorks,cost o	r the Sludge g of the drie	to be dred sludge
Total Deducted Quantity 0.000 L.S  Net Total Quantity 2.000 L.S  Say 2.000 L.S @ Rs 1200000.00 / L.S  Rs 2400000.00  10.28  Providing and fixing stainless steel (Grade-304) railing made of Hollow tubes, channels, plates including welding, prinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fix accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000 kg  Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329:100 mm dia Ductile Iron Double Flanged			2		15. 7	713		2.000	
Say 2.000 L.S @ Rs 1200000.00 / L.S  Rs 2400000.00  10.28  Kerala Water Authority Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fix accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000  Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 0.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1 Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged			15	4100		То	tal Quantity	2.000 L.S	
Say 2.000 L.S @ Rs 1200000.00 / L.S  Rs 2400000.00  10.28  Kerala Water Authority  Providing and fixing stainless steel (Grade-304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fix accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000  Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged			1/37	الأنكل	I	otal Deduct	ed Quantity	0.000 L.S	
33 10.28 Kerala Water Authority Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fix accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000 Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg Rs 5452.72  34 18.73.1 Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged			400			Net To	tal Quantity	2.000 L.S	
Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necess accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size on the top of floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, payment purpose only weight of stainless steel members shall be considered excluding fix accessories such as nuts, bolts, fasteners etc.)  1 8.0 8.000 kg  Total Quantity 8.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329:100 mm dia Ductile Iron Double Flanged									
Total Quantity 8.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	10.28	Kei				000.00 / L.S	Rs 240	0000.00
Total Deducted Quantity 0.000 kg  Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing, buffing stainless steel das vaist slab would be stainless to the stain stain would be stainless	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless sta arrangemen s steel men	made of Ho g curvature emplete, i/c eel bolts etc t as per ap	ollow tubes, (wherever r fixing the ., of require proval of E	channels, equired) an railing with d size on th ngineer-in-c	plates end fitting necessare top of charge, (
Net Total Quantity 8.000 kg  Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  34 18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing stainless steel das vaist slab would make the stainless to the stainless stai	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless sta arrangemen s steel men	made of Ho g curvature emplete, i/c eel bolts etc t as per ap	ollow tubes, (wherever r fixing the ., of require proval of E be consid	channels, equired) an railing with d size on th ngineer-in-c ered exclu	plates end fitting necessare top of charge, (
Say 8.000 kg @ Rs 681.59 / kg  Rs 5452.72  18.73.1  Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing stainless steel das vaist slab would make the stainless to the stainless stai	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless sta arrangemen s steel men	made of Ho g curvature emplete, i/c eel bolts etc t as per ap	ollow tubes, (wherever r fixing the ., of require proval of E be consid	channels, equired) an railing with d size on th ngineer-in-c ered exclu	plates end fitting necesse top of charge, (
18.73.1 Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing stainless steel das vaist slab would make the stainless to the stainless stai	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless ste arrangemen s steel men rs etc.)	made of Ho g curvature emplete, i/c eel bolts etc t as per ap abers shall	ollow tubes, (wherever r fixing the ., of require proval of Er be consid  8.0	channels, equired) an railing with d size on th ngineer-in-cered exclu	plates end fitting necesse top of charge,
Providing and laying Double Flanged ( Screwed / Welded ) Centrifugally (Spun) Ductile Iron Pipe Class K - 9 conforming to IS: 8329 :100 mm dia Ductile Iron Double Flanged	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing stainless steel das vaist slab would make the stainless to the stainless stai	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless ste arrangemen s steel men rs etc.)	made of Ho g curvature emplete, i/c eel bolts etc t as per app abers shall To otal Deduct	wherever r fixing the fixing the fixing the fixing the fixing the fixed require for requir	channels, equired) an railing with d size on the ngineer-in-cered exclusion 8.000 kg 0.000 kg 8.000 kg	plates end fitting necesse top of charge,
1 50.000 50.000	33	Providing and fixing including welding, gri same with necessary accessories & stainled floor or the side of we payment purpose of	stainless stainless, buffing stainless steel das vaist slab would make the stainless to the stainless stai	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless	ter Auth 304) railing g and making and bolts co stainless ste arrangemen s steel men rs etc.)	made of Ho g curvature emplete, i/c eel bolts etc t as per app abers shall To otal Deduct	wherever r fixing the fixing the fixing the fixing the fixing the fixed require for requir	channels, equired) an railing with d size on the ngineer-in-cered exclusion 8.000 kg 0.000 kg 8.000 kg	plates end fitting necess top of charge, ading fix
		Providing and fixing including welding, gri same with necessary accessories & stainles floor or the side of w payment purpose or accessories such as 18.73.1  Providing and laying	stainless stainless stainless stainless stainless ss steel das raist slab wally weight sanuts, bold 1	rala War teel (Grade- ng, polishing steel nuts a sh fasteners, ith suitable of stainless ts, fastener	ter Auth 304) railing g and making and bolts co stainless ste arrangemen s steel men rs etc.)	made of Hogourvature omplete, i/c eel bolts etc t as per appleters shall to the control of the c	ollow tubes, (wherever r fixing the ., of require proval of Er be consid  8.0  tal Quantity ed Quantity tal Quantity 681.59 / kg	channels, equired) an railing with d size on the ngineer-in-cered exclusion 8.000 kg 0.000 kg 8.000 kg Rs 54	plates end fitting necess e top of charge, (ding fix

				Т	otal Deducted Quantity	0 000 metr	e
				•	Net Total Quantity		
			Say 5	60.000 metre	@ Rs 1815.06 / metre		753.00
35	18.73.2 Providing and laying D Class K - 9 conforming		ged ( Screv	ved / Welde	d ) Centrifugally (Spur		
		1	20.000			20.000	
					Total Quantity	20.000 me	etre
				Т	otal Deducted Quantity	0.000 metr	е
					Net Total Quantity	20.000 me	tre
			Say 2	20.000 metre	e @ Rs 2722.86 / metre	Rs 54	457.20
36	18.73.3 Providing and laying D Class K - 9 conforming					n) Ductile Ir	on Pipes of
		1	20.000	76.36 A	4.3.1	20.000	
		155			Total Quantity	20.000 me	etre
	5				otal Deducted Quantity	0.000 metr	е
				HIST PEN	Net Total Quantity	20.000 me	tre
		Kera	ala \Say 2	20.000 metre	@ Rs 3436.45 / metre	Rs 68	729.00
37	18.73.5 Providing and laying D Class K - 9 conforming				7 7 7 7	n) Ductile Ir	on Pipes of
		1	40.000			40.000	
				-	Total Quantity	40.000 me	etre
				Т	otal Deducted Quantity	0.000 metr	е
					Net Total Quantity	40.000 me	tre
			Say 4	0.000 metre	e @ Rs 6262.46 / metre	Rs 250	0498.40
SI No	Description	No	L	В	D CF	Quantity	Remark
	<b>2</b> E	LECTRICA	L WORKS	(Cost In	dex:36.44 %)		
1	od336561/2021_2022 "250kVA Indoor Transforcapacity br>Supplying, Hz, Dyn 11, indoor ON, HV and LV side complet 2026 (Part 1 to Part 5) directed by the Engine cubicle type vcb panel	installation AN type, co te with all a & as per s er In Charg	n, testing an opper wound accessories oecification ge including	d commission  d transforme  i/c first filling  attached co  suuply inst	oning of 250KVA, 11KV or with OFF load tap chap of filtered dehydrated mplete in all respects a allation commissioning	//433V, 3 anging arra oil and con as required	r>Phase, 50 ngement or firming to IS at site or as

			1					
		1					1.000	
					To	otal Quantity	1.000 No	
				٦	Total Deduc	ted Quantity	0.000 No	
					Net To	otal Quantity	1.000 No	
			S	ay 1.000 No	@ Rs 1000	000.00 / No	Rs 100	00.000
2	od336563/2021_2022 "CT - PT Unit and TOD CT-PT Unit 3Phase D complete in all respec	ry type co	nfirming to	IS 2026 (P	art 1 to Pa	rt 5) & as p	er KSEB s	
		1					1.000	
				100	To	tal Quantity	1.000 No	
			JAS	401		ted Quantity		
			5.97	11 90	N	otal Quantity		
		6.0	X 2	Say 1.000 N	19 1 3	·		0000.00
	incoming line complyin operating load of 10kV the Engineer in Charge	with termin	nals made o	of MS/Alumin	nium with Z	inc plating fu	2.000 No	
						ted Quantity otal Quantity		
				Say 2 000		646.00 / No		292.00
4	od336567/2021_2022 Main LT panel br>Su mounted MS Cubicle including all inter consuperior quality ename quality as per specific standards and KSEB	type panel nections, well paint of a cation comp	board suit viring in all pproved co plete in all	esting and or collections and esting 1 older over a contest respects as	commission nnecting 25 4 gauge Cl oat of supe s required a	ing of S3ph 50 kva trans RCA sheet rior quality in at site confo	nase 415V, sformer and painted with ron primer prming to r	50Hz, floor d all motors h 2coats of of approved
		1					1.000	
		-			To	tal Quantity		
				7		ted Quantity		
				<u>'</u>		otal Quantity		
			<u> </u>	Say 1.000 N				0000.00
				_ =,				

5	od336570/2021_2022 "Earthing Equipments thick including accessarrangement and wat	sories, an	d providing	masonry	enclosure	with cover	plate havi	ng locking
		1					1.000	· · ·
					To	tal Quantity	1.000 L.S	
				Т		ed Quantity		
					Net To	tal Quantity	1.000 L.S	
			Sa	ay 1.000 L.S	6 @ Rs 2500	000.00 / L.S	Rs 250	000.00
6	od336572/2021_2022 "250KVA Diesel Gener Generating set alongw power factor at 415 V	ith having F	Prime Powe	r Rating of	250 KVA, 4	15 volts at	1500 RPM,	•
		1	83 6	6 2			1.000	
		613	Y R	51/1	То	tal Quantity	1.000 No	
		Bur	LA MA	MALE T	otal Deduct	ed Quantity	0.000 No	
		104	LKO.	357	Net To	tal Quantity	1.000 No	
		TOP	Sa	ay 1.000 No	@ Rs 1509	950.00 / No	Rs 1509	9950.00
7	od336574/2021_2022 "Auto Mains Failure Un Fabricating, Installing, pass panel, suitable for & protection and energ KWH, KVARH & provi cabling from AMF pan	Testing & 0 250 KVA s y analyser t sion for over	Commission ilent type D to indicate d erload, sho	ning of auto G set compl currents, pha rt circuit, re	matic mains ete with rela ase and line stricted ear	ays, timers, voltages, fr rth fault, un	set of CTs for equency, po der frequen	or metering ower factor,
		1					1.000	<u> </u>
					То	tal Quantity	1.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	1.000 No	
			5	Say 1.000 No	o @ Rs 232	300.00 / No	Rs 232	300.00
8	od336576/2021_2022 "Earthing Equipments for Earthing with copper emasonry enclosure with with charcoal/ coke and	arth plate 6 n cover plat	e having loc			•		
		1					1.000	
					То	tal Quantity	1.000 L.S	

				Т	otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
			Sa	ay 1.000 L.S	@ Rs 1021	39.99 / L.S	Rs 102	139.99
9	od336577/2021_2022 "Main Control Centre Design, Fabrication, S construction with fully a CRCA Sheets comparts approved shade. The pa equipment set with inc Busbars, ACBs & RCC mounting and internal operation on 415V, 3 ph supply, installation, ter specifications or as dir	utomated f menatised anel shall h dividual MO B's as spe- wiring, ea nase 50Hz mination to	eature (indowith hinge Inave enough CCB's/MCB cified belowarth termina AC supply vesting & Co	oor type) pre ock doors w a size to acc of appropr with cable als, number with enclosus mmissionin	eferably floo vith Dust, ve omadate the iate capaci alley, interd ing etc, co re protection g of the all	r mounted fermi proof a e individual ty and also connections mplete in a n class IP 54 power and	abricated of nd powder of control cent to have put having all a ill respect of as require control cal	2mm thick coated with res of each covision for accessories suitable for d. Including
		18	1		То	tal Quantity	1.000 L.S	
		(6)	L/A		otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
			Say	/ 1.000 L.S	@ Rs 23230	000.00 / L.S	Rs 232	3000.00
10	od336580/2021_2022 Wiring for Each equipmed cable of Aluminium conclusions with the state of the	nent Suppli ductor XLP direct in g as required	E power cal	ying of PV( ples as per I ding excava	C insulated S:7098/Part tion, sand c	:-I/88 with la ushioning, p	test ammen protective co lineer in Cha	dments 1.1 overing and
		1					1.000	
						tal Quantity		
				Т	otal Deduct			
					Net To	tal Quantity	1.000 L.S	
			Say	/ 1.000 L.S	@ Rs 18892	258.73 / L.S	Rs 188	9258.73
11	od336582/2021_2022 Brass Glands & Alumin and aluminium lugs for cable of 1.1 kV grade a	required si	ize of PVC i	_			-	_
		1					1.000	
			•		То	tal Quantity	1.000 L.S	
				Т	otal Deduct		0.000 L.S	
						tal Quantity		
						<u> </u>		

						238.26 / L.S	Rs 251	238.26
12	od336583/2021_2022 "Power Distribution Boa Supplying and fixing distribution board of sh bus bar, common neutrorequired. (Note: Verticoutlets are required.) 12 (i) Incoming - 63A MCC ii) Outgoing Feeders - 4 iii) Outgoing Feeders - 4	of following neet steel, d ral link, eart al type MCE 2 way (4 + 3 CB & 63A, 1 Nos of 25A 1Nos of 6A	g ways sur lust protect h bar, din b B TPDB is i 66), Double 00mA RCC MCCB with	face/ recessed, duly power for mountainermally usedoor	s mounting der painted ting MCBs ( d where 3 p	I, inclusive of but without	of 200 A, tin	ned copper
	iv) Outgoing Feeders -	zivos Spare	es"				1.000	
		ı	180	1608	Т.	tal Quantity		
			(.)		L.	ed Quantity		
		1	32.5		A I I	tal Quantity		
		111		Say 1.000 L.	UL 2	1		073.09
13	00330303/2021 2022							
	od336585/2021_2022 "Wiring & Lighting acce of FRLS PVC insulated cover plates, supplying commissioning of all	d copper co g and fixing	onductor, suggested for the suggested of the sugges	ipply and fitt modular sv res as appr	ing of GI bo vitch/ sock oved by de To Total Deduct	ets, supply, in ept.  etal Quantity and Quantity otal Quantity otal Quantity	1.000 1.000 L.S 0.000 L.S	r base and sesting and
14	"Wiring & Lighting acce of FRLS PVC insulated cover plates, supplying	G eathed / XI latest ame	ding externulation of me including n	and fitter modular systems as appropriate as approp	oved by de vitch/ socke of require trret light po cavation, sans or as directoral Deduction	ets, supply, in ept.  etal Quantity etal Size directly etal	vith modular nstallation, to 1.000 1.000 L.S 0.000 L.S 1.000 L.S Rs 274 ving and lay control called in ground and safety	1846.91  Sing of PVO ples as ped including equipment we covering and a second covering a second covering and a second covering a second covering a second covering and a second covering a second cove

Remark	Quantity	CF	D	В	L	No	Description	SI No
	е	sion by cable	ower exten	SEB and po	cation to K	or Power allo	3Charges fo	
00.000	Rs 9000	o-Sum Total	Lump					
Remark	Quantity	CF	D	В	L	No	Description	SI No
				nd Plants	4Tools a			
000.00	Rs 200	o-Sum Total	Lump					
Remark	Quantity	CF	D	В	L	No	Description	SI No
			em	CADA syste	Providing S	5P		
00.00	Rs 2500	o-Sum Total	Lumi					
	43720	Total						
					4.25			
0%	0.0	Centage @		120	100			
00	0.	age Amount	Centa					
0%	18.	nts (in %) @	ST paymer	ovision for G	Pro			
20.12	78696	T payments	ved for GS	mount rese	A	613		
	515897	I & Centage	1	SKA	N. A. A.	1 R		
		Mile	5 23)			11/55		
.00	0.	for round off	Lumpsum 1			J.C.		
9731.92	51589	TOTAL Rs	GRAND		MAN DE	125		
5,15,89,7	Total Rs 5	ınded Grand	Rou					
. Two O	and Thirts	on Uundrad	Ority	er Auth	ala Wat	Kera	Rupees Five (	

## **Detailed Estimate**

## SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART D- NETWORK

(Dsor year: 2018)

SI No	Description	No	L	В	D	CF	Quantity	Remark
	1La	ying of se	wer network	(Cost	ndex:36.44	· %)		
1	100.59.1 Cutting the bituminous sides of proposed align the charges for hire ar watching, ribbon fenci officers etc. complete, means and carrying ou	ment of the d conveyang, caution before car	e pipe to be la ince of tools a n boards, traf rying out the	aid without of and plant, if ice divers	causing any cost of cons ion, and as	damage to sumables a per the dir	other utilitie nd charges ection of de	s, includir for lightin partment
	Sewer	1	34117.000			lan.	34117.000	
	Inspection Chamber to Manhole	1	40000.000		35		40000.000	
		Ker	ala Wate	er Auth	ority To	tal Quantity	74117.000	metre
			<b>D</b> 1	T	otal Deduct	ed Quantity	0.000 metre	)
					Net To	tal Quantity	74117.000	metre
			Say 74	117.000 me	etre @ Rs 30	0.63 / metre	Rs 2270	203.71
2	15.43.2 Dismantling manually / unserviceable material	-		_	_			•
	Sewer	1	34117.000	1.000			34117.000	
	Inspection Chamber to Manhole	1	40000.000	0.600			24000.000	
					To	tal Quantity	58117.000	sqm
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	58117.000	sqm
			Say 5	8117.000 s	qm @ Rs 3	63.20 / sqm	Rs 2110	8094.40
3	15.2.1  Demolishing cement cometres lead as per direct design mix)							

					1	1		
	Demolishing of cement concrete ( Municipality roads)	1	2000.000	1.000	0.100		200.000	
	Inspection Chamber to Manhole	1	2500.000	0.600	0.100		150.000	
					To	otal Quantity	350.000 cu	ım
				Т	otal Deduct	ted Quantity	0.000 cum	
					Net To	otal Quantity	350.000 cu	m
			Say	350.000 cu	ım @ Rs 20	57.94 / cum	Rs 720	279.00
	Providing and laying in shuttering - All work up mm nominal size)  Reconcreting	•	evel:1:1/2:3 (d	cement : 11	/2 coarse s	•	ded stone ag	_
	demolished roads ( Municipality roads)	1	2000.000	1.000	0.100		200.000	
	Inspection Chamber to Manhole	1	2500.000	0.600	0.100	L	150.000	
		1435	90		To	otal Quantity	350.000 cu	ım
		K <sub>01</sub>	cala Wate	or Auth	otal Deduct	ted Quantity	0.000 cum	
	_	IXCI	ara wat	Auu	Net To	otal Quantity	350.000 cu	m
		P	Say	350.000 cu	ım @ Rs 85	40.67 / cum	Rs 298	9234.50
5	100.8.2 Fencing 1.50m high wit casuarina pole (girth 15 NEW DATA (Prepared	5cm to 24c	cm) fixed at 1.	5m interval	ls.	24cm) tied w	vith coir yarr	on vertion
	Sewer	1	34117.000	0.600			20470.200	
	Inspection Chamber to Manhole	1	40000.000	0.600			24000.000	
					To	tal Quantity	44470.200	metre
				T	otal Deduct	ted Quantity	0.000 metre	Э
					Net To	otal Quantity	44470.200	metre
			Say 44	470.200 me	etre @ Rs 9	6.77 / metre	Rs 430	3381.25
6	100.8.1 Fencing one side of tr casuarina pole (girth 1 (Data Prepared based of	15cm to 2	4cm) fixed at	2 m interv		cm plastic o	caution tape	in vertio

	Sewer	1	34117.000	0.200			6823.401	
	Inspection Chamber to Manhole	1	40000.000	0.200			8000.000	
					То	tal Quantity	14823.401	metre
				Т	otal Deduct	ed Quantity	0.000 metre	)
					Net To	tal Quantity	14823.401	metre
			Say 148	323.401 me	etre @ Rs 28	3.12 / metre	Rs 416	834.04
7	100.1.1 Excavating trenches of dressing of sides, ramn then returning the soil adeposited layer by ramplead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of	ning of bot as required ming, wate	ttoms, depth u	up to 1.5 m t exceedin	n, including g 20 cm in	getting out t depth, inclu	the excavate ding consoli	ed soil, a datingea
	Quantity from calculation sheet	1	46529.000		1-81	0.8	37223.201	
	Inspection Chamber to Manhole	1	40000.000	0.600	1.100	0.8	21120.001	
			WILL	300		tal Quantity		cum
		Ker	ala Wate	er Auth	otal Deduct	ed Quantity	0.000 cum	
			D		Net To	tal Quantity	58343.202	cum
			Say 5	8343.202 c	um @ Rs 5	58.99 / cum	Rs 3261	3266.49
8	100.1.5  Excavating trenches of dressing of sides, ramnethen returning the soil and deposited layer by ramage.	ning of bot as required	ttoms, depth u	ıp to 1.5 m t exceedin	n, including g 20 cm in	getting out t depth, inclu	the excavate ding consoli	ed soil, a datingea
	lead of 50 m :" Ordinary Rock. (Ref. Item No. 2.13.1 of	DSR)			I			
	Ordinary Rock.	DSR)	46529.000			0.2	9305.801	
	Ordinary Rock. (Ref. Item No. 2.13.1 of Quantity from	· · · · · · · · · · · · · · · · · · ·	46529.000 40000.000	0.600	1.100	0.2	9305.801	
	Ordinary Rock. (Ref. Item No. 2.13.1 of Quantity from calculation sheet Inspection Chamber	1		0.600			5280.001	cum
	Ordinary Rock. (Ref. Item No. 2.13.1 of Quantity from calculation sheet Inspection Chamber	1				0.2 tal Quantity	5280.001 14585.802	cum

	Say 14585.802 cur	m @ Rs 811.82 / cum	Rs 1184	1045.78
9	Excavating trenches of required width for pipes, cables, dressing of sides, ramming of bottoms, depth exceeding 1.5 out the excavated soil, and then returning the soil as requirincluding consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m All kinds of soil (Ref. Item No. 2.11 of DSR)	5m but not exceeding red, in layers not exceeding, watering, etc. and	g 3 m, includ eeding 20 c	ding getting m in depth
	Quantity from 1 13198.656	0.8	10558.925	
		Total Quantity	10558.925	cum
	Tot	tal Deducted Quantity	0.000 cum	
		Net Total Quantity	10558.925	cum
	Say 10558.925 cur	m @ Rs 666.03 / cum	Rs 7032	2560.82
	dressing of sides, ramming of bottoms, depth exceeding 1.5	nibeeaxe for fud mc.	g 3 m, includ	aing getting
	out the excavated soil, and then returning the soil as require including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from 1 13198.656	ig, watering, etc. and m to 3.0m.	_	•
	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m : 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from 1 13198 656	ng, watering, etc. and m to 3.0m.	2639.732	of surplus
	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from calculation sheet 1 13198.656	ng, watering, etc. and m to 3.0m.	2639.732 2639.732	of surplu
	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from calculation sheet 1 13198.656	ng, watering, etc. and m to 3.0m.  Ority  0.2  Total Quantity	2639.732 2639.732 c 0.000 cum	of surplu
	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from calculation sheet 1 13198.656	ng, watering, etc. and m to 3.0m.  Ority  0.2  Total Quantity  tal Deducted Quantity	2639.732 2639.732 c 0.000 cum 2639.732 c	of surplus
11	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m: 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from calculation sheet 1 13198.656	Total Quantity  Net Total Quantity	2639.732 2639.732 co 0.000 cum 2639.732 co Rs 2649 ration for so eeding 4.5 n not exceeding	of surplus  cum  9736.58  ockets, and  n, including
11	including consolidating each deposited layer by ramming excavated soil as directed, within a lead of 50 m : 1.50m Ordinary Rock.  (Ref. Item No. 2.14 of DSR)  Quantity from calculation sheet  Tot  Say 2639.732 cum  100.1.7  Excavating trenches of required width for pipes, cables, dressing of sides, ramming of bottoms, depth exceeding 3m getting out the excavated soil, and then returning the soil as depth, including consolidating each deposited layer by rammexcavated soil as directed, within a lead of 50 m : 3.0m to 4 Ordinary Rock.	Total Quantity  Net Total Quantity	2639.732 2639.732 co 0.000 cum 2639.732 co Rs 2649 ration for so eeding 4.5 n not exceeding	of surplus  cum  9736.58  ockets, and n, including

	Total Deducted Quantity	0.000 cum
	Net Total Quantity	69.750 cum
	Say 69.750 cum @ Rs 1195.76 / cum	Rs 83404.26
12	Excavating trenches of required width for pipes, cables, etc including excav dressing of sides, ramming of bottoms, depth exceeding 4.5 m in depth but including getting out the excavated soil, and then returning the soil as required, i 20 cm in depth, including consolidating each deposited layer by ramming, waterin surplus excavated soil as directed, within a lead of 50 m: 4.5m to 6.0m. Ordinary Rock.  (Ref. Item No. 2.15 of DSR)	not exceeding 6.0 r in layers not exceeding
	Quantity from Calculation Sheet 1 38.925	38.925
	Total Quantity	38.925 cum
	Total Deducted Quantity	0.000 cum
	Net Total Quantity	38.925 cum
	Say 38.925 cum @ Rs 1387.73 / cum	Rs 54017.39
	Close timbering in case of shafts, wells, cesspits, manholes and the like including packing cavities (wherever required) etc. complete (Measurements to be to timbered). Depth exceeding 1.5 m but not exceeding 3 m	
	2 15912.000 2.250	71604.000
	Total Quantity	71604.000 sqm
	Total Deducted Quantity	0.000 sqm
	Net Total Quantity	71604.000 sqm
	Say 71604.000 sqm @ Rs 192.52 / sqm	Rs 13785202.08
14	2.23 Extra for planking and strutting in open timbering if required to be left permanently of the timber permanently left to be measured).	y in position (Face are
	1 1500.000 2.800	4200.000
	Total Quantity	4200.000 sqm
	Total Deducted Quantity	0.000 sqm
	Net Total Quantity	4200.000 sqm
	Say 4200.000 sqm @ Rs 971.93 / sqm	Rs 4082106.00
15	od328805/2021_2022 Supplying, Providing bedding with m sand for sewer lines as per specification necessary with all lead and lift.	ns to be laid wherev

	beding for lines	1	12000.000	0.800	0.100		960.000	
			1		To	tal Quantity	960.000 cu	ım
		ed Quantity	0.000 cum					
		tal Quantity	960.000 cum					
			Say 9	960.000 cı	ım @ Rs 230	03.86 / cum	Rs 2211705.60	
16	5.1.3 Providing and laying ir centering, shuttering, fit sand: 4 graded stone a	nishing and	reinforceme	nt - All wo			•	
	R C C bedding concrete where ever necessary	1	12000.000	0.600	0.100		720.000	
			-/N	16	То	tal Quantity	720.000 сเ	ım
		-	34.7 W	\$ Sy	Total Deduct	ed Quantity	0.000 cum	
		16		$M\lambda$	Net To	tal Quantity	720.000 cum	
		1 A	Say	720.000 cu	um @ Rs 864	42.31 / cum	Rs 6222463.20	
17	100.98.226 Supply of uPVC Pipe, IS	S 4985: 200	00 , 8kg/cm2,	160mm Di	ia.			
	MH to IC	1	40000.000	300			40000.000	
		Kera	ala Wate	er Auth	ority to	tal Quantity	40000.000	metre
					Total Deduct	ed Quantity	0.000 metre	Э
					Net To	tal Quantity	40000.000	metre
			Say 4000	0.000 met	re @ Rs 905	5.95 / metre	Rs 3623	8000.00
18	100.98.214 Supply of uPVC Pipe, IS	S 4985: 200	00 , 6kg/cm2,	110mm Di	ia.			
	For House connection	3000	8.000				24000.000	
		tal Quantity	24000.000	metre				
		ed Quantity	0.000 metre	Э				
		24000.000	metre					
			Say 2400	0.000 met	re @ Rs 291	1.80 / metre	Rs 700	3200.00
19	od328806/2021_2022 Conveying to site, low 160mm PVC SN 8 (8 H pipes using rubber ris specification including providing bedding for pi pressure as per IS, CP	(g/Cm2) S ngs as per cost of ga pe line trer	& S Sewera r approved r sket, to corre nches with ava	ge pipes on the periods when the periods with the periods of the period of the periods of the period of the periods of the period of the periods of the peri	conforming t with rubber de watering th, hydraulic	o I.S.15328 gasket for with all rate testing the	B, including flexible joint es of recup- line to the re	jointing the nts as pe eration etce

	MH to IC	1	40000.000				40000.000		
					To	tal Quantity	40000.000	metre	
				Т	otal Deduc	ed Quantity	0.000 metro	Э	
					Net To	tal Quantity	40000.000	metre	
			Say 400	00.000 met	re @ Rs 21	4.42 / metre	Rs 857	6800.00	
20	Laying UPVC pipes of oposition aligning the picement and testing the specials).	ipe line to	the lines and	d levels an	d jointing th	ne pipes and	d specials v	vith solv	
	For house connection	3000	8.000				24000.000		
		F 16			To	tal Quantity	24000.000	metre	
		12			otal Deduc	ed Quantity	0.000 metro	9	
	Net Total Quantity							24000.000 metre	
		4000			San-				
21	60.2.3		Say 240	00.000 met	San-	9.07 / metre			
21	60.2.3 Bailing out water using above 5HP and up to other stores, pay of sta	10HP, inclu	ve 5 HP and	Up to 10 F vance to sit 5.000*.74	re @ Rs 12	9.07 / metre	Rs 309	<b>7680.00</b> d pump	
21	Bailing out water using above 5HP and up to	10HP, inclu aff etc com	ve 5 HP and uding convey plete	Up to 10 F vance to sit	re @ Rs 12 IP-Bailing o e and erec	9.07 / metre ut water wit ion,cost of	Rs 309 h engine an fuel, lubrica	d pump	
21	Bailing out water using above 5HP and up to	10HP, inclu aff etc com	ve 5 HP and uding convey plete	Up to 10 F vance to sit 5.000*.74 6	re @ Rs 12 IP-Bailing o e and erec	9.07 / metre ut water wit ion,cost of	Rs 309  h engine an fuel, lubrica 4476.000 I	d pump	
21	Bailing out water using above 5HP and up to	10HP, inclu aff etc com	ve 5 HP and uding convey plete	Up to 10 F vance to sit 5.000*.74 6	re @ Rs 12 IP-Bailing of e and erectors  Total Deductors	9.07 / metre ut water wit ion,cost of otal Quantity red Quantity	Rs 309  h engine an fuel, lubrica  4476.000  4476.000 I  0.000 hour	d pump tion oil a	
21	Bailing out water using above 5HP and up to	10HP, inclu aff etc com	ve 5 HP and uding convey plete 8.000	Up to 10 F vance to sit 5.000*.74 6	re @ Rs 12 IP-Bailing of e and erectors To otal Deductors	9.07 / metre ut water wit ion,cost of	Rs 309  h engine an fuel, lubrica  4476.000  4476.000 h  0.000 hour	d pump tion oil a	
21	Bailing out water using above 5HP and up to	10HP, incluant etc com 150  USING PU	ve 5 HP and uding convey plete  8.000  Say  JMP ABOVE up to 20HP,	Up to 10 F vance to sit 5.000*.74 6 T 4476.000 h	Total Deduction (Property of the Court (Prope	ed Quantity otal Quantity otal Quantity otal Quantity otal Quantity OHP - Bailing	Rs 309  h engine an fuel, lubrica  4476.000  4476.000 l  0.000 hour  4476.000 h  Rs 194	d pump tion oil a nour state our state with eng	
	Bailing out water using above 5HP and up to other stores, pay of statement of the stores of the store of	10HP, incluant etc com 150  USING PU	ve 5 HP and uding convey plete  8.000  Say  JMP ABOVE up to 20HP,	Up to 10 F vance to sit 5.000*.74 6 T 4476.000 h	Total Deduction (Property of the Court (Prope	ed Quantity otal	Rs 309  h engine an fuel, lubrica  4476.000  4476.000 l  0.000 hour  4476.000 h  Rs 194	d pump tion oil a nour our 8134.24 with eng	
	Bailing out water using above 5HP and up to other stores, pay of statement of the stores of the store of	10HP, incluant etc com 150  USING PU	Say  JMP ABOVE up to 20HP, pay of staff	Up to 10 F vance to sit 5.000*.74 6 7 4476.000 h E 10HP ANI including etc comple	To otal Deducted Our @ Rs 4	ed Quantity otal	Rs 309  h engine an fuel, lubrical  4476.000  4476.000 h  0.000 hour  4476.000 h  Rs 194  g out water d erection, contact and	d pump tion oil a nour state our state of f	
	Bailing out water using above 5HP and up to other stores, pay of statement of the stores of the store of	10HP, incluant etc com 150  USING PU	Say  JMP ABOVE up to 20HP, pay of staff	Up to 10 F vance to sit 5.000*.74 6 7 4476.000 h E 10HP ANI including etc comple 5.000	To and erections of the court o	etal Quantity atal Quantity atal Quantity atal Quantity atal Quantity atal Quantity btal Quantity atal Quantity	Rs 309  h engine an fuel, lubrical  4476.000  4476.000 h  0.000 hour  4476.000 h  Rs 194  g out water d erection, compared to the compared to	d pump tion oil a nour state our state of f	

			Say	1678.500 h	our @ Rs 5	40.40 / hour	Rs 907	061.40
23	60.2.5  BAILING OUT WATER and pump set above 2 lubrication oil and oth	25HP and ι	up to 30HP,	including o	conveyance	_	•	•
		60	25.000*.7 46	5.000			5595.000	
					To	tal Quantity	5595.000 h	nour
				Т	otal Deduct	ed Quantity	0.000 hour	
					Net To	tal Quantity	5595.000 h	our
			Say	5595.000 h	our @ Rs 9	78.66 / hour	Rs 547	5602.70
24	od328807/2021_2022 Supply of PE Pipe PE	100 (IS 143:	33/ sewerage	e pipe with la	atest IS), 8k	g, 200mm C	Outer Dia.	
		1	42720.000	\$ 54.			42720.000	
		61	MAG	20/2	To	tal Quantity	42720.000	metre
		1A	DIS	PUL T	otal Deduct	ed Quantity	0.000 metre	9
		16145		多沙人	Net To	tal Quantity	42720.000	metre
			Say 42720	0.000 metre	@ Rs 126	3.79 / metre	Rs 5420	2708.80
25	od328808/2021_2022 Supply of PE Pipe PE	100 (IS 143	33), 8kg, 250	mm Outer [	ority			
		1	1573.000				1573.000	
					To	tal Quantity	1573.000 r	netre
		0.000 metre	)					
		1573.000 m	netre					
			Say 157	3.000 metre	@ Rs 207	9.09 / metre	Rs 327	0408.57
26	100.98.144 Supply of PE Pipe, PE	100, PN8, 3	15mm dia, co	onforming to	o IS 4984/20	)16.		
		1	1518.000				1518.000	
		1519 000 #						
					10	tal Quantity	1518.000 r	netre
				Т			0.000 metre	
				Т	otal Deduct	ed Quantity		9
			Say 151		otal Deduct	ed Quantity	0.000 metre	enetre
27	100.98.146 Supply of PE Pipe, PE	100 PNO 1	•	8.000 metre	otal Deduct Net To	ed Quantity tal Quantity 5.00 / metre	0.000 metre	enetre

					Total Quantity	523.000 metre		
				Т	otal Deducted Quantity	0.000 metre		
					Net Total Quantity	523.000 metre		
		Rs 2204889.55						
28	pipes, electro-fusion we line thus fabricated to s the pipe in position int	elding using uit the hydr o the trenc g and leve g cost of pi	automatic rulic working hes already ling the trer	or semi auto pressure a made, test nches includ	omatic electrofusion maind after testing, alignir ting the line to suitable	al lead and aligning the other chines, testing the pipe of the pipeline, lowering a pressure with potable hire for appliances etc.		
	Open cut	1	31109.000			31109.000		
		- 8	3/2 9	\$ SI	Total Quantity	31109.000 metre		
		11	D. Si	70/AT	otal Deducted Quantity	0.000 metre		
		18			Net Total Quantity	31109.000 metre		
			Say 311	09.000 met	re @ Rs 321.86 / metre	Rs 10012742.74		
	pipes, electro-fusion we line thus fabricated to s the pipe in position int	elding using uit the hydr o the trenc g and leve g cost of pi	automatic ulic working hes already ling the trer	or semi auto pressure a made, test nches includ	omatic electrofusion maind after testing, alignir ting the line to suitable	Il lead and aligning the achines, testing the pipe of the pipeline, lowering pressure with potable hire for appliances etc.		
	Qty	1	997.000			997.000		
					Total Quantity	997.000 metre		
		0.000 metre						
					Net Total Quantity	997.000 metre		
	Say 997.000 metre @ Rs 444.59 / metre							
30	pipes, electro-fusion we line thus fabricated to s the pipe in position int	elding using uit the hydr o the trenc g and leve g cost of pi	gautomatic rulic working hes already ling the trer	or semi auto pressure a made, test nches includ	omatic electrofusion maind after testing, alignir ting the line to suitable	al lead and aligning the achines, testing the pipe of the pipeline, lowering a pressure with potable hire for appliances etc.		

	NEW DATA	T			Γ		1	1
	open cut	1	1488.000				1488.000	
					То	tal Quantity	1488.000	metre
				Т	otal Deduct	ed Quantity	0.000 metr	е
					Net To	tal Quantity	1488.000 n	netre
			Say 14	88.000 met	re @ Rs 58	4.65 / metre	Rs 869	959.20
31	Laying HDPE pipes (I pipes, electro-fusion w line thus fabricated to the pipe in position in water before back filling complete but excluding 400 mm OD HDPE pipen NEW DATA	relding using suit the hydrough to the trending and level good cost of p	g automatic of rulic working ches already eling the tren	or semi auto pressure a made, test ches includ	omatic elect nd after test ting the line	rofusion ma ting , alignin to suitable	chines, test g the pipelir pressure v	ing the pi ne, loweri vith potab
	INEW DATA	1	523.000	37/1			523.000	
		IA	020.000		To	tal Quantity		etre
		100	I-AVCA	31857	7-2779	glad.		
					otal Deduct	ed Quantity	IU.UUU IIIEU	Ե
			90.30	HI OF DE	13%	ed Quantity		
		Ker	212 \\$ay 5	HE PAN	Net To	ed Quantity tal Quantity 4.87 / metre	523.000 m	
32	7.6.1  Coursed rubble masor cement: 6 coarse sar		ara wat	23.000 met	Net To	tal Quantity	523.000 m	etre 1337.01
32	Coursed rubble masor	nd)	ara wat	23.000 met	Net To	tal Quantity	523.000 m	etre 1337.01
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	nd)	rt) with hard	23.000 met	Net To	tal Quantity	523.000 mc Rs 384 n:Cement m	etre 1337.01
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	nd)	rt) with hard	23.000 met stone in for 0.400	Net To re @ Rs 73- undation an 0.450 0.450	tal Quantity	523.000 mc Rs 384 n:Cement m 1.441 9.720	etre 1337.01 ortar 1:6
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	nd)	rt) with hard	23.000 met stone in for 0.400 0.450	Net To re @ Rs 734 undation an 0.450 0.450	tal Quantity 4.87 / metre	523.000 mc Rs 384 n:Cement m 1.441 9.720 11.161 cui	etre 1337.01 ortar 1:6
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	nd)	rt) with hard	23.000 met stone in for 0.400 0.450	Net To re @ Rs 734 undation an 0.450 0.450 To	tal Quantity 4.87 / metre d plinth with	523.000 mc Rs 384 n:Cement m  1.441 9.720 11.161 cui 0.000 cum	etre 1337.01 ortar 1:6
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	nd)	8.000 6.000	23.000 met stone in for 0.400 0.450	Net To re @ Rs 734 undation an 0.450 0.450 To otal Deduct Net To	atal Quantity 4.87 / metre d plinth with stal Quantity ed Quantity	523.000 mc Rs 384  n:Cement m  1.441  9.720  11.161 cui  0.000 cum  11.161 cui	etre 1337.01 ortar 1:6
32	Coursed rubble masor cement : 6 coarse sar Culvert regions / RR	1 8 8 in position sinishing and	rt) with hard  8.000  6.000  Sa specified grad reinforceme	23.000 met stone in for  0.400  0.450  T  y 11.161 cu  ide of reinfor int - All work	Net To re @ Rs 734  undation an  0.450  To otal Deduct Net To m @ Rs 86	atal Quantity 4.87 / metre d plinth with stal Quantity ed Quantity stal Quantity 61.01 / cum	523.000 mc Rs 384  1:Cement m  1.441 9.720 11.161 cui 0.000 cum 11.161 cun Rs 96	m 665.53
	Coursed rubble masor cement: 6 coarse sar Culvert regions / RR portions  5.1.2 Providing and laying it centering, shuttering, fire	1 8 8 in position sinishing and	rt) with hard  8.000  6.000  Sa specified grad reinforceme	23.000 met stone in for  0.400  0.450  T  y 11.161 cu  ide of reinfor int - All work	Net To re @ Rs 734  undation an  0.450  To otal Deduct Net To m @ Rs 86	atal Quantity 4.87 / metre d plinth with etal Quantity ed Quantity stal Quantity 61.01 / cum	523.000 mc Rs 384  1:Cement m  1.441 9.720 11.161 cui 0.000 cum 11.161 cun Rs 96	m 665.53
	Coursed rubble masor cement: 6 coarse sar Culvert regions / RR portions  5.1.2 Providing and laying i centering, shuttering, fi sand: 3 graded stone a	nd)  1  8  In position sinishing and aggregate 2	specified grad reinforceme 0 mm nomina	23.000 met  stone in for  0.400  0.450  T  y 11.161 cu  de of reinfort - All work	Net To re @ Rs 73-  undation an  0.450  To total Deduct Net To m @ Rs 86  orced ceme c up to plinth  0.700	atal Quantity 4.87 / metre d plinth with etal Quantity ed Quantity stal Quantity 61.01 / cum	523.000 mc Rs 384  1:Cement m  1.441 9.720 11.161 cum 0.000 cum 11.161 cum Rs 96  2, excluding 3 (1 cement ms) 15.925	m 665.53 the cost

					Net To	tal Quantity	15.925 cur	n
		Rs 14	5587.78					
34	5.22.6 Steel reinforcemen binding all complete		_	•		• .		
	steel	1	15.900			60.0	954.000	
		·			To	otal Quantity	954.000 k	ilogram
				Т	otal Deduct	ed Quantity	0.000 kilog	ıram
					Net To	tal Quantity	954.000 ki	logram
			Say 954.00	00 kilogram	@ Rs 98.9	2 / kilogram	Rs 94	369.68
	provicion for connoc	ting main cou	or and convic	o connoctio	ne convov	ina liftina n	lacing the c	sover clah
	provision for connect position by suitable drawings and spectoresistant cement shapes	e means, con ifications, inc	oveying and coluding the color the the color	disposing thost of reinfo	ne surplus prcement,	earth with a	all lead an	d lift as p
	position by suitable drawings and spec	e means, con ifications , inc nall be used for	oveying and coluding the color the the color	disposing the ost of reinfondate of reinfondate of reinfondate of the ostenoversion of the os	ne surplus proement , of inspection	earth with a	all lead and chamber at 600.000	d lift as p
	position by suitable drawings and spec	e means, con ifications , inc nall be used for	oveying and coluding the color the the color	disposing the pet of reinformstruction of the contraction of the contr	ne surplus procement , of inspection	earth with a testing the on chamber	chamber a	d lift as p
	position by suitable drawings and spec	e means, con ifications , inc nall be used for	oveying and coluding the color the the color	disposing the pet of reinformstruction of the contraction of the contr	ority To otal Deduct	earth with a testing the on chamber otal Quantity	600.000 No	d lift as pund sulpha
	position by suitable drawings and spec resistant cement sh	e means, con ifications , inc nall be used for	oveying and coluding the color the the color 600,000	disposing the post of reinfornstruction of the post of	ne surplus procement , of inspection  To otal Deduct	earth with a testing the on chamber of tal Quantity and Quantity	600.000 No	d lift as p nd sulpha
36	position by suitable drawings and spec	e means, con ifications, incomall be used for the formula, PC acceptance for walls, PC acceptance for walls, PC acceptance for grain sew the means, con ifications, incoming main sew the means, con incoming main sew the means of the means o	rs of size 0.4 or, RCC M20 so all classes on genecessary wer and service weying and occluding the colluding the co	ay 600.000  5x0.45m (in slab using 2 20mm brown slope in the econnection disposing the past of reinforms of reinforms of reinforms of the past of t	ne surplus procement, of inspection  OTITY  To  otal Deduct  Net To  No @ Rs 7  Inside) and Comm broke ken stone for stering the he benchir ons, convey he surplus procement, of inspection	earth with a testing the on chamber on chamber of the Quantity	600.000 No 600.000 No 600.000 No 600.000 No Rs 436 o with RCC removable ourse belov CM 1:3, 9m main sewe lacing the co all lead and chamber a	d lift as produced sulphate of the cover slab d lift as produced sul
36	od328810/2021_202 Constructing inspect 20mm broken stone Brick work in CM 1:6 including earth work neat cement flush provision for connect position by suitable drawings and spect	e means, con ifications, incomall be used for floor slab for walls, PC excavation in coat, providing main sew e means, con ifications, incomall be used for floor slab for walls, PC excavation in coat, providing main sew e means, con ifications, incomall be used for floor slab for walls, providing main sew e means, con in all be used for floor slab for floor slab floor f	siveying and obligation of the the color the color the color the the color	ay 600.000  5x0.45m (in slab using 2 20mm brold of soil, , plast sisposing the periodisposing the periodispo	ne surplus procement, of inspection  OTITY  To  otal Deduct  Net To  No @ Rs 7  Inside) and Comm broke ken stone for stering the he benchir ons, convey he surplus procement, of inspection	earth with a testing the on chamber on chamber of the control of t	600.000 No 600.000 No 600.000 No 600.000 No Rs 436  o with RCC removable ourse belov CM 1:3, 9m main sewe lacing the co all lead and chamber at 1500.000 1500.000	d lift as produced as a cover slab d lift as produced as prover slab d lift as produced as

			Sa	ay 1500.000	No @ Rs 3	673.89 / No	Rs 551	0835.00
37	od328811/2021_2022 Constructing inspection 20mm broken stone for Brick work in CM 1:6 for including earth work extended to the comprovision for connecting position by suitable my drawings and specifical	r floor slab or walls, PC xcavation in at, providin g main sew neans, con ations, inc	RCC M20, RCC M20, C 1:4:8 using all classes of necessary er and service veying and bluding the c	slab using 2 g 20mm bro of soil, plas y slope in the ce connection disposing the cost of reinforce states.	20mm broke ken stone for stering the in he benchin ons, conveying he surplus procement,	en stone for or leveling conside with Conside with Considering, lifting, poearth with a sesting the	removable burse below 2M 1:3, 9mr main sewer lacing the call lead and	cover slab r foundation m thick with r, providing over slab in d lift as pe
		1	450.000				450.000	
			1Ca	B.	То	tal Quantity	450.000 N	0
					otal Deduct	ed Quantity	0.000 No	
			43 6	8 2	Net To	tal Quantity	450.000 No	)
		FL	S	Say 450.000	No @ Rs 7	929.36 / No	Rs 356	8212.00
	Brick work in CM 1:6 for including earth work expression for connecting position by suitable means.	xcavation in at, providing main sew	n all classes g necessar er and servic	of soil, plas slope in t ce connection	stering the in hetbenchin ons, conveyi	nside with C g towards i ng, lifting, p	CM 1:3, 9mr main sewer lacing the c	n thick wit , providin
	drawings and specific resistant cement shall			ost of reinfo	orcement,	-		lift as pe
				ost of reinfo	orcement,	-		lift as pe
		be used for	or the the co	ost of reinfo	orcement , of inspection	-	chamber ar	d lift as pe
		be used for	or the the co	ost of reinfo	orcement , of inspection	n chamber	600.000 N	d lift as pe
		be used for	or the the co	ost of reinfo	orcement , for of inspection  To otal Deduct	n chamber	600.000 600.000 N 0.000 No	d lift as pend sulphat
		be used for	600.000	ost of reinfo	orcement , for of inspection  To otal Deduct	tal Quantity ed Quantity tal Quantity	600.000 No 600.000 No 600.000 No	d lift as pend sulphat

	Qty	1	250.000				250.000	
					То	tal Quantity	250.000 No	)
				7	Total Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	250.000 No	1
			Sa	ay 250.000	No @ Rs 7	687.45 / No	Rs 1921	1862.50
SI No	Description	No	L	В	D	CF	Quantity	Remark
	2Road Restoration wor	k of layin	g of sewers a	and pumpi	ng main.	(Cost Ind	ex:36.44 %)	
1	od335236/2021_2022 Excavation for roadwork loading in tippers, trimm cross sections and trans	ing bottor	n and side slop	pes, in acc	ordance wit	h requireme	nts of lines,	grades a
	Sewer- Municipality Roads	1	21534.000	1.200	0.300		7752.240	
	pumping mains (1900)	1	1900.000	1.000	0.300		570.000	
	Lifting stations	1	1970.000	1.000	0.300		591.000	
	Manhole to Inspection Chamber	1	25500.000	1.000	0.300	1	7650.000	
					To	tal Quantity	/ 16563.240 cum	
			Van Ball	1200	Total Deduct	ed Quantity	0.000 cum	
		Kei	cala Wate	er Auth	Net To	tal Quantity	16563.240	cum
			Say	16563.240	cum @ Rs	58.08 / cum	Rs 961	992.98
2	100.41.39 Supply ,stacking,sprea carriage, loading ,unlo	_		_	•	the trench	of pipe line	, includ
	Sewer- Municipality Roads	1	21534.000	1.200	0.150		3876.120	
	pumping mains (1900)	1	1900.000	1.000	0.150		285.000	
	Lifting stations	1	1970.000	1.000	0.150		295.500	
	Manhole to Inspection Chamber	1	25500.000	1.000	0.150		3825.000	
					To	tal Quantity	8281.620 c	um
				1	Total Deduct	ed Quantity	0.000 cum	
				-	Net To	otal Quantity	8281.620 cı	um
			Say	8281.620 d	cum @ Rs 5	49.44 / cum	Rs 4550	253.29
			·					

	wet mix macadam (WM mix plant, carriage of r mechanical paver finis vibratory roller of 8 to and directions of Engin	mixed mate her in sub 10 tonne ca	rial by tipper - base / base apacity to ach	to site, fo e course o	r all leads & n well prepa	k lifts, laying ared surfac	g in uniform e and comp	layers with
	Sewer- Municipality Roads	1	21534.000	1.200	0.150		3876.120	
	pumping mains (1900)	1	1900.000	1.000	0.150		285.000	
	Lifting stations	1	1970.000	1.000	0.150		295.500	
	Manhole to Inspection Chamber	1	25500.000	1.000	0.150		3825.000	
			Re	12	То	tal Quantity	8281.620 c	cum
			M		Total Deduct	ed Quantity	0.000 cum	
		-	£3 W		Net To	tal Quantity	8281.620 c	um
		613	Say 8	281.620 cu	ım @ Rs 31	28.64 / cum	Rs 2591	0207.60
	Providing and apply granular br>Base incluusing br>mechanical n	iding clearii				,		
	Sewer- Municipality Roads	Ker	21534.000	r <sup>1.200</sup> th	ority		25840.800	
		Ker	21534.000 1900.000	1.200 th	ority	7	25840.800 1900.000	
	Roads	<b>D</b> . 1			ority			
	Roads pumping mains (1900)		1900.000	1.000	ority		1900.000	
	Poads pumping mains (1900) Lifting stations Manhole to Inspection	1	1900.000	1.000	F	tal Quantity	1900.000 1970.000 25500.000	
	Poads pumping mains (1900) Lifting stations Manhole to Inspection	1	1900.000	1.000 1.000 1.000	F		1900.000 1970.000 25500.000 55210.800	
	Poads pumping mains (1900) Lifting stations Manhole to Inspection	1	1900.000	1.000 1.000 1.000	To Total Deduct	ed Quantity	1900.000 1970.000 25500.000 55210.800	sqm
	Poads pumping mains (1900) Lifting stations Manhole to Inspection	1	1900.000 1970.000 25500.000	1.000 1.000 1.000	To Total Deduct	ed Quantity	1900.000 1970.000 25500.000 55210.800 0.000 sqm 55210.800	sqm
5	Poads pumping mains (1900) Lifting stations Manhole to Inspection	1 1 g tack coa	1900.000 1970.000 25500.000 Say	1.000 1.000 1.000	To Total Deduct Net To sqm @ Rs son( RS) usi	ed Quantity tal Quantity 59.03 / sqm	1900.000 1970.000 25500.000 55210.800 0.000 sqm 55210.800 Rs 3259	sqm sqm 9093.52 distributo
5	Poads  pumping mains (1900)  Lifting stations  Manhole to Inspection Chamber  od328776/2021_2022  Providing and applyin at br>the rate of 0.20	1 1 g tack coa	1900.000 1970.000 25500.000 Say	1.000 1.000 1.000	To Total Deduct Net To sqm @ Rs son( RS) usi	ed Quantity tal Quantity 59.03 / sqm	1900.000 1970.000 25500.000 55210.800 0.000 sqm 55210.800 Rs 3259	sqm sqm 9093.52 distributo
5	Roads  pumping mains (1900)  Lifting stations  Manhole to Inspection Chamber  od328776/2021_2022  Providing and applyin at broom  Sewer- Municipality	1 1 g tack coa - 0.30 kg p	1900.000 1970.000 25500.000  Say st with bitumer sqm on the	1.000 1.000 1.000 55210.800 en emulside prepared	To Total Deduct Net To sqm @ Rs son( RS) usi	ed Quantity tal Quantity 59.03 / sqm	1900.000 1970.000 25500.000 55210.800 0.000 sqm 55210.800 Rs 3259 on pressure eaned with research	sqm sqm 9093.52 distributo

	Manhole to Inspection Chamber	1	25500.000	1.000			25500.000	
					То	tal Quantity	55210.800	sqm
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	55210.800	sqm
			Say	55210.800	sqm @ Rs	10.41 / sqm	Rs 574	744.43
6	od328781/2021_2022 Providing, laying and r mm departmental agg grade br>bitumen to r existing surface br>wit rolling with a three b grades, followed by a se of bitumen per 10 sqm.	gregates pequired lin h 5 kg of bir r>wheel seal coat of	remixed with e, grade and itumen (VG 3 tatic roller of br>0.09 cum	h 12.96 kg I level on a 0) 10 sqm If 80-100 I	g of bitume a previously including m KN capacit	en per 10 some per	qm using p base, after p uitable plant, to required	enetration priming the laying and level and
	Sewer- Municipality Roads	1	21534.000	1.200			25840.800	
	pumping mains (1900)	1	1900.000	1.000	179	4	1900.000	
	Lifting stations	14.1	1970.000	1.000			1970.000	
	Manhole to Inspection Chamber	1	25500.000	1.000			25500.000	
		Ker	ala Wate	er Auth	ority to	tal Quantity	y 55210.800 sqm	
			D = I	Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	55210.800	sqm
			Say 5	5210.800 s	qm @ Rs 1	76.52 / sqm	Rs 974	810.42
7	od328783/2021_2022 Seal Coat - Manual M voids br>in a bituminou B and br>Type C as pe Sewer- Municipality Roads	ıs surface l	aid to the spe	ecified leve	ls, grade <br< td=""><td>&gt;and cross</td><td>fall using Ty</td><td>ре А, Ту</td></br<>	>and cross	fall using Ty	ре А, Ту
	pumping mains (1900)	1	1900.000	1.000			1900.000	
	Lifting stations	1	1970.000	1.000			1970.000	
	Manhole to Inspection Chamber	1	25500.000	1.000			25500.000	
					То	tal Quantity	55210.800	sqm
	Total Deducted Quantity 0.000 sqm							
				т	otal Deduct	ed Quantity	0.000 sqm	

			Say	55210.800	sqm @ Rs	78.00 / sqm	Rs 430	6442.40
SI No	Description	No	L	В	D	CF	Quantity	Remark
	3Const	ruction of F	Pumping sta	ations (	Cost Index:	36.44 %)		
1	2.31 Clearing jungle includi to 30 cm measured at m outside the peripher	a height of	1 m above (	-				•
		1	20.000	20.000			400.000	average 40 cent
					To	otal Quantity	400.000 so	qm
	Total Deducted Quantity 0.0							
			100	AR.	Net To	otal Quantity	400.000 sq	m
			5	Say 400.000	sqm @ Rs	14.87 / sqm	Rs 59	48.00
	labour for the same incupto 1.5m PH1	1	1.500				1.500	
		Ker	ala Wat	ter Auth	nority To	otal Quantity	1.500 met	re
		D			Total Deduc	ted Quantity	0.000 metr	е
					Net To	otal Quantity	1.500 metr	е
			Say 1	1.500 metre	@ Rs 4272	0.83 / metre	Rs 64	081.25
3	od328765/2021_2022 Sinking wells above up in in 50% all kind of so scooping out earth from labour for the same in upto 1.5m to 3.0m	oil and 50% om inside ar	ordinary roc nd below th	ksoil (speci e steining ι	fy type of sousing neces	oil) to lines a sary applian	nd levels ar ices includi	nd plumb ng hire a
	PH1	1	1.500				1.500	
					To	otal Quantity	1.500 met	re
				-	Total Deduc	ted Quantity	0.000 metr	е
					Net To	otal Quantity	1.500 metr	e
			Say 1	1.500 metre	@ Rs 4635	7.39 / metre	Rs 69	536.08
4	od328768/2021_2022 Sinking wells above up in in 50% all kind of so		•					. •

	upto 3.0m to 4.5m				1		
	PH1	1	1.500			1.500	
					Total Quantity	y 1.500 met	re
				Total De	educted Quantity	y 0.000 metr	е
				Ne	et Total Quantity	1.500 metr	е
			Say 1.500	metre @ Rs 4	19992.72 / metre	Rs 74	989.08
	Sinking wells above us in in 50% all kind of some scooping out earth from the same in the first same i	soil and 50% rom inside a	ordinary rocksoil and below the ste	(specify type on the control of the	of soil) to lines a	and levels a nces includ	nd plumb ing hire
	PH1	1	1.500	748	1	1.500	
			* KARA		Total Quantity	1.500 met	re
		151		Total De	educted Quantity	y 0.000 metr	е
			Z A SAME NI	ot Total Quantity	1.500 metre		
		12000		INC	et Total Qualiti	y 1.500 meti	e
6	od328777/2021 2022	2 Ke1		metre @ Rs 5	53630.54 / metro		e )445.81
6	od328777/2021_2022 Sinking wells above u in in 50% all kind of s scooping out earth fr labour for the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a	dia. and up to 6.0 ordinary rocksoil and below the ste	metre @ Rs 5 Authority 0 m inside an (specify type oning using ne	d depth up to 3 of soil) to lines a	.00 m below and levels a nces includ	spring le
6	Sinking wells above usin in 50% all kind of secoping out earth from the same in	up to 3.50 m soil and 50% rom inside a	dia. and up to 6.0 ordinary rocksoil and below the ste	metre @ Rs 5 Authority 0 m inside an (specify type oning using ne	d depth up to 3 of soil) to lines a	.00 m below and levels a nces includ	spring le
6	Sinking wells above usin in 50% all kind of some scooping out earth from labour for the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be	metre @ Rs 5 Authority 0 m inside an (specify type oning using ne	d depth up to 3 of soil) to lines a	.00 m below and levels an nces includent complete 0.650	spring lead plumb ing hire a e.First de
6	Sinking wells above usin in 50% all kind of some scooping out earth from labour for the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be	metre @ Rs 5 Authority 0 m inside an (specify type oning using neighbors) yond the initial	d depth up to 3 of soil) to lines accessary applia	Rs 80 .00 m below and levels an nces includence complete 0.650	spring lead plumb ing hire a e.First de
6	Sinking wells above usin in 50% all kind of some scooping out earth from labour for the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be	metre @ Rs 5 Authority 0 m inside an (specify type oning using neighbors) yond the initial	d depth up to 3 of soil) to lines accessary applia	Rs 80 .00 m below and levels a nces includence complete 0.650 v 0.650 met	spring lead plumbling hire as e.First de
6	Sinking wells above usin in 50% all kind of some scooping out earth from labour for the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be	metre @ Rs 5 Authority 0 m inside an (specify type oning using neighbors) yond the initial	d depth up to 3 of soil) to lines a cessary applia. I lead of 50 m of Total Quantity educted Quantity	Rs 80 .00 m below and levels an nces including to complete 0.650 y 0.650 metro	spring lead plumbling hire as e.First de
7	Sinking wells above us in in 50% all kind of some scooping out earth from labour for the same in upto 6.0m to 7.5m  PH1  100.7.1  Bailing out water with and taking back of ecomplete.	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be  0.650  Say 0.650  e and pumpset in pump, cost of full	metre @ Rs 5 Authority 0 m inside and (specify type or ning using new yond the initial  Total De  No metre @ Rs 5  cluding converted to the converted of the converted to the co	d depth up to 3 of soil) to lines a cessary applia I lead of 50 m of the Total Quantity and Total Quantity and Total Quantity are to the site of the s	Rs 80  .00 m below and levels an incest including the complete of the complete	spring lend plumbing hire are. First de
	Sinking wells above used in in 50% all kind of some scooping out earth from the same in upto 6.0m to 7.5m  PH1  100.7.1  Bailing out water with and taking back of each scooping out in the same in upto 6.0m to 7.5m	up to 3.50 m soil and 50% rom inside a ncluding dur	dia. and up to 6.0 ordinary rocksoil and below the steemping the spoil be  0.650  Say 0.650  e and pumpset in pump, cost of full	metre @ Rs 5 Authority 0 m inside and (specify type or ning using new yond the initial  Total De  No metre @ Rs 5  cluding converted to the converted of the converted to the co	d depth up to 3 of soil) to lines a cessary applia I lead of 50 m of the Total Quantity and Total Quantity and Total Quantity are to the site of the s	Rs 80  .00 m below and levels an incest including the complete of the complete	spring lead plumbing hire and

	Total Deducted Quantity 0.000 Kwh									
					Net To	tal Quantity	5000.000 P	Kwh		
			Sa	ay 5000.000 l	Kwh @ Rs 3	37.18 / Kwh	Rs 18	5900.00		
8	od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead a	d steining o	_		•	•		_		
	PH1	1	3.14/4	(5.2*5.2)- (4.2*4.2)	7.150		52.760			
	Bottom Plug	1	3.14/4	5.2*5.2	0.500		10.614			
	curb top rectangular	1	3.140	4.7*0.50	0.200		1.476			
	Curb triangular	1	3.14/2	4.7*.50	0.500		1.845			
	Cover slab	1	3.14/4	5.2*5.2	0.200		4.246			
				K W	То	tal Quantity	70.941 cu	m		
		( k		73/AT	otal Deduct	ed Quantity	0.000 cum			
	Total Deducted Quantity 0.000 cum  Net Total Quantity 70.941 cum									
	Say 70.941 cum @ Rs 9555.17 / cum Rs 677853.31									
9	5.22.6 Steel reinforcement for	or R C C w	74/25	MEPL/	m @ Rs 95	55.17 / cum	Rs 67	7853.31		
9	5.22.6 Steel reinforcement for binding all complete u	K Q1	ork includin	g straighteni	m @ Rs 959 ng, cutting ally Treate	55.17 / cum bending, pd bars of g	Rs 67	7853.31 position a 0D or m		
9	Steel reinforcement fo	ipto plinth	ork includin	g straighteni	m @ Rs 959 ng, cutting ally Treate	bending, pd bars of g  80.0  tal Quantity	Rs 677	7853.31 Position a 0D or m		
9	Steel reinforcement fo	ipto plinth	ork includin	g straighteni	m @ Rs 955 ng, cutting ally Treate To otal Deduct	bending, ped bars of general Research	Rs 677 placing in prade Fe-50 5675.281	7853.31 Position a OD or m kilogram		
9	Steel reinforcement fo	ipto plinth	rork includin levelThermo 70.941	g straighteni	ng, cutting ally Treate  To otal Deduct	bending, ped bars of general Research Boston	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog	7853.31 Position a OD or m kilogram		
9	Steel reinforcement fo	ng including	rork includin levelThermo 70.941 Say 5675.	g straighteni o - Mechanic Te 281 kilogram	ng, cutting ally Treate  To otal Deduct  Net To  @ Rs 98.9	bending, pd bars of g 80.0 tal Quantity tal Quantity 2 / kilogram	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k	ram kilogram kilogram		
	Steel reinforcement for binding all complete under the state of the st	ng including	rork includin levelThermo 70.941 Say 5675.	g straighteni o - Mechanic Te 281 kilogram	ng, cutting ally Treate  To otal Deduct  Net To  @ Rs 98.9	bending, pd bars of g 80.0 tal Quantity tal Quantity 2 / kilogram	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k	ram kilogram kilogram		
	Steel reinforcement for binding all complete under the state of the st	ng including	rork including levelThermore 70.941  Say 5675 g strutting, e	g straighteni o - Mechanic  To  281 kilogram  tc. and remo	ng, cutting ally Treate  To otal Deduct  Net To  @ Rs 98.92  val of form  1.200	bending, pd bars of g 80.0 tal Quantity tal Quantity 2 / kilogram	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k Rs 567	ram kilogram ram 1398.80		
	Steel reinforcement for binding all complete under the state of the st	ng including	rork including levelThermore 70.941  Say 5675 g strutting, e	g straighteni o - Mechanic  To  281 kilogram  tc. and remo  4.700	ng, cutting ally Treate  To otal Deduct  Net To  @ Rs 98.92  val of form  1.200	bending, ped bars of general Quantity and Quantity and Quantity and Quantity are for:Foundat tal Quantity	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k Rs 567	ram kilogram ram 1398.80		
	Steel reinforcement for binding all complete under the state of the st	ng including concrete	rork including levelThermore 70.941  Say 5675 g strutting, e	g straighteni o - Mechanic  To  281 kilogram  tc. and remo  4.700	ng, cutting ally Treate  To otal Deduct  Net To  Rs 98.9  val of form  1.200  To otal Deduct	bending, ped bars of general Quantity and Quantity for:Foundated Quantity and Quant	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k Rs 567 ions, footing 17.710	ram kilogram ram silogram gs, bases		
	Steel reinforcement for binding all complete under the state of the st	ng including concrete	Say 5675 g strutting, e	g straighteni o - Mechanic  To  281 kilogram  tc. and remo  4.700	ng, cutting ally Treate  To otal Deduct  Net To  Rs 98.92  val of form  1.200  To otal Deduct  Net To	bending, ped bars of general Quantity and Quantity for:Foundated Quantity and Quant	Rs 677 placing in prade Fe-50 5675.281 0.000 kilog 5675.281 k Rs 567 ions, footing 17.710 17.710 sq 0.000 sqm 17.710 sqr	ram kilogram ram silogram gs, bases		

	Cover slab- PH1	1	3.140/4	5.2*5.2			21.227			
			1		To	tal Quantity	21.227 sqi	m		
				Т	otal Deduc	ted Quantity	0.000 sqm			
					Net To	otal Quantity	21.227 sqn	า		
			S	ay 21.227 s	qm @ Rs 8	20.89 / sqm	Rs 17	425.03		
12	5.9.12									
	Centering and shuttering	ng including	strutting, etc	c. and remov	/al of form f	or:Well stein	ing 			
	PH1	2	3.140	4.700	7.150		211.040			
		otal Quantity	211.040 s	qm						
		Total Deducted Qua								
			//60	1651	Net To	otal Quantity	211.040 sq	m		
			Sa	y 211.040 s	qm @ Rs 2	51.25 / sqm	Rs 53	023.80		
	labour charges, etc cor	mplete as po	er the instruction 41.000	ction of the	engineer in	-charge.	41.000			
		1	41.000			les of	41.000			
					To	otal Quantity	41.000 No			
		17	1 337			ted Quantity				
		Kera	ala Wat	er Auth	OTINEt To	otal Quantity	41.000 No			
		$D \perp$		Say 41.00	0 No @ Rs	424.89 / No	Rs 17	420.49		
SI No	Description	No	L	В	D	CF	Quantity	Remark		
1	2.2.1 Earth work in rough e breaking clods, waterine every 3rd and top-most roads, flood banks, mand lift up to 1.5 m:All	excavation, ng, rolling ea t layer with parginal bank	banking ex ach layer wit power roller ks and guide	cavated eath 1/2 tonne	rth in laye roller or wo	ooden or ste nd dressing	eding 20 c el rammers up in emba	, and roll		
		1	320.000	0.600	0.800		153.601			
		1	1		To	tal Quantity	153.601 c	ım		
				Т		ted Quantity				
						otal Quantity		m		
			Sa	y 153.601 c	um @ Rs 8	84.54 / cum	Rs 135	5866.23		
2	4.1.6 Providing and laying in	position ce	ement concr	ete of speci	fied grade (	evoluding th	e cost of ce	nterina s		

	nominal size)				Г	ı	Г	T
		1	320.000	0.600	0.800		153.601	
					То	tal Quantity	153.601 cı	ım
				7	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	153.601 cu	m
			Say	153.601 cu	ım @ Rs 72	56.36 / cum	Rs 111	4584.15
3	7.1.1 Random rubble ma concrete 1:6:12 (1 concrete with:Cement notes 1:6:12 (1 concrete management not	cement : 6 coa	rse sand : 12	graded sto	•	•	• .	
		1	320.000	0.450	0.450		64.800	
			All		То	tal Quantity	64.800 cur	n
		-	£ 2 W	183	otal Deduct	ed Quantity	0.000 cum	
		61	SK B	5 1	Net To	tal Quantity	64.800 cun	า
		12	Say	y 64.800 cu	ım @ Rs 72	49.94 / cum	Rs 469	796.11
				1111110000000	ricks of clas	s designatio	n 7.5 in fou	ndation a
	plinth in:Cement mo			o.220 er Auth	1.800 lority To	s designatio tal Quantity ed Quantity	126.721 126.721 ct	
			nent : 6 coars	o.220 er Auth	1.800 To Total Deduct	tal Quantity	126.721 126.721 cu 0.000 cum	ım
			320.000	0.220 O.220	1.800 To Total Deduct Net To	tal Quantity	126.721 ct 126.721 ct 0.000 cum 126.721 cu	ım
5		ortar 1:6 (1 cen	320,000 320,000 Say	0.220 0.220 1 Auth	1.800 To Total Deduct Net To	tal Quantity ed Quantity tal Quantity	126.721 ct 126.721 ct 0.000 cum 126.721 cu	um m
5	plinth in:Cement mo	ortar 1:6 (1 cen	320,000 320,000 Say	0.220 0.220 1 Auth	1.800 To Total Deduct Net To	tal Quantity ed Quantity tal Quantity	126.721 ct 126.721 ct 0.000 cum 126.721 cu	um m
5	plinth in:Cement mo	ster of mix:1:4 (	320,000 Say	0.220 0.220 1 Auth	1.800 To Total Deduct Net To Im @ Rs 725	tal Quantity ed Quantity tal Quantity	126.721 cu 126.721 cu 0.000 cum 126.721 cu Rs 924	um m k218.07
5	plinth in:Cement mo	ster of mix:1:4 (	320,000 Say	0.220 1 Auth 126.721 cu	1.800 To otal Deduct Net To om @ Rs 725	tal Quantity ed Quantity tal Quantity 93.33 / cum	126.721 cu 0.000 cum 126.721 cu Rs 924	um m k218.07
5	plinth in:Cement mo	ster of mix:1:4 (	320,000 Say	0.220 1 Auth 126.721 cu	1.800 To otal Deduct Net To om @ Rs 725	tal Quantity ed Quantity tal Quantity 93.33 / cum	126.721 cu 0.000 cum 126.721 cu Rs 924  1152.000 1152.000 sqm	um m <b>3218.07</b>
5	plinth in:Cement mo	ster of mix:1:4 (	Say  1 cement : 4  320.000	0.220 1 Auth 126.721 cu fine sand)	1.800 To otal Deduct Net To otal 2.800 To otal Deduct Net To otal Deduct	tal Quantity ed Quantity tal Quantity 93.33 / cum tal Quantity	126.721 cu 0.000 cum 126.721 cu Rs 924  1152.000 1152.000 sqm 1152.000 s	um m <b>3218.07</b>
5	plinth in:Cement mo	exter of mix:1:4 (	Say  1 cement : 4  320.000  Say  nable cement	126.721 cu fine sand)	1.800 To Total Deduct Net To m @ Rs 729  1.800 To Total Deduct Net To eqm @ Rs 3	tal Quantity ed Quantity tal Quantity 93.33 / cum tal Quantity ed Quantity tal Quantity tal Quantity	126.721 cu 0.000 cum 126.721 cu Rs 924 1152.000 1152.000 sqm 1152.000 s Rs 364	um m 1218.07 sqm qm
	13.1.1 12 mm cement plas  13.43.1 Applying one coat	exter of mix:1:4 (	Say  1 cement : 4  320.000  Say  nable cement	126.721 cu fine sand)	1.800 To Total Deduct Net To m @ Rs 729  1.800 To Total Deduct Net To eqm @ Rs 3	tal Quantity ed Quantity tal Quantity 93.33 / cum tal Quantity ed Quantity tal Quantity tal Quantity	126.721 cu 0.000 cum 126.721 cu Rs 924 1152.000 1152.000 sqm 1152.000 s Rs 364	um m 1218.07 sqm qm

Net Total Quantity Say 1152.000 sqm @ Rs 71.09 / sqm Rs 81895.66 7 13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coats are @ 3.84 kg/10 sqm)  2 320.000 1.800 1152.000  Total Quantity 1152.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 1152.000 sqm  Rs 124485.1 8 10.25.2 Item Shifted to Sub head 14 as item 14.73Item Shifted to head 14 as item 14.74Steel work welded in up sections/framed work, including cutting, hoisting, fixing in position and applying a priming or approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, lar railings, brackets, gates and similar works  MS gate 1 800.000  Total Quantity 800.000 kg  Total Deducted Quantity 0.000 kg  Total Deducted Quantity 800.000 kg  Say 800.000 kg @ Rs 155.13 / kg Rs 124104.0						Total Deducte	ed Quantity	0.000 sqm	
Total Deducted Quantity   1152,000 sqm   Total Quantity   1152,000 sqm   Rs 124485.1						Net Tot	al Quantity	1152.000 s	qm
Finishing walls with water proofing cement paint of required shade:New work (Two or more coats ap @ 3.84 kg/10 sqm)  2 320.000 1.800 1152.000 sqm  Total Quantity 1152.000 sqm  Net Total Quantity 1152.000 sqm  Net Total Quantity 1152.000 sqm  Say 1152.000 sqm @ Rs 108.06 / sqm  Rs 124485.1  8 10.25.2  Item Shifted to Sub head 14 as item 14.73Item Shifted to head 14 as item 14.74Steel work welded in up sections/framed work, including cutting, hoisting, fixing in position and applying a priming or approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, la railings, brackets, gates and similar works  MS gate 1 800.000 800.000 kg @ Rs 155.13 / kg  Total Deducted Quantity 0.000 kg  Rerala Water Authori Net Total Quantity 800.000 kg  Say 800.000 kg @ Rs 155.13 / kg  Rs 124104.0  1 od328759/2021_2022  Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall 1 2°(3+2) 0.500 (6.24+5.46 ) 58.500   working platform 1 2.500 0.750 0.150 0.282  bottom plug 1 2.500 1.500 0.450 1.688  Total Quantity 0.000 cum  Net Total Quantity 0.000 cum				Sa	y 1152.000	) sqm @ Rs 7	′1.09 / sqm	Rs 81	895.68
Total Quantity   1152.000 sqm   Total Deducted Quantity   0.000 sqm   Net Total Quantity   1152.000 sqm   Net Total Quantity   1152.000 sqm   Net Total Quantity   1152.000 sqm   Rs 108.06 / sqm   Rs 124485.1	7	Finishing walls with wa	ater proofing	g cement pair	nt of require	ed shade:Nev	v work (Two	o or more co	oats appl
Total Deducted Quantity   0.000 sqm			2	320.000		1.800		1152.000	
Net Total Quantity  Say 1152.000 sqm @ Rs 108.06 / sqm  Rs 124485.1.  8						Tot	al Quantity	1152.000 \$	sqm
Say 1152.000 sqm @ Rs 108.06 / sqm  Rs 124485.1.  8						Total Deducte	ed Quantity	0.000 sqm	
8 10.25.2 Item Shifted to Sub head 14 as item 14.73Item Shifted to head 14 as item 14.74Steel work welded in up sections/framed work, including cutting, hoisting, fixing in position and applying a priming or approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, la railings, brackets, gates and similar works  MS gate 1 800.000 800.000 800.000 kg  Total Deducted Quantity 0.000 kg  Total Deducted Quantity 0.000 kg  Kerala Water Authori Net Total Quantity 800.000 kg  Say 800.000 kg ® Rs 155.13 / kg Rs 124104.0  Si No Description No L B D CF Quantity Ren  5Construction of screen chamber and Valve chamber (Cost Index:36.44 %)  1 od328759/2021_2022  Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curring etc complete as per the specifications drawings with alllead and lift  Side wall 1 2*(3+2) 0.500 (6.24+5.46 ) 58.500   working platform 1 2.500 0.750 0.150 0.282  bottom plug 1 2.500 1.500 0.450 1.688  Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum						Net Tot	al Quantity	1152.000 s	qm
Item Shifted to Sub head 14 as item 14.73Item Shifted to head 14 as item 14.74Steel work welded in up sections/framed work, including cutting, hoisting, fixing in position and applying a priming or approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, la railings, brackets, gates and similar works  MS gate 1 800.000 800.000 kg  Total Quantity 800.000 kg  Total Deducted Quantity 0.000 kg  Kerala Water Authori Net Total Quantity 800.000 kg  Say 800.000 kg ® Rs 155.13 / kg  Rs 124104.0  SI NO Description No L B D CF Quantity Ren  5Construction of screen chamber and Valve chamber (Cost Index:36.44 %)  1 od328759/2021_2022  Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall 1 2*(3+2) 0.500 (6.24+5.46 ) 58.500   working platform 1 2.500 0.750 0.150 0.282  bottom plug 1 2.500 1.500 0.450 1.688  Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum				Say	1152.000	sqm @ Rs 10	8.06 / sqm	Rs 124	485.12
Total Quantity 800.000 kg  Total Deducted Quantity 0.000 kg  Kerala Water Authori Net Total Quantity 800.000 kg  Say 800.000 kg @ Rs 155.13 / kg  Rs 124104.0  Si No Description No L B D CF Quantity Ren  5Construction of screen chamber and Valve chamber (Cost Index:36.44 %)  1 od328759/2021_2022 Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall 1 2*(3+2) 0.500 (6.24+5.46 )  working platform 1 2.500 0.750 0.150 0.282  bottom plug 1 2.500 1.500 0.450 1.688  Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum		approved steel prime railings, brackets, ga	r using strotes and sin	uctural steel nilar works				nes, guard I	-
Total Deducted Quantity 0.000 kg    Say 800.000 kg @ Rs 155.13 / kg   Rs 124104.0		MS gate	1	800.000	35337			800.000	
Si No   Description   No   L   B   D   CF   Quantity   Ren				9100000		Tot	al Quantity	800.000 kg	3
Say 800.000 kg @ Rs 155.13 / kg  Say 800.000 kg @ Rs 155.13 / kg  Rs 124104.0  Si No  Description  No  L  B  D  CF  Quantity  Ren  5Construction of screen chamber and Valve chamber  (Cost Index:36.44 %)  1  od328759/2021_2022  Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall  1  2*(3+2)  0.500  (6.24+5.46 )  58.500  working platform  1  2.500  0.750  0.150  0.282  bottom plug  1  2.500  1.688  Total Quantity  60.470 cum  Net Total Quantity  60.470 cum			V or	olo Wot	A	Total Deducte	ed Quantity	0.000 kg	
SINO Description No L B D CF Quantity Ren  5Construction of screen chamber and Valve chamber (Cost Index:36.44 %)  1 od328759/2021_2022 Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall 1 2*(3+2) 0.500 (6.24+5.46 ) 58.500   working platform 1 2.500 0.750 0.150 0.282  bottom plug 1 2.500 1.500 0.450 1.688  Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum		Kerala Water Authority Net Total Quantity 800.000							
5Construction of screen chamber and Valve chamber (Cost Index:36.44 %)  1 od328759/2021_2022 Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall  1 2*(3+2) 0.500 (6.24+5.46 )  working platform  1 2.500 0.750 0.150 0.282  bottom plug  1 2.500 1.500 0.450 1.688  Total Quantity  60.470 cum  Total Deducted Quantity  Net Total Quantity  60.470 cum		-	Kei	ala Wat	01 7 1010	Net Tot	ai Quantity	800.000 kg	
1 od328759/2021_2022 Reinforcement cement concrete M-30using 20mm&down size (nominal size) broken stone using SR raft slab ,well kerb and steining excluding formwork,curing etc complete.as per the specifications drawings with alllead and lift  Side wall  1 2*(3+2) 0.500 (6.24+5.46 ) 58.500  working platform  1 2.500 0.750 0.150 0.282  bottom plug  1 2.500 1.500 0.450 1.688  Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum		-	P	R ]	Say 800.0	000 kg @ Rs	155.13 / kg	Rs 124	
Side wall   1   2*(3+2)   0.500	SI No	-	No	RL	Say 800.0	000 kg @ Rs	155.13 / kg	Rs 124	
bottom plug		od328759/2021_2022 Reinforcement cement raft slab ,well kerb an	No  f screen ch  t concrete M  d steining o	namber and \M-30using 20	Say 800.0  B  Valve chan	000 kg @ Rs D mber (Cos	155.13 / kg  CF  st Index:36	Rs 124 Quantity  3.44 %) en stone us	Remark
Total Quantity 60.470 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum		od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead	No  f screen ch  t concrete M  d steining of	A-30using 20 excluding for	Say 800.0  B  Valve chan  mm&down mwork,cur	ono kg @ Rs  D  mber (Cos  size (nominating etc comp	155.13 / kg  CF  st Index:36	Rs 124 Quantity  2.44 %)  en stone us the specific	Remark
Total Deducted Quantity 0.000 cum  Net Total Quantity 60.470 cum		5Construction of od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead Side wall	no  f screen ch  t concrete N  d steining of  and lift  1	A-30using 20 excluding for 2*(3+2)	Say 800.0  B  Valve chan  mm&down  mwork,cur	ooo kg @ Rs  b  mber (Cos  size (nominating etc comp  (6.24+5.46 )	155.13 / kg  CF  st Index:36	Rs 124 Quantity  3.44 %)  en stone us the specific	Remark
Net Total Quantity 60.470 cum		5Construction of od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead Side wall working platform	No  f screen ch  t concrete M  d steining of  and lift  1	A-30using 20 excluding for 2*(3+2)	Say 800.0  B  Valve chan  mm&down mwork,cur  0.500  0.750	size (nominaling etc comp  (6.24+5.46  ) 0.150	155.13 / kg  CF  st Index:36	Rs 124 Quantity  2.44 %) en stone us the specific  58.500  0.282	Remark
		5Construction of od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead Side wall working platform	No  f screen ch  t concrete M  d steining of  and lift  1	A-30using 20 excluding for 2*(3+2)	Say 800.0  B  Valve chan  mm&down mwork,cur  0.500  0.750	000 kg @ Rs  D  mber (Cos  size (nominating etc comp  (6.24+5.46 )  0.150  0.450	CF  St Index:36  I size) brok lete.as per	Rs 124 Quantity  2.44 %)  en stone us the specific  58.500  0.282  1.688	Remarking SRC cations a
Say 60.470 cum @ Rs 9555.17 / cum Rs 577801.1		5Construction of od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead Side wall working platform	No  f screen ch  t concrete M  d steining of  and lift  1	A-30using 20 excluding for 2*(3+2)	Say 800.0  B Valve chan mm&down mwork,cur  0.500  0.750  1.500	000 kg @ Rs    D	CF  St Index:36  I size) brok lete.as per	Rs 124 Quantity  2.44 %)  en stone us the specific 58.500  0.282  1.688  60.470 cur	Remarking SRC cations a
•		5Construction of od328759/2021_2022 Reinforcement cement raft slab ,well kerb and drawings with alllead Side wall working platform	No  f screen ch  t concrete M  d steining of  and lift  1	A-30using 20 excluding for 2*(3+2)	Say 800.0  B Valve chan mm&down mwork,cur  0.500  0.750  1.500	size (nominaling etc comp  (6.24+5.46  ) 0.150 0.450  Total Deducte	CF  St Index:36  I size) brok lete.as per	Rs 124 Quantity  2.44 %) en stone us the specific 58.500  0.282  1.688  60.470 cur  0.000 cum	Remark ing SRC cations a

	2*1	2*(3+2)	(6.24+5.46		234.000	
rking platform	1	2.500	0.150		0.375	
			To	tal Quantity	234.375 sc	ım
			Total Deduct	ed Quantity	0.000 sqm	
			Net To	tal Quantity	234.375 sq	m
		Say 2	34.375 sqm @ Rs 33	37.42 / sqm	Rs 790	082.81
		17 / T. J. J. T.	N / 2 11 /A 1	d bars of g 100.0 tal Quantity	6047.000 6047.000 F	OD or n
	18	L KNIEK	Total Deduct	ed Quantity	0.000 kilogi	ram
	451		Net To	tal Quantity	6047.000 k	ilogram
	4000	Say 6047.000	kilogram @ Rs 98.92	2 / kilogram	Rs 598	169.24
•	KAT	ala Water	Alithority			
awing specification shuding excavation, all, removal of bounching of useful manager with near the special of the required in all respecial chinaries, powers achinaries, powers achinaries achinaries.	n to the given dewatering unders, burried naterials and ecessarry s/approved suited equipments cts for successupply at site cost of all ma	r alignment and until completion d timbers, trunk disposal of the shoring and uitable arrangents, oil lubricants, sfull completion etc, including a aterials and laborates.	to any depth in all of works application as, fossils, including surplus earth/unsustrutting, barrionentys for diversion cabour and any other of work, including call necessarry safety our charges with all least to any other of work, including the control of works and the control of works application to a surplus and the control of works application to a surplus earth of works are a surplus eart	kinds of str of knetledg depositingtl itable mate cading et of water cou mechanica ost of mate arrangeme	rata including e for alround he excavate erial as directed in cluding ars etc. The large all operations erials, tools onto like dangers	g soft red seating distant stuff cted by ground continued and place ger light
awing specification shuding excavation, all, removal of bounching of useful manager with near the special of the required in all respecial chinaries, powers achinaries, powers achinaries achinaries.	n to the given dewatering unders, burried naterials and ecessarry s/approved suited equipments cts for successupply at site cost of all ma	r alignment and until completion d timbers, trunk disposal of the shoring and uitable arrangents, oil lubricants, sfull completion etc, including a aterials and laborates.	to any depth in all of works application as, fossils, including surplus earth/unsustrutting, barrionentys for diversion cabour and any other of work, including call necessarry safety our charges with all least to any other of work, including the control of works and the control of works application to a surplus and the control of works application to a surplus earth of works are a surplus eart	kinds of str of knetledg depositingtl itable mate cading et of water cou mechanica ost of mate arrangeme	rata including e for alround he excavate erial as directed in cluding ars etc. The large all operations erials, tools onto like dangers	g soft red seating distant stuff cted by ground continued and place ger light
awing specification sluding excavation, all, removal of bounds of useful management with new grounds of the required in all respectations are including the required in all respectations are including the required achinaries, powers achinaries, powers aching etc including the required in all respectations.	n to the given, dewatering uldars, burrien aterials and ecessarry s/approved sud equipments cts for successupply at site cost of all ma 6.00m beyond	r alignment and until completion d timbers, trunk disposal of the shoring and uitable arrangems, oil lubricants, lafull completion etc, including a aterials and labor d initial 4.50m d	to any depth in all of works application as, fossils, including surplus earth/unsustrutting, barridation abour and any other of work, including all necessarry safety our charges with all leapth.	kinds of str of knetledg depositingtl itable mate cading et of water cou mechanica ost of mate arrangeme ead and lift	rata including e for alround he excavate erial as directed including ars etc. The rail operations erials, tools etc as per the state of	g soft red seating cted by cost rate incomments and plager lighted
awing specification sluding excavation, all, removal of bounds of useful management with new grounds of the required in all respectations are including the required in all respectations are including the required achinaries, powers achinaries, powers aching etc including the required in all respectations.	n to the given, dewatering uldars, burrien aterials and ecessarry s/approved sud equipments cts for successupply at site cost of all ma 6.00m beyond	r alignment and until completion d timbers, trunk disposal of the shoring and uitable arrangems, oil lubricants, lafull completion etc, including a aterials and labor d initial 4.50m d	to any depth in all of works application as, fossils, including surplus earth/unsustrutting, barridation abour and any other of work, including all necessarry safety our charges with all leapth.	kinds of str of knetledg depositingtl itable mate cading et of water cou mechanica ost of mate arrangeme ead and lift	rata including e for alround he excavate erial as directed including ars etc. The rail operations erials, tools etc as per the state of	g soft id seating distant mat mat and plager lighthe directed
awing specification sluding excavation, all, removal of bounds of useful management with new grounds of the required in all respectations are including the required in all respectations are including the required achinaries, powers achinaries, powers aching etc including the required in all respectations.	n to the given, dewatering uldars, burrien aterials and ecessarry s/approved sud equipments cts for successupply at site cost of all ma 6.00m beyond	r alignment and until completion d timbers, trunk disposal of the shoring and uitable arrangems, oil lubricants, lafull completion etc, including a aterials and labor d initial 4.50m d	to any depth in all of works application as, fossils, including surplus earth/unsustrutting, barridaentys for diversion of abour and any other of work, including our charges with all length.	kinds of str of knetledg depositingtl itable mate cading et of water cou mechanica ost of mate arrangeme ead and lift tal Quantity	rata including e for alround he excavate erial as directed including ars etc. The rail operations erials, tools etc as per the state of	g soft id seating distance of stuff cted by grown construction of the cted by
awing saluding sell, renacking ginee gbunds oviding quired achinar noing e	excavation excavation noval of both of useful metric with note s/cofferdamethe required in all respe- ies, powers to including	excavation, dewatering unoval of bouldars, burries of useful materials and er with necessarry socofferdams/approved suthe required equipments in all respects for successies, powersupply at site to including cost of all materials for upto 6.00m beyond	excavation, dewatering until completion noval of bouldars, burried timbers, trunk of useful materials and disposal of the er with necessarry shoring and scofferdams/approved suitable arrangem the required equipments, oil lubricants, lin all respects for successfull completion ies, powersupply at site etc, including a to including cost of all materials and labouter for upto 6.00m beyond initial 4.50m d	excavation, dewatering until completion of works application moval of bouldars, burried timbers, trunks, fossils, including of useful materials and disposal of the surplus earth/unsuer with necessarry shoring and strutting, barrieds/cofferdams/approved suitable arrangementys for diversion of the required equipments, oil lubricants, labour and any other in all respects for succesfull completion of work, including cries, powersupply at site etc, including all necessarry safety to including cost of all materials and labour charges with all lever for upto 6.00m beyond initial 4.50m depth.	excavation, dewatering until completion of works application of knetledge noval of bouldars, burried timbers, trunks, fossils, including depositing of useful materials and disposal of the surplus earth/unsuitable mater with necessarry shoring and strutting, barricading et s/cofferdams/approved suitable arrangementys for diversion of water count the required equipments, oil lubricants, labour and any other mechanical in all respects for succesfull completion of work, including cost of materies, powersupply at site etc, including all necessarry safety arrangements in cluding cost of all materials and labour charges with all lead and lift therefor upto 6.00m beyond initial 4.50m depth.  1 1.150	

including excavation, dewatering until completion of works application of knetledge for alround seating of well, removal of bouldars, burried timbers, trunks, fossils, including depositing the excavated stuff and stacking of useful materials and disposal of the surplus earth/unsuitable material as directed by the engineer with necessarry shoring and strutting, barricading etcincluding cost of ringbunds/cofferdams/approved suitable arrangementys for diversion of water cours etc. The rate include providing the required equipments, oil lubricants, labour and any other mechanical operationthat may be required in all respects for succesfull completion of work, including cost of materials, tools and plants, machinaries, powersupply at site etc, including all necessarry safety arrangements like danger lighting, fencing etc including cost of all materials and labour charges with all lead and lift etc as per the direction of Engineer for upto 4.50m beyond initial 3.00m depth. PH<sub>1</sub> 1 1.500 1.500 Total Quantity | 1.500 metre Total Deducted Quantity 0.000 metre Net Total Quantity 1.500 metre Say 1.500 metre @ Rs 15751.66 / metre Rs 23627.49 6 od328784/2021 2022 Sinking section for screen chamber of internal dimmension of 2.5 m x 1.5 m as per approved design, drawing specification to the given alignment and to any depth in all kinds of strata including soft rock, including excavation, dewatering until completion of works application of knetledge for alround seating of well, removal of bouldars, burried timbers, trunks, fossils, including depositing the excavated stuff and stacking of useful materials and disposal of the surplus earth/unsuitable material as directed by the engineer with necessarry shoring and strutting, barricading etcincluding cost of ringbunds/cofferdams/approved suitable arrangementys for diversion of water cours etc. The rate include providing the required equipments, oil lubricants, labour and any other mechanical operationthat may be required in all respects for succesfull completion of work, including cost of materials, tools and plants, machinaries, powersupply at site etc, including all necessarry safety arrangements like danger lighting, fencing etc including cost of all materials and labour charges with all lead and lift etc as per the direction of Engineer for upto 3.00m below ground level PH1 1 3.000 3.000 Total Quantity 3.000 metre Total Deducted Quantity 0.000 metre Net Total Quantity 3.000 metre Rs 44504.34 Say 3.000 metre @ Rs 14834.78 / metre 7 100.7.1 Bailing out water with 5 HP engine and pumpset including conveyance to the site, errection, dismantling and taking back of engine and pump, cost of fuel lubricating oil and other stores pay of staff etc. complete. NEW DATA (Prepared based on PHED SDB - Item No.1070 5000.000 5000.000 1 **Total Quantity** 5000.000 Kwh

				7	Fotal Deduct	ed Quantity	0.000 Kwh	
					Net To	tal Quantity	5000.000 K	(wh
			Sa	y 5000.000	Kwh @ Rs 3	37.18 / Kwh	Rs 185	900.00
8	od328787/2021_2022 Providing and laying in excluding the cost of c sand: 4 graded stone	entering a	nd shuttering	- All work	_			
		1	3.500	2.500	0.500		4.375	
		4.375 cum						
				٦	Total Deduct	ed Quantity	0.000 cum	
			100	60	Net To	tal Quantity	4.375 cum	
		51.69 / cum	Rs 347	788.64				
9	13.7.2 12 mm cement plaster	finished wit	th a floating c	oat of neat	cement of m	ix:1:4 ( 1 ce	ement : 4 fine	e sand)
	Side wall	1	2*(3+2)	73/A	6.24+5.46		117.000	
	Working Platform	(1)	2.500		0.150	L	0.375	
		4550	40.50		То	tal Quantity	117.375 sc	m
			THE STATE OF	H 91.72.0	Total Deduct	ed Quantity	0.000 sqm	
		Ker	ala Wat	er Auth	noriNet To	tal Quantity	117.375 sq	m
			Sa	y 117.375 s	sqm @ Rs 38	38.79 / sqm	Rs 450	634.23
10	13.44.1 Finishing walls with water proofing cement paint of required shade:New work (Two or more coat @ 3.84 kg/10 sqm)							
	side wall	1	2*(3+2)		6.24+5.46		117.000	
	Working Platform	1	2.500		0.150		0.375	
					То	tal Quantity	117.375 sc	m
					Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	117.375 sq	m
		08.06 / sqm	Rs 120	683.54				
11	13.65.1 Painting with black ant shade:Two or more co		•	paint of app	proved branc	I and manu	facture to gi	ve an ever
	side wall	1	2*(3+2)		6.24+5.46		117.000	
	Working Platform	1	2.500		0.150		0.375	
_						tal Quantity	117.375 sc	

				Т	otal Deduct	<u>-</u>				
							/ 117.375 sqm			
			Sa	ıy 117.375 s	qm @ Rs 12	25.59 / sqm	Rs 14	741.13		
12	od328782/2021_2022 Supplying providing and labour charges, etc cor	•	•	•			ed manner i	ncluding all		
		38					38.000			
	Total Quantity 38.000 No									
		Total Deducted Quantity 0.000 N								
	Net Total Quantity 38.000 N									
			100	Say 38.00	0 No @ Rs	424.89 / No	Rs 16	145.82		
SI No	Description	No	1/18	В	D	CF	Quantity	Remark		
	6Cons	truction of	Valve chan	nber (Co	st Index:36	5.44 %)				
	dressing of sides, rammer then returning the soil and deposited layer by rammer lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 of	as required ming, wate	, in layers n ring, etc. an	ot exceedin d disposing	g 20 cm in o	depth, inclu	ding consol	idatingeach		
	Qty- valve chamber 1	P <sub>1</sub>	4.600	2.600	1.800	7	21.528	chamber 1- 7*2*1.5		
	qty - valve chamber 2	1	2.600	1.600	1.800		7.488	chamber - 2* 1 *1.5		
					То	tal Quantity	29.016 cur	n		
				Т	otal Deduct	ed Quantity	0.000 cum			
					Net To	tal Quantity	29.016 cum	ı		
2	Say 29.016 cum @ Rs 558.99 / cum   Rs 16219.65  100.1.2  Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth exceeding 1.5m but not exceeding 3 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m: 1.50m to 3.0m  All kinds of soil  (Ref. Item No. 2.11 of DSR)									
	Qty- valve chamber 1	1	4.600	2.600	0.300		3.588	chamber 1- 7*2*1.5		

	qty - valve chamber 2	1	2.600	1.600	0.300		1.248	chamber 2* 1 *1.5
					To	tal Quantity	4.836 cum	
				7	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	4.836 cum	
				Say 4.836 d	cum @ Rs 6	66.03 / cum	Rs 32	220.92
3	5.1.2 Providing and laying in centering, shuttering, find sand :3 graded stone a	nishing and	d reinforceme	nt - All worl			•	
	Qty- valve chamber 1- sidewall	1	2*(4.4+2)	0.200	1.500		3.841	chambe 1- 7*2*1.
	bottom plug	1	4.400	2.400	0.300		3.168	
	cover slab	1	4.400	2.400	0.200		2.112	
	qty - valve chamber 2- side wall	1	2*(2.2+1.2	0.200	1.500	la constitution of the con	2.041	chamber 2* 1 *1.5
	bottom plug	1	2.400	1.400	0.300	la de	1.008	
	cover slab	1	2.400	1.400	0.200		0.672	
		1/		A 41	То	tal Quantity	12.842 cu	m
		Ker	ala wate	er Auth	otal Deduct	ed Quantity	0.000 cum	
				. 10 010	Net To	tal Quantity		n 7 <b>402.72</b>
4	5.22.6 Steel reinforcement fo binding all complete u		ork including	straighter	ing, cutting	, bending, ¡	olacing in p	osition a
		1	12.842			80.0	1027.361	
					То	tal Quantity	1027.361	kilogram
				٦	Total Deduct	ed Quantity	0.000 kilog	ram
					Net To	tal Quantity	1027.361 k	ilogram
			Say 1027.3	61 kilogram	n @ Rs 98.9	2 / kilogram	Rs 101	1626.55
5	13.9.1 Cement plaster 1:3 ( 'cement plaster	1 cement :	3 coarse sa	nd) finishe	d with a flo	ating coat o	of neat cem	nent.12 m
	Qty- valve chamber 1- sidewall	1	2*(4.4+2)		1.500		19.201	chambe 1- 7*2*1

	cover slab	1	4.400		0.200		0.881	
	qty - valve chamber 2- side wall	1	2*(2.4+1)		1.500		10.200	chamber 2* 1 *1.5
	bottom plug	1	2.400		0.300		0.720	
	cover slab	1	2.400		0.200		0.480	
					То	tal Quantity	32.802 sqı	m
				Т	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	32.802 sqn	n
			S	ay 32.802 s	qm @ Rs 4	14.71 / sqm	Rs 13	603.32
6	od328782/2021_2022 Supplying providing and labour charges, etc com	•	7 1 0032	DKANA N			ed manner	including a
	Qty	8	E 18 10				8.000	
		61	N Z	SAM	То	tal Quantity	8.000 No	
		18	TOW		otal Deduct	ed Quantity	0.000 No	
		10L	Mai		Net To	tal Quantity	8.000 No	
	2	TUE		Say 8.00	0 No @ Rs	424.89 / No	Rs 33	399.12
OL NIA								
SI No	Description	No	L	В	D	CF	Quantity	Remark
OI IVO	7Construction of			4			,	Remark
1	·	Control received a control recei	banking ex ach layer with power roller of ks and guide	cavated each 1/2 tonne	om (Cos arth in layer roller or wo 8 tonnes ar	st Index:36.  rs not exce  oden or ste  nd dressing	44 %) eding 20 c el rammers up in emba	m in dept , and rollin nkments fo
	7Construction of 2.2.1 Earth work in rough expression of the control of the contr	Control received a control recei	banking ex ach layer with power roller of ks and guide	cavated each 1/2 tonne	om (Cos arth in layer roller or wo 8 tonnes ar	st Index:36.  rs not exce  oden or ste  nd dressing	44 %) eding 20 c el rammers up in emba	m in deptl , and rollin nkments fo
	7Construction of  2.2.1  Earth work in rough expression of the control of the con	control received a control recei	banking ex ach layer with power roller of ks and guide bil	cavated each 1/2 tonne of minimum banks or f	om (Cos arth in layer roller or wo 8 tonnes ar illing up gro 1.600	st Index:36.  rs not exce  oden or ste  nd dressing	eding 20 c el rammers up in emba sions, lead	m in deptl , and rollin nkments fo up to 50 r
	7Construction of 2.2.1 Earth work in rough expression of the control of the contr	control received a control recei	banking ex ach layer with power roller of ks and guide bil	cavated each 1/2 tonne of minimum banks or f	om (Costarth in layer roller or wo 8 tonnes arilling up gro	st Index:36.  The state of the	eding 20 c el rammers up in emba sions, lead 36.992	m in deptl , and rollin nkments fo up to 50 r
	7Construction of 2.2.1 Earth work in rough expression of the control of the contr	control received a control recei	banking ex ach layer with power roller of ks and guide bil	cavated each 1/2 tonne of minimum banks or f	om (Costarth in layer roller or wo 8 tonnes arilling up gro	st Index:36.  The state of the	eding 20 c el rammers up in emba sions, lead 36.992 36.992 cui	m in deptl , and rollin nkments fo up to 50 r
	7Construction of 2.2.1 Earth work in rough expression of the control of the contr	control received a control recei	banking ex ach layer with power roller of ks and guide bil	cavated each 1/2 tonne of minimum banks or f	om (Costarth in layer roller or wo 8 tonnes arilling up ground 1.600  Total Deduct Net To	st Index:36.  The state of the	eding 20 c el rammers up in emba sions, lead 36.992 cui 0.000 cum 36.992 cun	m in dept , and rollin nkments fo up to 50 i
	7Construction of 2.2.1 Earth work in rough expression of the control of the contr	control received a control recei	banking ex ach layer with power roller of ks and guide bil 1.700	cavated each 1/2 tonner of minimum banks or f	om (Costarth in layer roller or wo 8 tonnes arilling up ground 1.600  Total Deduct Net Tour @ Rs 8	st Index:36.  In sex not excessore and dressing bund depressing bund depression bund depressin	eding 20 c el rammers up in emba sions, lead 36.992 cur 0.000 cum 36.992 cun Rs 32 e cost of ce	m in depti , and rollin nkments fo up to 50 i
1	7Construction of  2.2.1  Earth work in rough expression of every 3rd and top-most roads, flood banks, may and lift up to 1.5 m:All For Column footing  4.1.6  Providing and laying in shuttering - All work up and top-most roads, flood banks, may and lift up to 1.5 m:All life for Column footing	control received a control recei	banking ex ach layer with power roller of ks and guide bil 1.700	cavated each 1/2 tonner of minimum banks or f	om (Costarth in layer roller or wo 8 tonnes arilling up ground 1.600  Total Deduct Net Tour @ Rs 8	st Index:36.  In sex not excessore and dressing bund depressing bund depression bund depressin	eding 20 c el rammers up in emba sions, lead 36.992 cur 0.000 cum 36.992 cun Rs 32 e cost of ce	m in depth, and rollin nkments for up to 50 rm

	,,	1	5.000	4.000	0.080		1.600	
					То	tal Quantity	6.912 cum	
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	6.912 cum	
			S	ay 6.912 cu	m @ Rs 72	56.36 / cum	Rs 50	155.96
3	5.1.2 Providing and laying i centering, shuttering, fi sand :3 graded stone a	nishing and	reinforceme	ent - All work			•	
	Footing	8	1.500	1.500	0.200		3.600	
	Isolated Portion	8/3	1.500	1.500	0.450		2.700	
	Column Pedestal	8	0.200	0.400	1.200		0.769	
	Grade slab	1	5.000	4.000	0.150		3.000	
	Plinth beam	2*3	3.270	0.200	0.450		1.766	
	,,	2	3.600	0.200	0.450		0.649	
	,,	1	4.000	0.200	0.450	ميآ	0.361	
	Ramp	2	3.000	1.500	0.100		0.900	
				a and		tal Quantity		n
		Ker	ala Wat	er Auth	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	13.745 cun	1
			Sa	y 13.745 cu	m @ Rs 91	42.09 / cum	Rs 125	658.03
4	5.2.2 Reinforced cement cor and string courses, fill excluding cost of centers agraded stone aggreger	ets, column ering, shutte	s, pillars, pie ering, finishin	ers, abutme	nts, posts a	nd struts et	c. up tot flo	or five I
				,				
	Column Above Plinth	8	0.200	0.400	4.900		3.137	
	Column Above Plinth Lintel		0.200 3.270	0.400	0.300		0.393	
		8	0.200	0.400				
	Lintel	8 2	0.200 3.270	0.400	0.300		0.393	
	Lintel ,,	8 2 4	0.200 3.270 3.270	0.400 0.200 0.200	0.300 0.150		0.393	
	Lintel ,,	8 2 4 2	0.200 3.270 3.270 3.600	0.400 0.200 0.200 0.200	0.300 0.150 0.150		0.393 0.393 0.217	
	Lintel	8 2 4 2 1	0.200 3.270 3.270 3.600 4.000	0.400 0.200 0.200 0.200 0.200	0.300 0.150 0.150 0.150		0.393 0.393 0.217 0.120	

	Beam	4	3.600	0.200	0.330		0.951	
	,,	2*3	3.270	0.200	0.230		0.903	
	Slab	1	11.200	5.000	0.120		6.720	
					To	tal Quantity	15.065 cui	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	15.065 cun	า
			Say	/ 15.065 cun	n @ Rs 110	22.71 / cum	Rs 166	057.13
5	5.9.1 Centering and shut columns, etc for ma		g strutting, et	tc. and remo	oval of form	for:Foundat	ions, footing	gs, bases
	Footing PCC	8*4	1.700	1.700	0.100		9.248	
	Footing RCC	8*4	1.500	1.500	0.200		14.400	
			43 6	8	To	tal Quantity	23.648 sqı	n
		11	MAG	57/17	otal Deduct	ed Quantity	0.000 sqm	
		1/2-			Net To	tal Quantity	23.648 sqn	า
		100	S	Say 23.648 s	sqm @ Rs 3	37.42 / sqm	Rs 79	79.31
6	5.9.5							
6	Centering and shur girders bressumers	s and cantileve	rsla Wat		ority	n for:Lintels		inth beam
6	Centering and shur girders bressumers Plinth beam	s and cantileve	30.000		0.450	n for:Lintels	13.500	inth beam
6	Centering and shur girders bressumers Plinth beam	s and cantileve	rsla Wat		ority	n for:Lintels		inth beam
6	Centering and shur girders bressumers Plinth beam	and cantileve	30.000 4.000		0.450 0.450	n for:Lintels	13.500 7.200	inth beam
6	Centering and shur girders bressumers Plinth beam	and cantileve	30.000 4.000 3.270		0.450 0.450 0.450	n for:Lintels	13.500 7.200 8.829	inth beam
6	Centering and shur girders bressumers Plinth beam " Lintel	and cantileve	30.000 4.000 3.270 3.270	er Auth	0.450 0.450 0.450	n for:Lintels	13.500 7.200 8.829 3.924	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom	and cantileve	30.000 4.000 3.270 3.270 3.270	er Auth	0.450 0.450 0.450 0.300	n for:Lintels	13.500 7.200 8.829 3.924 1.308	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel	3*2 2*2 2 4*2	30.000 4.000 3.270 3.270 3.270 3.270	er Auth	0.450 0.450 0.450 0.300	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel Lintel Lintel	3*2 2*2 2 4*2 2*2	30.000 4.000 3.270 3.270 3.270 3.270 3.600	er Auth	0.450 0.450 0.450 0.300 0.150	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel Lintel  Lintel  "	3*2 2*2 2 4*2 2*2 1*2	30.000 4.000 3.270 3.270 3.270 3.270 3.600 4.000	0.200	0.450 0.450 0.450 0.300 0.150	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160 1.200	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel Lintel " Bottom	and cantilever 1 4 3*2 2*2 2 4*2 2*2 1*2 5	30.000 4.000 3.270 3.270 3.270 3.270 3.600 4.000 1.500	0.200	0.450 0.450 0.450 0.300 0.150 0.150	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160 1.200 1.501	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel Lintel  Bottom Beam	and cantilever 1 4 3*2 2*2 2 4*2 2*2 1*2 5 4*2	30.000 4.000 3.270 3.270 3.270 3.270 3.600 4.000 1.500 3.600	0.200 0.200	0.450 0.450 0.450 0.300 0.150 0.150	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160 1.200 1.501 9.505	inth beam
6	Centering and shur girders bressumers Plinth beam  " Lintel Bottom Lintel Lintel  Bottom Beam Bottom	and cantilever 1 4 3*2 2*2 2 4*2 2*2 1*2 5 4*2 4 4	30.000 4.000 3.270 3.270 3.270 3.270 3.600 4.000 1.500 3.600 3.600	0.200 0.200	0.450 0.450 0.450 0.300 0.150 0.150 0.330	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160 1.200 1.501 9.505 2.881	inth beam
6	Centering and shur girders bressumers Plinth beam  "" Lintel Bottom Lintel Lintel "" Bottom Beam Bottom Beam Bottom	and cantilever 1 4 3*2 2*2 2 4*2 2*2 1*2 5 4*2 4 6*2	30.000 4.000 3.270 3.270 3.270 3.270 3.600 4.000 1.500 3.600 3.600 3.270	0.200 0.200	0.450 0.450 0.450 0.300 0.150 0.150 0.330 0.230	n for:Lintels	13.500 7.200 8.829 3.924 1.308 3.924 2.160 1.200 1.501 9.505 2.881 9.026 3.925	

					Net To	tal Quantity	68.883 sqm	1
			Sa	ay 68.883 s	sqm @ Rs 6	53.89 / sqm	Rs 450	041.90
7	5.9.6 Centering and shutter Abutments, Posts and		ding strutting	, etc. and	removal of	form for:Co	olumns, Pil	lars, Pie
	Column up to Plinth	8	1.200		0.750		7.200	
	Column above Plinth	8	1.200	4.900			47.040	
					To	tal Quantity	54.240 sqr	n
				7	Γotal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	54.240 sqm	1
			Sa	ay 54.240 s	sqm @ Rs 8	69.05 / sqm	Rs 47	137.27
8	5.9.20 Centering and shutter landings, balconies ar	_					spended flo	oors, ro
	Shade	1	11.800	0.750	4-2		8.851	
	,,	1	11.8+2*4. 4	0.600		Ž.	12.361	
	Vertical	2*2	0.600	1100	0.900		2.160	
	Shade Edge	6	0.600	or Auth	0.100		0.360	
	,,	2	0.750	7 7 4 4 4	0.100		0.151	
	Slab	3	4.000	3.270		1	39.240	
	,, Projection	2	11.200	0.120			2.688	
	,,	2	5.000	0.120			1.200	
					To	tal Quantity	67.011 sqr	n
				7	Total Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	67.011 sqm	1
			Sa	ay 67.011 s	sqm @ Rs 9	23.02 / sqm	Rs 618	852.49
9	50.6.7.2 Laterate masonry with mortar 1:6 for super strucharges etc.	-						
	Masonry wall	6	3.270	0.200	4.650		18.247	
	,,	2	3.600	0.200	4.550		6.553	
	,,	1	4.000	0.200	4.900		3.921	
	Parapet wall	1	31.600	0.200	0.400		2.529	

	Lintel	4	3.270	0.200	0.150		-0.392	
	,,	2	3.270	0.200	0.300		-0.392	
	,,	2	3.600	0.200	0.150		-0.216	
	,,	1	4.000	0.200	0.150		-0.120	
	RS Opening	2	3.270	0.200	3.000		-3.924	
	Window	4	1.500	0.200	1.500		-1.800	
	Door op	1	1.500	2.400			-3.599	
					To	tal Quantity	31.250 cur	n
				7	Total Deduct	ed Quantity	-10.443 cur	n
			- 0	100	Net To	tal Quantity	20.807 cum	1
			Sa	y 20.807 cu	ım @ Rs 79	68.75 / cum	Rs 165	805.78
10	5.22.6 Steel reinforcement fo binding all complete u  @ 100 Kg of Steel of	pto plinth			0. 0	d bars of g	rade Fe-500	
	1 Cum of CC	1	.065		الزاوي	100.0	2881.000	
	2	TO SE			To	tal Quantity	2881.000 k	ilogram
			A STATE OF	HISTORY OF THE	Fotal Deduct	ed Quantity	0.000 kilogi	am
		Ker	ala Wat	er Auth	1011Net To	tal Quantity	2881.000 k	ilogram
	1				n @ Rs 98.9			
11	13.1.1 12 mm cement plaster of	of mix:1:4 (	1 cement : 4	I fine sand)				
	Room inside	2	18.000	4.900			176.400	
	Column sides	4*2	0.200	4.900			7.841	
	Op. Side	2	9.270	0.200			3.708	
	,,	1	6.300	0.200			1.260	
	Out side	1	30.000	4.900			147.000	
	Parapet wall	1	31.600	1.000			31.600	
	Window	4	1.500	1.500			-9.000	
	Open.	1*2	1.500	2.400			-7.199	
	Rs	2*2	3.270		3.000		-39.240	
					To	tal Quantity	367.809 sc	lm
				7	Total Deduct	ed Quantity	-55.439 sqr	n
					Net To	tal Quantity	312.370 sq	m

			Sa	y 312.370 s	qm @ Rs 31	16.06 / sqm	Rs 98	727.66	
12	50.13.1 9 mm cement plastering charges etc complete	ng of mix	: 1:3 (1 ceme	ent : 3 fine	sand ) inclu	uding all co	st of mate	rials, labo	
	Ceiling	2	5.000	4.000			40.000		
	Beam sides	2*2	4.000	0.330			5.280		
	Slab Proj.	1	31.500	0.300			9.450		
	Edge	1	32.400	0.150			4.860		
	Shade Bottom & Top	2	11.800	0.750			17.701		
	,,	2	11.800	0.600			14.160		
	,,	2*2	4.400	0.600			10.560		
	Vertical	2*2	0.600	0.900	3		2.160		
	Roof Top	1	10.200	4.000			40.800		
		11	The state of	MA	To	tal Quantity	144.971 s	qm	
		1 12	11234	DEL T	otal Deducte	ed Quantity	0.000 sqm		
		100	1460		Net To	tal Quantity	144.971 sc	m	
	Net Total Quantity								
13	10.6.1 Supplying and fixing ro	olling shutt	Vertex	4 3/6	qm @ Rs 29	•		:496.80	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t	ers of appro th and jointe side guides luding the co ensile steel	ved make, d together a and arrange ost of provi	made of recat the end be ements for inding and fix quate streng	quired size y end locks side and ou ting necess yth conformi	M.S. laths, , mounted utside lockir ary 27.5 c ing to IS: 4	interlock on specia ng with pu m long w 454 - par	
13	Supplying and fixing rotogether through their education designed pipe shaft with and pull operation consprings manufactured f	entire leng n brackets, nplete, inc from high t	ers of appro th and jointe side guides luding the co ensile steel v ickness for re	ved make, d together a and arrange ost of provi	made of recat the end be ements for inding and fix quate streng	quired size y end locks side and ou ting necess yth conformi	M.S. laths, , mounted itside lockir ary 27.5 cl ing to IS: 4 ths with 1.2	interlock on specia ng with pu m long w 454 - par	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t required th	ers of appro th and jointe side guides luding the co ensile steel	ved make, d together a and arrange ost of provi	made of recent the end by ements for inding and fix quate strengers.80x1.25	quired size y end locks side and ou ting necess th conformi mm M.S. la	M.S. laths, mounted atside lockir ary 27.5 cannot be arrow ary 27.5 cannot be arrow ary 27.5 cannot be arrow	interlock on specia ng with pu m long w 454 - par 25 mm th	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t required th	ers of appro th and jointe side guides luding the co ensile steel v ickness for re	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of recent the end by the ements for inding and fix quate strengers.80x1.25	quired size y end locks side and outing necess th conforminm M.S. la	M.S. laths, mounted atside lockir ary 27.5 cing to IS: 4 ths with 1.2 19.620	interlock on specia ng with pu m long w 454 - par 25 mm th	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t required th	ers of appro th and jointe side guides luding the co ensile steel v ickness for re	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of recent the end between the end between the end between the end between the end of the end o	quired size y end locks uside and outing necess th conformit mm M.S. la tal Quantity	M.S. laths, mounted atside locking 27.5 cing to IS: 4 ths with 1.2 19.620 19.620 sq 0.000 sqm	interlock on specia ng with pu m long w 454 - par 25 mm th	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t required th	ers of appro th and jointe side guides luding the co ensile steel ickness for ro 3.270	ved make, d together a and arrange ost of provi- wire of adeco	made of recent the end betweents for inding and fix quate strengers.80x1.25  3.000  Total Deducters.	quired size y end locks y end locks uside and outing necess th conformite mm M.S. la tal Quantity ed Quantity tal Quantity	M.S. laths, mounted atside locking 27.5 cing to IS: 4 ths with 1.2 19.620 sq 0.000 sqm 19.620 sqr	interlock on specia ng with pu m long w 454 - par 25 mm th	
13	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation consprings manufactured fand M.S. top cover of rotogether through the supplying	entire leng n brackets, nplete, inc from high t required th 2	ers of appro th and jointe side guides luding the co ensile steel v ickness for ro 3.270	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of recat the end betweents for inding and fix quate strengers.80x1.25  3.000  Total Deductor Net Total Deductor Met Total Deductor m @ Rs 348	quired size y end locks side and outing necess th conforminm M.S. lated Quantity and Quantity an	M.S. laths, , mounted atside lockir ary 27.5 cannot be seed in the seed of the	interlock on specia ng with pu m long w 454 - par 25 mm th m m 4418.86	
	Supplying and fixing rotogether through their edesigned pipe shaft with and pull operation comparings manufactured from the cover of rotop cover of rotop cover of rotop cover odd 28795/2021_2022  Supplying and providing shutters with 4mm thick	entire leng n brackets, nplete, inc from high t required th 2	ers of appro th and jointe side guides luding the co ensile steel v ickness for ro 3.270	ved make, d together a and arrange ost of provi wire of adec olling shutte	made of recat the end betweents for inding and fix quate strengers.80x1.25  3.000  Total Deductor Net Total Deductor Met Total Deductor m @ Rs 348	quired size y end locks side and outing necess th conforminm M.S. lated Quantity and Quantity an	M.S. laths, , mounted atside lockir ary 27.5 cannot be seed in the seed of the	interlock on specia ng with pu m long w 454 - par 25 mm thi m  418.86	

				٦	Γotal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	9.000 sqm	
			S	ay 9.000 so	qm @ Rs 38	52.42 / sqm	Rs 340	671.78
15	4.1.3 Providing and laying in shuttering - All work up nominal size)	•		•	_	•		•
	Screading Concrete (Panel Room)	1	4.000	5.000	0.040		0.800	
					То	tal Quantity	0.800 cum	
			0	65.	Total Deduct	ed Quantity	0.000 cum	
			168	1697	Net To	tal Quantity	0.800 cum	
			S	ay 0.800 cu	um @ Rs 80	40.95 / cum	Rs 64	32.76
16	13.9.1 Cement plaster 1:3 ( 'cement plaster	I cement :	3 coarse sa	and) finishe	ed with a flo	ating coat o	of neat cem	ent.12 r
	Floor Finishing	2	4.000	5.000			40.000	
	Rammp	2	3.000	1.500	36		9.000	
		I/ au	ala Wat	2 12 A 274]	То	tal Quantity	49.000 sqr	n
		Ker	ala Wat	er Auu	Fotal Deduct	ed Quantity	0.000 sqm	
				+(	Net To	tal Quantity	49.000 sqm	1
			S	ay 49.000 s	sqm @ Rs 4	14.71 / sqm	Rs 203	320.79
17	13.43.1 Applying one coat of surface:Water thinnak			nt primer o	of approved	l brand and	l manufactu	ıre on v
	Room inside	2	18.000	4.900			176.400	
	Column sides	4*2	0.200	4.900			7.841	
	Op. Side	2	9.270	0.200			3.708	
	,,	1	6.300	0.200			1.260	
	Out side	1	30.000	4.900			147.000	
	Parapet wall	1	31.600	1.000			31.600	
	Window	4	1.500	1.500			-9.000	
	Open.	1*2	1.500	2.400			-7.199	
	Rs	2*2	3.270		3.000		-39.240	
	Ceiling	2	5.000	4.000			40.000	

				1	1		1	
	Beam sides	2*2	4.000	0.330			5.280	
	Slab Proj.	1	31.500	0.300			9.450	
	Edge	1	32.400	0.150			4.860	
	Shade Bottom & Top	2	11.800	0.750			17.701	
	,,	2	11.800	0.600			14.160	
	,,	2*2	4.400	0.600			10.560	
	Vertical	2*2	0.600	0.900			2.160	
					Tot	tal Quantity	471.980 sc	m
				-	Total Deducte	ed Quantity	-55.439 sqr	m
			-0	65	Net Tot	tal Quantity	416.541 sq	m
			S	Say 416.541	sqm @ Rs 7	71.09 / sqm	Rs 29	611.90
18	13.44.1 Finishing walls with war @ 3.84 kg/10 sqm)	ter proofing	cement pair	nt of require	ed shade:Nev	w work (Two	o or more co	pats app
	Room inside	2	18.000	4.900	173	ş	176.400	
	Column sides	4*2	0.200	4.900			7.841	
	Op. Side	2	9.270	0.200			3.708	
	,,	1	6.300	0.200			1.260	
	Out side	Kera	30.000	4.900	lority		147.000	
	Parapet wall	1	31.600	1.000		ì	31.600	
	Window	4	1.500	1.500			-9.000	
	Open.	1*2	1.500	2.400			-7.199	
	Rs	2*2	3.270		3.000		-39.240	
	Ceiling	2	5.000	4.000			40.000	
	Beam sides	2*2	4.000	0.330			5.280	
	Slab Proj.	1	31.500	0.300			9.450	
	Edge	1	32.400	0.150			4.860	
	Shade Bottom & Top	2	11.800	0.750			17.701	
	,,	2	11.800	0.600			14.160	
	,,	2*2	4.400	0.600			10.560	
	Vertical	2*2	0.600	0.900			2.160	
					Tot	tal Quantity	471.980 so	m
				-	Total Deducte	ed Quantity	-55.439 sqr	m
	<u> </u>						1	

Say 416.541 sqm @ Rs 108.06 / sqm   Rs 45011.42									
19 10.25.2 Item Shifted to Sub head 14 as item 14.73Item Shifted to head 14 as item 14.74Steel work welded in bui up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat c approved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladde rallings, brackets, gates and similar works  Window grill 4 1.500 1.500 16.0 144.000 kg  Total Deducted Quantity 144.000 kg  Net Total Quantity 144.000 kg  Say 144.000 kg @ Rs 155.13 / kg  Rs 22338.72  20 13.61.1  Painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel paint of approved brand and manufacture to give an even shade. Two control of the provided painting with synthetic enamel painting with synthetic enamel painting enamely approved brand manufacture to give an even shade. Two control of the provided painting enamely approved brand manufacture to give an even shade. Two control of the provided painting enamely approved brand manufacture to give an even shade. Two control of the provided painting enamely approved brand manufacture to give an even shade. Tw									
tem Shifted to Sub head 14 as item 14.73ltem Shifted to head 14 as item 14.74Steel work welded in bui up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat capproved steel primer using structural steel etc. as required. In gratings, frames, guard bar, ladde rallings, brackets, gates and similar works  Window grill 4 1.500 1.500 16.0 144.000 kg  Total Deducted Quantity 144.000 kg  Total Quantity 144.000 kg  Re 2338.72  13.61.1  Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two comore coats on new work  Window 4 1.500 1.500 9.000  Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sgm  Total Deducted Quantity 58.051 sgm  Total Deducted Quantity 58.051 sgm  Total Deducted Quantity 58.051 sgm  Re 8355.86  Si No Description No L B D CF Quantity Remark  **Re 8355.86**  **Re 8355.86**  **Re 8355.86**  **Re 8355.86**  **Re 8355.86**  **Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  **A 1.8**  **Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  **A 1.8**  **Total Quantity 0.631 cum  Total Quantity 0.631 cum  Total Quantity 0.631 cum  **Total Quantity 0.631 cum  Total Quantity 0.631 cum  Total Quantity 0.631 cum  **Total Quantity 0.631 cum  Total				Sa	y 416.541 s	qm @ Rs 1	08.06 / sqm	Rs 45	011.42
Total Quantity 144.000 kg  Total Deducted Quantity 0.000 kg  Net Total Quantity 144.000 kg  Net Total Quantity 144.000 kg  Res 22338.72  20 13.61.1  Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two comore coats on new work  Window 4 1.500 1.500 9.000  Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sqm  Total Deducted Quantity 58.051 sqm  Total Deducted Quantity 58.051 sqm  Say 58.061 sqm @ Rs 143.94 / sqm Rs 8355.86  SI No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coars sand : 3 graded stone aggregate 20 mm nominal size	19	Item Shifted to Sub up sections/framed approved steel prin	d work, includi mer using stru	ng cutting, h uctural steel	oisting, fixi	ng in positi	on and app	lying a prim	ning coat of
Total Deducted Quantity 0.000 kg  Net Total Quantity 144.000 kg  Say 144.000 kg @ Rs 155.13 / kg  Rs 22338.72  20 13.61.1  Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two or more coats on new work  Window 4 1.500 1.500 9.000  Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Authori Net Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  Si No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.0631 cum  Total Quantity 0.0631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coars sand :3 graded stone aggregate 20 mm nominal size		Window grill	4	1.500	1.500		16.0	144.000	
Net Total Quantity  Say 144.000 kg @ Rs 155.13 / kg  Rs 22338.72  20 13.61.1  Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two of more coats on new work  Window 4 1.500 1.500 9.000  Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Authorn Net Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm  Rs 8355.86  Si No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.0631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coars sand : 3 graded stone aggregate 20 mm nominal size)						To	tal Quantity	144.000 kg	9
Say 144,000 kg @ Rs 155.13 / kg  Rs 22338.72  20					Т	otal Deduct	ed Quantity	0.000 kg	
20 13.61.1 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two of more coats on new work  Window 4 1.500 1.500 9.000 Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sqm  Total Deducted Quantity 58.051 sqm  Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  SINO Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:15:3 (1 cement 1.5 coars sand : 3 graded stone aggregate 20 mm nominal size						Net To	tal Quantity	144.000 kg	
Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:Two comore coats on new work  Window 4 1.500 1.500 9.000  Rolling shutter 2 3.270 3.000 2.5 49.051  Total Quantity 58.051 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Authori Net Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  SI No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering an shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size				168	Say 144.0	00 kg @ Rs	155.13 / kg	Rs 22	338.72
Total Quantity 58.051 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Author Net Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  SI No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.631 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size	20	Painting with synthemore coats on new	work		SMA	nd manufac	eture to give		ade:Two o
Total Quantity 58.051 sqm  Total Deducted Quantity 0.000 sqm  Kerala Water Author Net Total Quantity 58.051 sqm  Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  SI No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.631 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size		Rolling shutter	2	3.270	3.000	الاناوي	2.5	49.051	
Total Deducted Quantity   0.000 sqm			483			To			n
Say 58.051 sqm @ Rs 143.94 / sqm Rs 8355.86  Si No Description No L B D CF Quantity Remark  8Providing Cable Trenches (Cost Index:36.44 %)  1 4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering anshuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.631 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand : 3 graded stone aggregate 20 mm nominal size				Variation	TILL THE T			-	
8 Providing Cable Trenches (Cost Index:36.44 %)  4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.631 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size			Ker	ala Wat		Ority			າ
8Providing Cable Trenches (Cost Index:36.44 %)  4.1.8 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2 Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size			D	S	Say 58.051 s	qm @ Rs 1	43.94 / sqm	Rs 83	55.86
4.1.8  Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size	SI No	Description	No	L	В	D	CF	Quantity	Remark
Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 4 nominal size)  1 6.000 1.050 0.100 0.631  Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarse sand :3 graded stone aggregate 20 mm nominal size		8	8Providing Ca	ble Trenche	es (Cost	Index:36.4	4 %)		
Total Quantity 0.631 cum  Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand :3 graded stone aggregate 20 mm nominal size	1	Providing and layin shuttering - All wor	• .		-	-	_		_
Total Deducted Quantity 0.000 cum  Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand :3 graded stone aggregate 20 mm nominal size			1	6.000	1.050	0.100		0.631	
Net Total Quantity 0.631 cum  Say 0.631 cum @ Rs 6857.61 / cum  Rs 4327.15  2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand :3 graded stone aggregate 20 mm nominal size						To	tal Quantity	0.631 cum	
Say 0.631 cum @ Rs 6857.61 / cum  Rs 4327.15  5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand :3 graded stone aggregate 20 mm nominal size					Т	otal Deduct	ed Quantity	0.000 cum	
2 5.1.2  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coarses sand :3 graded stone aggregate 20 mm nominal size						Net To	tal Quantity	0.631 cum	
Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level:1:1:5:3 (1 cement 1.5 coars sand :3 graded stone aggregate 20 mm nominal size				S	Say 0.631 cu	m @ Rs 68	57.61 / cum	Rs 43	27.15
	2	Providing and layir centering, shuttering	g, finishing and	l reinforceme	ent - All work			•	

					To	otal Quantity	0.631 cum	
				Τ		ted Quantity		
					Net To	otal Quantity	0.631 cum	
			5	Say 0.631 cu	ım @ Rs 91	42.09 / cum	Rs 57	68.66
3	13.9.1 Cement plaster 1:3 ( cement plaster	1 cement :	3 coarse sa	and) finishe	ed with a flo	pating coat o	of neat cem	ent.12 mı
		1	6.000	1.050	1.050		6.616	
					To	otal Quantity	6.616 sqm	
				Т	Total Deduc	ted Quantity	0.000 sqm	
			100	120	Net To	otal Quantity	6.616 sqm	
				Say 6.616 s	sqm @ Rs 4	14.71 / sqm	Rs 27	43.72
4	od328764/2021_2022 supplying and providir iron primer		d plate 6mm	thick over th	ne cable tre	nch includin	g painting w	th a coat
		1	30.000	0.800	3 10	L.	24.000	
		436			To	otal Quantity	24.000 sqr	n
			THE STATE OF	MINE PER	Total Deduc	ted Quantity	0.000 sqm	
		Ker	ala Wat	er Auth	noriNet To	otal Quantity	24.000 sqm	1
	-		Sa	ay 24.000 sc	m @ Rs 69	97.51 / sqm	Rs 167	940.24
SI No	Description	No	L	В	D	CF	Quantity	Remark
		9Bath cur	n Toilets	(Cost Inde	ex:36.44 %)			
1	2.2.1 Earth work in rough breaking clods, wateri every 3rd and top-mos roads, flood banks, m and lift up to 1.5 m:Al	ing, rolling e st layer with narginal ban	ach layer wi power roller ks and guid	th 1/2 tonne of minimum	roller or wo	ooden or ste and dressing	el rammers, up in embai	and rolliinkments f
	WALL	1	9.920	0.900	0.700		6.250	
	STEPS	1	1.000	0.750	0.150		0.113	
					To	otal Quantity	6.363 cum	
				T	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	6.363 cum	
				Say 6.363 c	cum @ Rs 8	884.54 / cum	Rs 56	28.33
2	4.1.6 Providing and laying i	n position c	ement concr	ete of speci	ified grade	excluding th	e cost of ce	ntering a

	nominal size)	p to plinth lev	1		T	, o gradou c		Jane 10
	WALL	1	9.920	0.900	0.100		0.893	
	STEPS	1	1.000	0.750	0.100		0.076	
					To	tal Quantity	0.969 cum	
				7	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	0.969 cum	
			S	Say 0.969 cu	ım @ Rs 72	56.36 / cum	Rs 70	31.41
3	7.1.1 Random rubble mas concrete 1:6:12 (1 ce level with:Cement mo	ment : 6 coar	se sand : 12	2 graded sto	•	•	• .	
	FOUNDATION	2	9.920	0.600	0.600		7.143	
	BASEMENT	2	9.920	0.450	0.450		4.018	
			1 KV	<u> </u>	To	tal Quantity	11.161 cur	n
		11/58			Total Deduct	ed Quantity	0.000 cum	
		400	£4000		Net To	tal Quantity	11.161 cum	า
				4 27		49.94 / cum	Rs 80	916.58
4	6.4.1 Brick work with commabove plinth level up sand)(from floor 2 level)	non burnt clay to floor V lev	ala Wat F.P.S. (nor rel in all sha	er Auth n modular) b	Ority Oricks of clas	ss designation	on 7.5 in sup	perstruct
4	Brick work with commabove plinth level up	non burnt clay to floor V lev	ala Wat F.P.S. (nor rel in all sha	er Auth	Ority Oricks of clas	ss designation	on 7.5 in sup	perstruct
4	Brick work with commabove plinth level up sand)(from floor 2 lev	to floor V level up to floor	ala Wat v F.P.S. (nor rel in all sha 5 level)	er Auth n modular) b pes and siz	ority oricks of class es in:Cemel	ss designation	on 7.5 in sup 4(1 cemen	perstruct
4	Brick work with commabove plinth level up sand)(from floor 2 lev	to floor V level up to floor	ala Wat v F.P.S. (nor rel in all sha 5 level)	er Auth n modular) b pes and siz	oricks of clases in:Cemer	ss designation	on 7.5 in sup 4 ( 1 cemen 12.321	perstruct
4	Brick work with commabove plinth level up sand)(from floor 2 lev	to floor V level up to floor  2  2*3	ala Wat y F.P.S. (nor rel in all sha 5 level) 9.920 1.000	er Author modular) be pes and siz	oricks of clases in:Cemer 2.700 0.150	ss designation	on 7.5 in sup 4 ( 1 cemen 12.321 0.225	perstruct
4	Brick work with commabove plinth level up sand)(from floor 2 lev Walls steps	to floor V level up to floor  2  2*3  2	ala Wat y F.P.S. (nor rel in all sha r 5 level) 9.920 1.000 0.800	er Authorized pes and siz	2.700 0.150 0.500	ss designation	200 7.5 in sup 4 ( 1 cemen 12.321 0.225 -0.625	perstruct
4	Brick work with commabove plinth level up sand)(from floor 2 lev Walls steps	to floor V level up to floor  2  2*3  2	ala Wat y F.P.S. (nor rel in all sha r 5 level) 9.920 1.000 0.800	er Author modular) be pes and siz 0.230 0.250 0.230 0.230	2.700 0.150 1.700 0.500	ss designationt mortar 1:4	n 7.5 in sup 4 ( 1 cemen 12.321 0.225 -0.625 -0.161 12.546 cur	perstruct t : 4 coa
4	Brick work with commabove plinth level up sand)(from floor 2 lev Walls steps	to floor V level up to floor  2  2*3  2	ala Wat y F.P.S. (nor rel in all sha r 5 level) 9.920 1.000 0.800	er Author modular) be pes and siz 0.230 0.250 0.230 0.230	2.700 0.150 1.700 0.500 Total Deduct	ss designation the mortar 1:4	n 7.5 in sup 4 ( 1 cemen 12.321 0.225 -0.625 -0.161 12.546 cur	perstruct t : 4 coa
4	Brick work with commabove plinth level up sand)(from floor 2 lev Walls steps	to floor V level up to floor  2  2*3  2	ala Wat y F.P.S. (nor yel in all sha 5 level) 9.920 1.000 0.800 0.700	0.230 0.230 0.230 0.230	2.700 0.150 1.700 0.500 Total Deduct	es designation the mortar 1:4	12.321 0.225 -0.625 -0.161 12.546 cur -0.786 cum	perstruct t : 4 coa
5	Brick work with commabove plinth level up sand)(from floor 2 lev Walls steps	to floor V level up to floor  2 2*3 2 2 2 oncrete work najjas, lintels de cost of cer	Ala Water P.P.S. (nor rel in all shares 1.000   0.800   0.700   Satisfied by the shares 1.000    Satisfied by the shares 1.000	er Author modular) by pes and size 0.230 0.250 0.230 0.230 0.230 ay 11.760 cursuspended in window sitering, finish	oricks of classes in:Cemer  2.700  0.150  1.700  0.500  Total Deduct  Net Total Deduct  Res 92  floors, roofsills, staircashing and rein	es designation mortar 1:4  etal Quantity etal Quantity etal Quantity 49.88 / cum es, having slo	12.321 0.225 -0.625 -0.161 12.546 cur -0.786 cum 11.760 cur Rs 108	m  a  778.59  b  o  o  o  o  o  o  o  o  o  o  o  o

	lintel	2	9.920	0.230	0.150		0.685	
	sunshade	2	2.580	0.600	0.100		0.310	
					То	tal Quantity	3.517 cum	1
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	3.517 cum	
			Sa	ıy 3.517 cun	n @ Rs 115	64.93 / cum	Rs 40	673.86
6	5.22.6 Steel reinforcement f binding all complete				•	•		
		1	3.500			80.0	280.000	
			100	B.	То	tal Quantity	280.000 k	ilogram
			J/W		otal Deduct	ed Quantity	0.000 kilog	ram
			33 8	8 4	Net To	tal Quantity	280.000 ki	ogram
		FL	Say 280.0	000 kilogram	n @ Rs 98.9	2 / kilogram	Rs 27	697.60
7	4.1.8 Providing and laying i shuttering - All work i nominal size)			NORMOLOGIC PLAN	All the second of the second	A		_
7	Providing and laying i shuttering - All work u			2.500	0.100	nd : 8 grad	1.000 cum	ggregate
7	Providing and laying i shuttering - All work u	up to plinth	level:1:4:8 (	2.500	0.100 To	nd: 8 grad tal Quantity	1.000 cum	ggregate
7	Providing and laying i shuttering - All work u	up to plinth	2.000 ala Wat	2.500	0.100 To	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum	ggregate
8	Providing and laying i shuttering - All work u	2 Ker	2.000 ala Wat	2.500 CT Auth	0.100 To otal Deduct	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum	ggregate
	Providing and laying is shuttering - All work unominal size)	2 Ker	2.000 ala Wat	2.500 CT Auth	0.100 To otal Deduct	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum	ggregate
	Providing and laying is shuttering - All work unominal size)  13.1.1 12 mm cement plaster	y of mix:1:4 (	2.000 ala Wat	2.500 CT Auth	0.100 Total Deduct Net To	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 1.000 cum 0.000 cum 1.000 cum Rs 6	ggregate
	Providing and laying is shuttering - All work is nominal size)  13.1.1 12 mm cement plaster Walls	y of mix:1:4 (	2.000 ala Wat (1 cement : 4	2.500 CT Auth	0.100 Total Deduct Net To m @ Rs 68	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum Rs 6	ggregate
	Providing and laying is shuttering - All work unominal size)  13.1.1 12 mm cement plaster Walls steps	2 Ker 2 2*3	2.000 ala Vat 2.000 s (1 cement : 4 9.920 1.000	2.500 CT Auth	0.100 Total Deduct Net To m @ Rs 68	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum Rs 68	ggregate
	Providing and laying is shuttering - All work unominal size)  13.1.1 12 mm cement plaster Walls steps door	2 Ker 2 2*3 2	2.000 ala Wat 2.000 s (1 cement : 4 9.920 1.000 0.800	2.500 CT Auth	0.100 To Total Deduct Net To Im @ Rs 688  2.700 0.150 1.700 0.500	nd: 8 grad tal Quantity ed Quantity tal Quantity	1.000 cum 0.000 cum 1.000 cum 1.000 cum 1.000 cum 0.000 cum -2.720 -0.700	357.61
	Providing and laying is shuttering - All work unominal size)  13.1.1 12 mm cement plaster Walls steps door	2 Ker 2 2*3 2	2.000 ala Wat 2.000 s (1 cement : 4 9.920 1.000 0.800	2.500 Cr Auth	0.100 To Total Deduct Net To Im @ Rs 688  2.700 0.150 1.700 0.500	tal Quantity ed Quantity tal Quantity 57.61 / cum	1.000 cum 0.000 cum 1.000 cum 1.000 cum 1.000 cum 0.000 cum 1.000 cum 0.000 cum 1.000	ggregate  357.61
	Providing and laying is shuttering - All work unominal size)  13.1.1 12 mm cement plaster Walls steps door	2 Ker 2 2*3 2	2.000 ala Wat 2.000 s (1 cement : 4 9.920 1.000 0.800	2.500 Cr Auth	0.100 Total Deduct Net To m @ Rs 688  2.700 0.150 1.700 0.500 Total Deduct	tal Quantity tal Quantity 57.61 / cum	1.000 cum 0.000 cum 1.000 cum 1.000 cum 1.000 cum 0.000 cum 1.000 cum 0.000 cum 1.000	ggregate  357.61

	roof slab	2*2	3.160	2.660			33.623	
	sunshade	2*2	2.800	0.600			6.720	
					To	otal Quantity	40.343 sq	m
				-	Total Deduc	ted Quantity	0.000 sqm	
					Net To	otal Quantity	40.343 sqr	n
			S	Say 40.343	sqm @ Rs 2	93.14 / sqm	Rs 11	826.15
10	13.33.1 Pointing on stone wo	ork with cemer	nt mortar 1:3	(1 cement	: 3 fine sand	d):Flush/ Rul	ed pointing	
	FOUNDATION	2	9.920		0.600		11.904	
	BASEMENT	2	9.920	163	0.450		8.928	
			1.0		To	otal Quantity	20.832 sq	m
			3,29		Total Deduc	ted Quantity	0.000 sqm	
		16		20/A	Net To	otal Quantity	20.832 sqr	n
			S	Say 20.832	sqm @ Rs 3	38.10 / sqm	Rs 70	043.30
11	od328785/2021_202 Supplying and fixing and labour charges	PVC door of	te	10m as per		rd specificat	ion includin	g all fitt
	Supplying and fixing	PVC door of ,etccomplet	te	er Auth	ority	rd specificat  tal Quantity  ted Quantity	2.000 2.000 No	g all fitt
	Supplying and fixing	PVC door of ,etccomplet	te	er Auth	Ority Total Deduc	otal Quantity	2.000 2.000 No 0.000 No	g all fitt
	Supplying and fixing	PVC door of ,etccomplet	te	er Auth	Ority Total Deduc	otal Quantity ted Quantity	2.000 2.000 No 0.000 No 2.000 No	g all fitt
12	Supplying and fixing	ment concrete rced with 1.6 finishing in c	e jali 1:2:4 ( 1 mm dia mild cement mort	Say 2.000 cement : 2 steel wire ar 1:3 (1 cc	Total Deduction Net Total One Rs 4	otal Quantity ted Quantity otal Quantity 816.51 / No	2.000 No 2.000 No 2.000 No Rs 96 stone aggr	633.02 egate 6 roughe
	Supplying and fixing and labour charges  5.18.1 Providing precast ce nominal size) reinforcleaning, fixing and	ment concrete rced with 1.6 finishing in c	e jali 1:2:4 ( 1 mm dia mild cement mort	Say 2.000 cement : 2 steel wire ar 1:3 (1 cc	Total Deduction Net Total One Rs 4	otal Quantity ted Quantity otal Quantity 816.51 / No	2.000 No 2.000 No 2.000 No Rs 96 stone aggr	633.02 egate 6 roughe
	Supplying and fixing and labour charges  5.18.1 Providing precast ce nominal size) reinforcleaning, fixing and	ment concrete rced with 1.6 finishing in combs, sills and	e jali 1:2:4 ( 1 mm dia mild cement mort soffits.50 m	Say 2.000 cement : 2 steel wire ar 1:3 (1 cc	Total Deduction Net Total	otal Quantity ted Quantity otal Quantity 816.51 / No	2.000 2.000 No 0.000 No 2.000 No Rs 90 stone aggr shuttering, tc. complet	egate 6 roughe e exclu
	Supplying and fixing and labour charges  5.18.1 Providing precast ce nominal size) reinforcleaning, fixing and	ment concrete rced with 1.6 finishing in combs, sills and	e jali 1:2:4 ( 1 mm dia mild cement mort soffits.50 m	Say 2.000 cement : 2 steel wire ar 1:3 (1 comm thick	Total Deduction Net Total	otal Quantity ted Quantity otal Quantity 816.51 / No ad : 4 graded entering and ne sand ) en	2.000 2.000 No 0.000 No 2.000 No Rs 90 stone aggr shuttering, tc. complet 3.000 3.000 sqm	egate 6 roughe e exclu
	Supplying and fixing and labour charges  5.18.1 Providing precast ce nominal size) reinforcleaning, fixing and	ment concrete rced with 1.6 finishing in combs, sills and	e jali 1:2:4 ( 1 mm dia mild cement mort soffits.50 m	Say 2.000 cement : 2 steel wire ar 1:3 (1 comm thick	Total Deduction  Net Total Deduction  Net Total Deduction  O No @ Rs 4  C coarse sand including celement: 3 fill  1.000  Total Deduction	otal Quantity ted Quantity otal Quantity 816.51 / No ad : 4 graded entering and ne sand ) en	2.000 2.000 No 0.000 No 2.000 No Rs 96 stone aggr shuttering, tc. complet 3.000 3.000 sqm 0.000 sqm	egate 6 roughe e exclu
	Supplying and fixing and labour charges  5.18.1 Providing precast ce nominal size) reinforcleaning, fixing and	ment concrete rced with 1.6 finishing in combs, sills and	e jali 1:2:4 ( 1 mm dia mild cement mort soffits.50 m	Say 2.000 cement : 2 steel wire ar 1:3 (1 comm thick	Total Deduction  Net Total Deduction  Net Total Deduction  Coarse sand including celement: 3 fill  1.000  Total Deduction  Net Total Deduction	otal Quantity ted Quantity otal Quantity 816.51 / No ad : 4 graded entering and ne sand ) en	2.000 2.000 No 0.000 No 2.000 No Rs 96 stone aggr shuttering, tc. complet 3.000 3.000 sqm 0.000 sqm	egate 6 roughe e exclu

		2	3.000	1.500			9.000		
			3.000	1.500	<u>Г</u>	tal Quantity			
				т		ed Quantity			
				'		<u>-</u>	•		
				0 000 am		tal Quantity	•	00.74	
14	Say 9.000 sqm @ Rs 1097.86 / sqm  13.37.1  White washing with lime to give an even shade:New work (three or more coats)								
	side wall	2	3.000		1.800		10.800		
	top	2	3.000	B.	1.500		9.000		
					То	tal Quantity	19.800 sqn	n	
		ed Quantity	0.000 sqm						
		61	N. FR	201	Net To	tal Quantity	19.800 sqm	1	
		1 12	11538	Say 19.800	sqm @ Rs	33.84 / sqm	Rs 67	70.03	
15	13.40 Distempering with dishade on new work,	•	The state of the s			•	•		
	side wall	Ker	al <b>3</b> .000at	er Auth	011.800		10.800		
	top	2	3.000		1.500	7	9.000		
			K		То	tal Quantity	19.800 sqn	n	
				T	otal Deduct	ed Quantity	0.000 sqm		
					Net To	tal Quantity	19.800 sqm	)	
			S	ay 19.800 s	qm @ Rs 1	39.44 / sqm	Rs 27	60.91	
SI No	Description	No	L	В	D	CF	Quantity	Remar	

## 1 od328753/2021\_2022

Supply, delivery and erection of non-clog sewage submersible pump sets with stainless steel impeller to pass soft solids upto 50mm size per separate special specification. including cost of required submersible cable to suit the site condition ,starter with control board, Submersible cables required as per site conditions should be supplied with two capacitance type level guards for operating automatically autocoupler SS chain ,guide rail etc for the following duty condition. MSB(Separate pannels for H&C PS 1,Asramom and H&C PS 2 pump houses)<br/>
houses)<br/>
Tabrication supply,conveyance,installation testing and commissioning of floor/wall mounting dust and vermin proof cubicle type MV panel board confirming of the fallowing components/devicess and complying to IS 8623<br>>Fabrication of fully partitioned ,dust and vermin proof enclosure for panel assemby as per form 4 of IS 8623 using 2mm CRCA sheet as per approved design and requirement, with front and rear accessembly bus bar chembers, hinged doors for all switch gear components ,earthing the door using 4sq.mm braided copper conductor, providing necessary cut-outs for mounting meters, relays, indication lamps, bus bar inter connections etc, detachable covers for busbar chember and cable alley, power coating the assembly after subjecting to 7 tank process etc as required. CRCA sheet alone be used for the fabrication. Angles/flats/slotted angles etc shall not be used forthe fabrication of panel assembly. The panel shail be provided with base frame from ISMS 75. Necessary barriers and shrouding with 2mm/3mm SMC Sheets shall be provided. Heavy duty neoprene beeding of apropriate sizes shall be used to make the panel dust and vermin proof. The control board should have necessary tripping devices and indicating devices for safety of motor and pumpsets with necessary isolator near the wet well site - Ipd and head in m as follow as per actual site condition.>Outgoing<br/>oing<br/>/br>(i)H&C PS2: 150A TP MCCB to control the submersible pump set-5Nos, <br>(b). 150 A TP MCCB to control the capacitor bank - 1 no(c)Providing suitable rating capacitor bank with APFC Panel-1No.(d)150A 25Ka TP MCCB spare -1No.<br/>
-1No.<br/>
-1No.<br/>
-1No.APFC Panel-1No.(d)150A 16KA TP MCCB to control submersible pump sets at Asramom-5Nos,b,150A 16 KA TPMCCB to control the capacitor bank-1No c, Providing suitable rating capacitor bank with APFC Panel (d) (iii)IH&C PS1(a)150A 25 KA TPMCCB -2 Nos,(b) 150A 25KA TPMCCB-2Nos,(c)150A 25 KA TPMCCB-2Nos (d) Providing suitable ratings(3Nos 40Kvar) capacitor bank with APFC Panel-1No.<br/>br>N.B (a) Necessary CTs should be provided for safe guarding the instruments wherever necessary. Interlocking should be provided for standby pump sets.<br/>
br>Cabling <br>
Supply ,delivery and laying of following size L.T cable (1.1KV Grade)including jointing material, cable carrier system like trenches, cable trays pipe sleeves etc as per IE rules including cost of flat submersible cable connecting main panel board and submersible pump sets thro starter control board and isolator 3 ½ core 95 sq mm armourd aluminum conductor cable length as per site condition.connection from suction up to header line.(three year additional replacement warranty additional to 2 years = total 5 year -Including replacement of parts or pump, motors, panel board fully.)

PH1	2	27.000				54.000	
				То	tal Quantity	54.000 Hp	
			Т	otal Deduct	ed Quantity	0.000 Hp	
				Net To	tal Quantity	54.000 Hp	
		5	Say 54.000 H	Hp @ Rs 25	395.04 / Hp	Rs 137	1332.16

2 od328762/2021\_2022

Supply and delivery of suitable flexible joint coupling upto 200mm for easy dismantling of delivery pipes and valves with Tie bolts with angular deflection 5 Degree

			1					
		3					3.000	
					То	tal Quantity	3.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	3.000 No	
				Say 3.000 N	No @ Rs 10	350.00 / No	Rs 31	050.00
3	od328766/2021_2022 Supply and delivery of valves with Tie bolts wi				ling for eas	y dismantlin	ng of deliver	y pipes an
		3					3.000	
			1		То	tal Quantity	3.000 No	
			19	T 12-	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	3.000 No	
			236	Say 3.000 N	F. 75			950.00
	Supply and delivery of pump sets .	200 mm C	Cl Sluice Va	llves suitable	e for the se	wage pump		o. for ead
		1					1.000	
				SHIP Z	То	tal Quantity	1.000 No	
		Ker	ala Wai	ter Auth	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	1.000 No	
			K	Say 1.000 N	No @ Rs 80	500.00 / No	Rs 80	500.00
5	od328786/2021_2022 Supply, delivery and erection of Multistage force Pump 600LPM X 30M head suitable for cleaning the screen chamber, Pumpset during servicing with 16 m of 20 mm dia hose required for operating the pumpset.							
		1					1.000	
					То	tal Quantity	1.000 set	
				Т	otal Deduct	ed Quantity	0.000 set	
					Net To	tal Quantity	1.000 set	
				Say 1.000 s	et @ Rs 63	250.00 / set	Rs 63	250.00
6	od328788/2021_2022 Supply and delivery of b	oreathing ap	oparatus wit	h Oxygen cy	rlinder mask	etc comple	te .	
		1					1.000	
				•	То	tal Quantity	1.000 set	•
				Т		ed Quantity		
						tal Quantity		

				Say 1.000 s	et @ Rs 86	250.00 / set	Rs 86	250.00		
7	od328789/2021_2022									
	Supply and delivery of	Diaphragm	type pressu	re gauge wit	h necessary	S.S tubes	and isolating	valves		
		1					1.000			
					То	tal Quantity	1.000 No			
				Т	otal Deduct	ed Quantity	0.000 No			
					Net To	tal Quantity	1.000 No			
				Say 1.000	No @ Rs 6	900.00 / No	Rs 69	00.00		
8	od328791/2021_2022 Supply and fixing of E pipes,specials and acc	_				_	-	-		
		1	1/10	199			1.000			
		- Committee	62 h		То	tal Quantity	1.000 No			
		610	X 2	35. Z/1	otal Deduct	ed Quantity	0.000 No			
		12			W_ 2v 1	tal Quantity				
		151		Say 1.000 No	( 11)	8		000.00		
		1	R	H	То	tal Quantity	1.000 1.000 No			
				Т	otal Deduct	ed Quantity	0.000 No			
					Net To	tal Quantity	1.000 No			
				Say 1.000 N	No @ Rs 46	000.00 / No	Rs 46	00.00		
10	100.98.460 Supply of CI Double Fla Size 150mm.	anged Sluic	e Valve Co	nforming to I	S 14846 - 2	000, Sluice	Valve with (	Cap PN ′		
		2					2.000	3 + 1		
					То	tal Quantity	2.000 No			
				Т	otal Deduct	ed Quantity	0.000 No			
		Total Deducted Quantity 0.000 No								
	Net Total Quantity 2.000 No  Say 2.000 No @ Rs 6770.65 / No Rs 13541.30									
				Say 2.000	No @ Rs 6	770.65 / No	Rs 13	541.30		

		2					2.000	9.4
							2.000	3 + 1
					То	tal Quantity	2.000 Nos	
				Т	Total Deduct	ed Quantity	0.000 Nos	
					Net To	tal Quantity	2.000 Nos	
				Say 2.000 N	os @ Rs 15	67.42 / Nos	Rs 31	34.84
12	100.98.461 Supply of CI Double FI Size 200mm.	anged Sluic	e Valve Co	nforming to I	S 14846 - 2	000, Sluice	Valve with C	ap PN
		2	100	65.			2.000	
			JAN	192	То	tal Quantity	2.000 No	
		-	$\leq 2$	W. S. H	Total Deduct	ed Quantity	0.000 No	
		613	X 2	25. X	Net To	tal Quantity	2.000 No	
		1 1	1	Say 2.000 N	No @ Rs 11	794.00 / No	Rs 235	88.00
	Supply and delivery of coated for the commo		lon-Return	Ball valve m	ade up of E	)I and ball o	of Aluminum	with M
		Kera	ala Wat	ter Auth	lority	tal Quantity		
		D		T	Total Deduct			
					,	tal Quantity		
				Say 2.000 N	No @ Rs 258	-		'50.00
14	od328796/2021_2022 Supply, delivery and er per drawings enclosed			•	•	ole for the p	ump set offe	red and
		1					1.000	
					То	tal Quantity	1.000 No	
				Т	Total Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	1.000 No	
				Say 1.000 N	No @ Rs 120	075.00 / No	Rs 120	75.00
15	od328797/2021_2022 Supply, delivery and er per drawings enclosed			•	•	ole for the p	ump set offe	red and
		1					1.000	

				Т	otal Deduct	ed Quantity	0.000 kg	
					Net To	tal Quantity	1.000 kg	
				Say 1.00	00 kg @ Rs	174.22 / kg	Rs 17	74.22
16	od328798/2021_2022 Supply and fixing of s screen chamber chan suitable for manual cle fixing charges for 1.00	stainless ste nel (fixed ty eaning includ	pe)at 45 d ling cost of	degree inclina	ation for a c	lear passag	e of 40 mm	solids ar
	for each ps	1					1.000	
					To	tal Quantity	1.000 No	
			-0	GS. T	otal Deduct	ed Quantity	0.000 No	
			JA		Net To	tal Quantity	1.000 No	
			691	Say 1.000 No	@ Rs 103	500.00 / No	Rs 103	500.00
17	od328799/2021_2022 Supply , delivery , ere hoist with mono rail traite condition for a traunloading of Pumps a	ecting and n aveling on s vel of 9 (wel	ingle girder I dia+3m) n	with over he neters or suit	ead traveling	g trolley for	a clear lift a	ccording
	one for each pump	1	1 337	11年			4.000	
		IXCI.	<del>ala Wa</del>	ter Auth	ority		1.000	
	-	Ker	ala wa	ter Auth	ority	tal Quantity		
	-	D	R ala wa	ter Auth	7	tal Quantity	1.000 No	
	eq.	P	R	ter Auth	otal Deduct		1.000 No 0.000 No	
		P	R .	Say 1.000 No	otal Deduct	ed Quantity	1.000 No 0.000 No 1.000 No	500.00

Estimate for Mechanical and Allied Electrical works - ELECTRICAL PANELS AND CABLES Supply, Delivery of M.V control panel of wall mounting type made up of 14 SWG M.S Sheet of size to suit the L.T metering arrangements by KSEB. The board is to be supplied with 3 Nos of fuse carriers, MCCB with neutral and earthing arrangements as per I.E rules. Supply and delivery of floor mounting type MV control panel of vermin proof, dust proof, modular type consisting of the following accessories and controls. The control panel shall be of enclosed type and built with compartmentalized modular type cubical. All cubical shall be constructed from 14 SWG, M.S sheet at the bottom and rear and 12 SWG M.S Sheet at front. The interior and exterior of the panels and compartment shall be treated with one coat of primer and two coats of stove enameled light gray shade suitable for electric applications. The panel should be supplied with 4 nos of copper bus bars of ample carrying capacity properly sleeved with respective colour codes.Set1 Incoming 1. 150 A MCCB / 35KA with over load, short circuit protection 2. (0-500 v) Voltmeter (w) selector switch -1set3. Ammeter 0-300A with phase selector switch – 1 set4. 3 phase / 4 wire KWH meter – 1 no5. Earth fault relay – 1 set6. Slide locking type fuses – 1set Supply and installation of suitable starters in the above pump houseses(7). 63 A TPN MCCB for lighting control and spare – 2noN.B (a) Necessary CTs should be provided for safe guarding the instruments wherever necessary(b)

The supply should be terminated through A.M.F panel of Genset offered for Auto start operation during EB power failure with in 15 secsTwin earthing the plant and equipment as per IE roles including cost of GI flats (continuous earthing) etc complete.set1Cabling Supply, delivery and laying of following size L.T cable (1.1KV Grade)including jointing material, cable carrier system like trenches, cable trays pipe sleeves etc as per IE rules excluding cost of flat submersible cable connecting main panel board and submersible pump sets thro starter control board and isolator 3 ½ core 35 sq mm armourd aluminum conductor cable of suitable length as per site condition connecting EB pole and EB meter and control panel boardm30 SupplyLighting LoadSupply and completion of required house wiring for accommodating the following including DB panels, cost of wire, cost of PVC conduits, earthing etc.1. SV lamp to be fixed on the top of control room -1no (250w)2. Industrial type tube lights inside the control room.-8 nos (40w)3. 4 Nos CFL (not exceeding 25 W) at suitable locations with fittings.4. 15 A plug and socket with control switch - 2 nos5. 5 A plug and socket with control switch - 2 nos6. Portable lamp with 25W CFL bulb and 15 M cable-1 no7. Pedestal fan -1 no<br/>
br>The above electrical items as per IE rules includes cost of materials such as bulbs and fittings etc.<br/>
Supply and delivery of silent diesel generator set of 82.5 Kva with AMF panel with suitable engine capacity conforming to relevent IS specifications, water cooled, six cylinders comprising of suitable alternator 3 phase, 0.8PF, 4 pole with panel board, digital type voltmeter, anneter, Hertz meter, kwh meter, MCCB with acoustic enclosure as per CPCP norms including cost of battery charger, cost of battery etc. complete, including cost of cabling, earthing, etc. suitable for outdoor application as per IE rules including cost of platform etc. complete.set1<br/>br>Air valves<br/>br>Supply and delivery of following safety items, including cost of same. L SI. Fire extinguisher of required capacity (powder type 2 no's) II. Fire buckets with stand 5no's III. Rubber mat to be laid in front of all the panel boards including starter panelsSupply and delivery of tools required for maintenance works including double end spanners, ring spanners, screw drivers, etc and Supply and erection of 1 number 50KVA **Diesel Generator** 

		Kera 1	ara wat	er Auth	ority		1.000	
					То	tal Quantity	1.000 L.S	
					otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
			Say	y 1.000 L.S	@ Rs 20000	000.00 / L.S	Rs 2000	000.00
SI No	Description	No	L	В	D	CF	Quantity	Remark

## 11Pumping mains (Cost Index:36.44 %)

1 100.1.1

Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m:

All kinds of soil

(Ref. Item No. 2.10.1 of DSR)

(1101: 110111 110: 2:10:1 01	1 2011)						
PH1 to STP- 200DI	1	3850.000	0.800	1.150	0.8	2833.600	
				То	tal Quantity	2833.600 d	cum
			Т	otal Deduct	ed Quantity	0.000 cum	

					Net To	tal Quantity	2833.600 c	um
			Say	2833.600 c	um @ Rs 5	58.99 / cum	Rs 158	3954.06
2	100.1.5 Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m:" Ordinary Rock. (Ref. Item No. 2.13.1 o	aming of bo as require nming, wat	ottoms, depth d, in layers no	up to 1.5 m ot exceedin	n, including g g 20 cm in	getting out t depth, inclu	the excavat ding consol	ed soil, and idatingeach
	PH1 to STP- 200DI	1	3850.000	0.800	1.150	0.18	637.560	
			-0	600	То	tal Quantity	637.560 cı	ım
			JAN	(A) T	otal Deduct	ed Quantity	0.000 cum	
			611		Net To	tal Quantity	637.560 cu	m
		6	Sa	y 637.560 c	um @ Rs 8	11.82 / cum	Rs 517	<b>7583.96</b>
	100.1.9 Excavating trenches dressing of sides, ram then returning the soil	ming of bo	ottoms, depth	up to 1.5 m	n, including	getting out	the excavat	ed soil, and
	Excavating trenches dressing of sides, ram	as require nming, wat Blasting).	ottoms, depth d, in layers no ering, etc. and	up to 1.5 m ot exceedin d disposing	n, including g 20 cm in of surplus control	getting out t depth, inclu	the excavat ding consol oil as direct 70.840	ed soil, and idatingeach ed, within a
	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 o	as require naming, wat Blasting).	ottoms, depth d, in layers no ering, etc. and rala Wate	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus control	getting out to depth, inclusexcavated some of the control of the c	the excavat ding consol oil as direct 70.840	ed soil, and idatingeach ed, within a
	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 o	as require naming, wat Blasting).	ottoms, depth d, in layers no ering, etc. and rala Wate	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus of 1.150 To	getting out to depth, inclusexcavated some of the control of the c	the excavat ding consol oil as direct 70.840 70.840 cur 0.000 cum	ed soil, and idatingeach ed, within a
	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 o	as require naming, wat Blasting).	ottoms, depth d, in layers no ering, etc. and rala Wate	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus control  1.150  To  Total Deduct	getting out to depth, inclusive excavated solution 0.02 tal Quantity et al Quantity tal Quantity	70.840 cun 70.840 cun	ed soil, and idatingeach ed, within a
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 o	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and a Water 3850.000  Saganually / by m	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus of surplu	getting out to depth, inclusive accavated so the control of the co	70.840 70.840 cum 70.840 cum Rs 81	ed soil, and idatingeach ed, within a m
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 or PH1 to STP- 200DI	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and a Water 3850.000  Saganually / by m	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus of surplu	getting out to depth, inclusive accavated so the control of the co	70.840 70.840 cum 70.840 cum Rs 81	ed soil, and idatingeach ed, within a m
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 or PH1 to STP- 200DI	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and rala Water 3850.000  Saganually / by mingineer - in-C	up to 1.5 m ot exceeding d disposing er Auth 0.800	n, including g 20 cm in of surplus e ority  1.150  To orith Deduct  Net To original Rs 114  means including g 20 cm in of surplus e ority  0.150	getting out to depth, inclusive accavated so the control of the co	70.840 70.840 cum 70.840 cum 70.840 cum Rs 81 al of matericher mix (i/o	ed soil, and idatingeached, within a m 445.46 al within 50 c equivalent
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 or PH1 to STP- 200DI	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and rala Water 3850.000  Saganually / by mingineer - in-C	up to 1.5 m of exceeding d disposing er Auth 0.800  T y 70.840 cu nechanical inharge.Nom	n, including g 20 cm in of surplus e ority  1.150  To orith Deduct  Net To original Rs 114  means including g 20 cm in of surplus e ority  0.150	getting out to depth, inclusive excavated so the control of the co	70.840 70.840 cum 70.840 cum 70.840 cum 70.840 cum 30.000 cum 30.000 cum	ed soil, and idatingeached, within a m 445.46 al within 50 c equivalent
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 or PH1 to STP- 200DI	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and rala Water 3850.000  Saganually / by mingineer - in-C	up to 1.5 m of exceeding d disposing er Auth 0.800  T y 70.840 cu nechanical inharge.Nom	n, including g 20 cm in of surplus of surplu	getting out to depth, inclusive excavated so the control of the co	70.840 70.840 cun 70.840 cun 70.840 cun 70.840 cun Rs 81  al of matericher mix (i/o	ed soil, and idatingeach ed, within a m 445.46 al within 50 c equivalent
4	Excavating trenches dressing of sides, ram then returning the soil deposited layer by ram lead of 50 m Hard Rock(Requiring E (Ref. Item No. 2.13.2 or PH1 to STP- 200DI	as require naming, wat Blasting).  If DSR)  1	sttoms, depth d, in layers no ering, etc. and rala Water 3850.000  Saganually / by mangineer - in-C	up to 1.5 m of exceeding d disposing er Auth 0.800  T y 70.840 cu hechanical inharge.Nom 1.000	n, including g 20 cm in of surplus of surplu	getting out of depth, inclusive excavated so the control of the co	70.840 70.840 cum 70.840 cum 70.840 cum 70.840 cum 30.000 cum 30.000 cum 30.000 cum	ed soil, and idatingeach ed, within a m 445.46 al within 50 c equivalent

	Supply of DI K9 Pipe C			liiii Dia.			
		1	3850.000			3850.000	
				То	tal Quantity	3850.000 r	netre
				Total Deduct	ed Quantity	0.000 metre	<u> </u>
				Net To	tal Quantity	3850.000 m	netre
			Say 3850.000 n	netre @ Rs 2100	0.55 / metre	Rs 8087	7117.50
6	100.14.3 Conveying and laying excluding cost of pip 200 mm dia Ductile Iro Data derived from 18.7	es and spe n Class K-9	ecials : Pipes	un) / Ductile In	on Pipes co	onforming t	o IS: 83
		1	3850.000			3850.000	
			27 M	То	tal Quantity	3850.000 r	netre
				Total Deduct	ed Quantity	0.000 metre	<b>Э</b>
		1 1		Net To	tal Quantity	3850.000 m	netre
			Say 3850.000	metre @ Rs 122	2.86 / metre	Rs 473	011.00
	casuarina pole (girth	15cm to 24	lcm) fixed at 2 m ir	et a	om pladao e	adulon tapo	in veru
	_	15cm to 24	lcm) fixed at 2 m ir	itervals.	SIII Plastio C	2000.000	in veru
	casuarina pole (girth	15cm to 24	Icm) fixed at 2 m in DB - Item No.1009)	ntervals. uthority	otal Quantity	2000.000	
	casuarina pole (girth	15cm to 24	Icm) fixed at 2 m in DB - Item No.1009)	ntervals. uthority	otal Quantity	2000.000 2000.000 r	metre
	casuarina pole (girth	15cm to 24	Icm) fixed at 2 m in DB - Item No.1009)	tervals. uthority To Total Deduct	otal Quantity and Quantity	2000.000 2000.000 r	metre e
	casuarina pole (girth	15cm to 24	Acm) fixed at 2 m in DB (Item No.1009)	tervals. uthority To Total Deduct	otal Quantity red Quantity otal Quantity	2000.000 r 2000.000 r 0.000 metre 2000.000 m	metre e
8	casuarina pole (girth	on PWD SI	Say 2000.000 Say 2000.000	Total Deduct  Net To  metre @ Rs 28	otal Quantity red Quantity otal Quantity 8.12 / metre	2000.000 r 2000.000 r 0.000 metre 2000.000 m	metre e netre 240.00
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI	Say 2000.000 Say 2000.000	Total Deduct  Net To  metre @ Rs 28	otal Quantity red Quantity otal Quantity 8.12 / metre	2000.000 r 2000.000 r 0.000 metre 2000.000 m	metre e netre 240.00
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI	Say 2000.000 Say 2000.000	Total Deduct Net To O metre @ Rs 28 Iron Pipes or Dedia pipes	otal Quantity red Quantity otal Quantity 8.12 / metre	2000.000 r 2000.000 r 0.000 metre 2000.000 m Rs 562	metre enetre 240.00
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI	Say 2000.000 Say 2000.000	Total Deduct Net To O metre @ Rs 28 Iron Pipes or Dedia pipes	etal Quantity red Quantity stal Quantity 8.12 / metre rectile Iron Pi	2000.000 r 2000.000 r 0.000 metre 2000.000 m Rs 562 ipes includin 650.000	metre enetre 240.00
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI	Say 2000.000 Say 2000.000	Total Deduct Net To O metre @ Rs 28 Iron Pipes or Dedia pipes Total Deduct	ed Quantity atal Quantity atal Quantity B.12 / metre actile Iron Pi	2000.000 r 2000.000 r 0.000 metre 2000.000 m Rs 562 ipes includin 650.000	metre e netre 240.00 ng testing
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI	Say 2000.000  Say 2000.000  rifugally (Spun) Cast ber gasket:200 mm	Total Deduct Net To O metre @ Rs 28 Iron Pipes or Dedia pipes Total Deduct	ed Quantity atal Quantity atal Quantity B.12 / metre actile Iron Pi atal Quantity atal Quantity atal Quantity atal Quantity	2000.000 r 2000.000 r 0.000 metre 2000.000 m Rs 562 ipes includin 650.000 650.000 joint 650.000 joint	metre e netre 240.00 ng testing
8	casuarina pole (girth (Data Prepared based  18.70.3 Providing push - on-joi	on PWD SI on PWD SI 1 ints to Centre e cost of rub 650	Say 2000.000 Say 2000.000 Say 2000.000 Say 2000.000 Say 2000.000	Total Deduct Net To O metre @ Rs 28 Iron Pipes or Dodia pipes Total Deduct Net To O metre @ Rs 28	ed Quantity atal Quantity atal Quantity B.12 / metre actile Iron Pi atal Quantity atal Quantity atal Quantity atal Quantity	2000.000 r 2000.000 r 0.000 metre 2000.000 m Rs 562 ipes includin 650.000 650.000 joint 650.000 joint	metre e netre 240.00 ng testing int

					То	tal Quantity	40.000 Ea	ch Cut
				Т	otal Deduct	ed Quantity	0.000 Each	Cut
					Net To	tal Quantity	40.000 Eac	ch Cut
			Say 40.000	Each Cut ©	® Rs 433.40	/ Each Cut	Rs 17	336.00
10	18.68.1 Providing and laying D. mm dia	I specials	of class K -	12 suitable f	or push - or	n jointing as	per IS : 952	23 :Upt 60
		1	25.000				25.000	
					То	tal Quantity	25.000 qui	ntal
				Т	otal Deduct	ed Quantity	0.000 quint	al
			100	Be	Net To	tal Quantity	25.000 quir	ntal
			Say 25.0	000 quintal @	® Rs 20247.	.70 / quintal	Rs 506	3192.50
	Testing 200mm DI/CI pi 200 mm dia Observed Data derived		11/1/11		uired test pi	essure		I
		1	3850.000				3850.000	
			PRESE	111 01 2	То	tal Quantity	3850.000 ı	metre
		<b>T</b> 7	1 337	T.	otal Deduct	ed Quantity	0.000 metro	е
		<del>K er</del>	<del>'ala Wat</del>	er Auth	OTITY			
		Ker	ala Wat	er Auth	ority	<u>-</u>	3850.000 n	netre
		Ker	Say 3	3850.000 me	Net To	tal Quantity	3850.000 n	netre 1539.00
12	5.1.3 Providing and laying in centering, shuttering, fir sand: 4 graded stone a	nishing an	specified grad reinforcem	3850.000 me ade of reinfo	Net To	tal Quantity 0.14 / metre nt concrete	3850.000 n Rs 154	1539.00 the cost o
12	Providing and laying in centering, shuttering, fin	nishing an	specified grad reinforcem	3850.000 me ade of reinfo	Net To	tal Quantity 0.14 / metre nt concrete	3850.000 n Rs 154	1539.00 the cost o
12	Providing and laying in centering, shuttering, fin sand : 4 graded stone a pipe supports/ anchor	nishing and	specified grad reinforcem	ade of reinfo ent - All wor	Net To Netre @ Rs 40 prced ceme or k up to plint	tal Quantity 0.14 / metre nt concrete	3850.000 n Rs 154 , excluding 4 ( 1 cemen	the cost of t : 2 coars
12	Providing and laying in centering, shuttering, fin sand : 4 graded stone a pipe supports/ anchor	nishing and	specified grad reinforcem	ade of reinfo ent - All wor nal size)	Net To Netre @ Rs 40 prced ceme or k up to plint	tal Quantity  .14 / metre  nt concrete th level:1:2:	3850.000 n Rs 154 , excluding 4 ( 1 cemen	the cost of t : 2 coars
12	Providing and laying in centering, shuttering, fin sand : 4 graded stone a pipe supports/ anchor	nishing and	specified grad reinforcem	ade of reinfo ent - All wor nal size)	Net To Net To Netre @ Rs 40 Proced ceme Netre with the proced ceme Netro with the procedure wit	tal Quantity  2.14 / metre  nt concrete th level:1:2:  tal Quantity ed Quantity	3850.000 n Rs 154 , excluding 4 ( 1 cemen	the cost of the co
12	Providing and laying in centering, shuttering, fin sand : 4 graded stone a pipe supports/ anchor	nishing and	specified grad reinforcem 20 mm nomi 1.000	ade of reinfo ent - All wor nal size)	Net To	tal Quantity  2.14 / metre  nt concrete th level:1:2:  tal Quantity ed Quantity tal Quantity	3850.000 n Rs 154 , excluding 4 ( 1 cemen 10.000 cur 0.000 cur 10.000 cur	the cost of the co
12	Providing and laying in centering, shuttering, fin sand : 4 graded stone a pipe supports/ anchor	nishing and aggregate 10	specified grad reinforcem 20 mm nominate 1.000	ade of reinformal size)  1.000  Tay 10.000 cu	Net To Net To Net To Proced ceme Net up to plint  1.000  To Total Deduct Net To m @ Rs 864	tal Quantity 0.14 / metre nt concrete th level:1:2: tal Quantity ed Quantity tal Quantity tal Quantity 42.31 / cum	3850.000 n Rs 154 , excluding 4 ( 1 cemen 10.000 cur 0.000 cum 10.000 cum Rs 86	the cost of the co
	Providing and laying in centering, shuttering, fin sand: 4 graded stone a pipe supports/ anchor blocks  5.9.1 Centering and shuttering	nishing and aggregate 10	specified grad reinforcem 20 mm nominate 1.000	ade of reinformal size)  1.000  Tay 10.000 cu	Net To Net To Netre @ Rs 40  Priced ceme Rk up to plint  1.000  To Total Deduct Net To m @ Rs 864	tal Quantity 0.14 / metre nt concrete th level:1:2: tal Quantity ed Quantity tal Quantity tal Quantity 42.31 / cum	3850.000 n Rs 154 , excluding 4 ( 1 cemen 10.000 cur 0.000 cum 10.000 cum Rs 86	the cost of the co

		Total Deducted Quan								
					Net To	tal Quantity	40.000 sqm	1		
			S	Say 40.000 s	qm @ Rs 3	37.42 / sqm	Rs 134	496.80		
14	5.22.6 Steel reinforcement fo binding all complete u		•		J. J		• .			
		1	10.000			80.0	800.000			
					То	tal Quantity	800.000 ki	logram		
	Total Deducted Quantity  Net Total Quantity							ram		
								ogram		
	Say 800.000 kilogram @ Rs 98.92 / kilogram						Rs 79	136.00		
SI No	Description	No	1/1	В	D	CF	Quantity	Remark		
	12Laying PE pipe	es via HDD	Method ab	ove 3m der	oth (Cos	t Index:36.	44 %)			
	types of soil above /be setting up setting up of pipe (6 m line pipe necessary. De watering alignment and monitoring fluid /bentonite slurry. specification approve using br>Ground penof of corridor with detected 	and equipmonth with states of the conducted w	ent, installing out joint all stringing, reved guidance ck filling og statement dar survey ition of located using ed using ed using ed triang ed using ed using 	g new pipe verified cive aming, ce system. verified pit and he or as direction corridor eations and >500MHZ a	work, testing ril /mechan pulling bar vastage of less by appeted by er br>with to less by appeted b	g and commical works lock the new or pipes, proved borrougineer in detect buries to the to MHZ antenr	issioning ind like entry /6 pipe on the oper dispos ow br>mate charge. ed utilities of 	cluding cost exits pit as e designed al of drilling erial as per r> on the map us utilities		
	250MM HDPE	1	576.000				576.000			
	315MM HDPE	1	30.000				30.000			
					То	tal Quantity	606.000 m	etre		
				Т	otal Deduct	ed Quantity	0.000 metre	Э		
					Net To	tal Quantity	606.000 me	etre		
			Say 60	6.000 metre	@ Rs 6445	5.97 / metre	Rs 390	6257.82		
2	od328760/2021_2022 Installation of PE pipe sewer including prepairmaking of making of system or making the including all related civic reaming and pulling back	ring and se and exit p system <br il and mech</br 	etting up the it up to requi or making nanical work	e plant and uired depth the system s like ex	equipment, installing n ready for occavation sh	preparing new pipe wo commission poring/strutti	ew pipe wo ork and com ing by HDI ng etc drillin	ork material amissioning of operating and stringing		

	drilling fluid and back fil Ground penetrating map br>of br>corridd detected br>.work to be 	radar su or with info oe cond	urvey in commation of	orridor <br locations a</br 	>with to o	detect bui	ried utilitie top of vario	es on the
	200MM HDPE	1	11611.000				11611.000	
					То	tal Quantity	11611.000	metre
				Т	otal Deduct	ed Quantity	0.000 metre	Э
	Net Total Quantity 11611.000 metre  Say 11611.000 metre @ Rs 5100.12 / metre							
SI No	Description	No	Say 1161	1.000 metre	e @ Rs 5100	0.12 / metre	Rs 5921  Quantity	7493.32 Remark
31110	·		of Man hol	65	t Index:36.4		Quantity	Remark
1	od328755/2021_2022 Constructing manhole provided with tight fitting into the cover slab, promanner, bottom slab, sielow floor slab, inside coat, two coats of ant channelling inside the rearthwork excavation for provision of pipe contibarricades etc.and dispersion of the contibarric	g approved viding provide wall and to be plasticorrossive manhole will for all leads posing the	make heaves is in of encade cover slab tered with Common the CC M30 and lifts, be inlet, outlet surplus ear	y duty CI manapsulated Proposition RCC Modern Moder	anhole cove VC/CI foot r 130 with a p on thick on he outside s ings and sp e-watering, e connection	r with frame ests @ 30 corovision of le coat with surfaces, precifications side protection pipes, p	600 mm diacm apart in a PCC 1:3:6, a neat ceme roviding berottion with steroviding darroviding darrowiding darrowi	a, embeded a staggered 10 cm thick ent flushing nching and hall include eel shoring, nger lights,
					То	tal Quantity	754.000 N	0
				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	754.000 No	)
			Sa	ay 754.000 N	No @ Rs 58	049.94 / No	Rs 4376	9654.76
2	od328758/2021_2022 Constructing manhole provided with tight fitting the cover slab, providing manner, bottom slab, so below floor slab, inside coat, two coats of ant channelling inside the results.	g approved ng provisio ide wall and to be plas icorrossive	make heaven of encaps d cover slab tered with Commons	y CI manhol sulated PVC with RCC M SM. 1:3, 12m s paint to th	le cover with C/CI foot resoluted 130 with a point thick one the outside s	n frame 600 sts @ 30 crovision of le coat with surfaces, per	mm dia, em m apart in a PCC 1:3:6, a neat ceme roviding ber	nbeded into staggered 10 cm thick ent flushing nching and

	earthwork excavation provision of pipe con- barricades etc.and dis depth 2.5m (internal	nection for posing the	inlet, outlet surplus ear	and servic	e connection	on pipes, p	roviding da	nger lights,
		420					420.000	
			1		To	tal Quantity	420.000 N	0
				Т		ed Quantity		
		Net Total Quantity 420.000 No						
	Say 420.000 No @ Rs 76668.65 / No Rs 32200833.0							0833.00
	Constructing manhole provided with tight fitting the cover slab, provided manner, bottom slab, so below floor slab, inside coat, two coats of an channelling inside the earthwork excavation provision of pipe combarricades etc.and disadepth 3.5m (internal)	ng approved ing provision side wall and the to be plass ticorrossive manhole wifor all leads nection for aposing the diameter - 1	make heaven of encaps d cover slab tered with C bituminous th CC M30 a and lifts, b inlet, outlet surplus ear	y CI manho sulated PVC with RCC M M. 1:3, 12n s paint to th as per draw ackfilling, d and servic th away with	le cover with a part of the cover watering, a connection all leads a part of the cover water of the cover of the	n frame 600 ets @ 30 crovision of le coat with surfaces, precifications side protection pipes, pro	mm dia, en mapart in a PCC 1:3:6, a neat cemeroviding beat in the rate settion with steroviding darmonial.	nbeded into staggered 10 cm thick ent flushing nching and hall include eel shoring
		30201	qia vvat	CI Auu	- 4	tal Quantity		^
		PI	R	Т	<u> </u>	ed Quantity		<u> </u>
						tal Quantity		)
			Sav	, 302.000 No		988.35 / No		4481.70
4	od328770/2021_2022 Constructing manhole provided with tight fittir		ent depths a					
	the cover slab, provid manner, bottom slab, s below floor slab, inside coat, two coats of an channelling inside the earthwork excavation provision of pipe conbarricades etc.and disidepth upto 4.5m ( interesting in the control of th	ing provisions ing provisions wall and to be plass ticorrossive manhole with for all leads nection for aposing the	on of encaps d cover slab tered with C bituminous th CC M30 a and lifts, b inlet, outlet surplus ear	sulated PVC with RCC N M. 1:3, 12n s paint to th as per draw ackfilling, d and servic th away with	C/CI foot read 130 with a prime thick on the outside sings and spectrum, e connection	sts @ 30 cr provision of le e coat with surfaces, precifications side protect on pipes, precipitations	m apart in a PCC 1:3:6, a neat cemeroviding bear. The rate sertion with steroviding darmoviding darmov	staggere 10 cm thice ent flushin nching an hall includ eel shorin nger light
	manner, bottom slab, s below floor slab, inside coat, two coats of an channelling inside the earthwork excavation provision of pipe con	ing provisions ing provisions wall and to be plass ticorrossive manhole with for all leads nection for aposing the	on of encaps d cover slab tered with C bituminous th CC M30 a and lifts, b inlet, outlet surplus ear	sulated PVC with RCC N M. 1:3, 12n s paint to th as per draw ackfilling, d and servic th away with	C/CI foot read 130 with a prime thick on the outside sings and spectrum, e connection	sts @ 30 cr provision of le e coat with surfaces, precifications side protect on pipes, precipitations	m apart in a PCC 1:3:6, a neat cemeroviding bear. The rate sertion with steroviding darmoviding darmov	staggere 10 cm thice ent flushin nching an hall includ eel shoring

				Т	otal Deduct	ed Quantity	0.000 No	
					Net To	tal Quantity	159.000 No	)
			Say	159.000 No	@ Rs 196	474.41 / No	Rs 3123	9431.19
5	od328774/2021_2022 Constructing manhole provided with tight fittin the cover slab, providi manner, bottom slab, s below floor slab, inside coat, two coats of ant channelling inside the earthwork excavation f provision of pipe conr barricades etc.and dis depth upto 5.50m (inter-	g approved ng provisio side wall and to be plast icorrossive manhole with for all leads nection for iposing the	make heaven of encaps dicover slab tered with Continuous th CC M30 and lifts, beinlet, outlet surplus eart	y CI manholesulated PVC with RCC MM. 1:3, 12mm is paint to the as per draw ackfilling, depend and service th away with	le cover with C/CI foot resolution in thick one outside sings and spee-watering, e connection	h frame 600 sts @ 30 crovision of le coat with surfaces, procedifications side protection pipes, pro	mm dia, en m apart in a PCC 1:3:6, a neat cemeroviding beat in the rate settion with steroviding da	nbeded into a staggered 10 cm thick ent flushing nching and hall include eel shoring, nger lights,
		136	N		H	Ł	136.000	asramom- 4, h&C2- 18, H&C1- 3
		400			То	tal Quantity	136.000 N	0
			A STATE OF	HIS PART	otal Deduct	ed Quantity	0.000 No	
		Kera	ala Wat	er Auth	OriNet To	tal Quantity	136.000 No	)
		D - 1	Say	136.000 No	@ Rs 236	432.82 / No	Rs 3215	4863.52
6	od328775/2021_2022 Constructing manhole provided with tight fittin the cover slab, providi manner, bottom slab, s below floor slab, inside coat, two coats of ant channelling inside the earthwork excavation f provision of pipe conr barricades etc.and dis depth upto 6.50m (interesting to the construction of	g approved ng provisio side wall and to be plast icorrossive manhole with for all leads nection for iposing the	make heaven of encaps discover slab tered with Continuous th CC M30 and lifts, beinlet, outlet surplus eart	y CI manhol sulated PVC with RCC M M. 1:3, 12m s paint to the as per draw ackfilling, de and service th away with	le cover with C/CI foot resoluted from thick one outside sings and spee-watering, e connection.	h frame 600 sts @ 30 crovision of le coat with surfaces, procedifications side protection pipes, pro	mm dia, en mapart in a PCC 1:3:6, a neat cemeroviding beat in The rate settion with steroviding da	nbeded into a staggered 10 cm thick ent flushing nching and hall include eel shoring, nger lights,
		20					20.000	
					То	tal Quantity	20.000 No	
				Т	otal Deduct	ed Quantity	0.000 No	
	Net Total Quantity 20.000 No							
			Sa	y 20.000 No	@ Rs 248	508.47 / No	Rs 497	0169.40

SI No	Description	No	L	В	D	CF	Quantity	Remark	
	14Road	l Restorati	on - to PWD	/NH (Co	ost Index:3	6.44 %)			
1	od328752/2021_2022 PWD Berm Cutting								
	For Inspection Chamber	3050	1.000	1.000			3050.000		
					То	tal Quantity	3050.000 s	qm	
	Total Deducted Quantity							0.000 sqm	
					Net To	tal Quantity	3050.000 s	qm	
			Say	3050.000 s	qm @ Rs 3	21.29 / sqm	Rs 979	934.50	
2	od328754/2021_2022 PWD Road reformation	Charges- E	3T Cutting	A					
		1	13063.000	1.000	-	1.5	19594.500		
		1	30	SX	То	tal Quantity	19594.500	sqm	
		1 1		73/A	otal Deduct	ed Quantity	0.000 sqm		
		1/55			Net To	tal Quantity	19594.500	sqm	
		4300	Say 19	9594.500 sq	m @ Rs 27	59.43 / sqm	Rs 5406	9651.14	
3	od328757/2021_2022 Road restoration charge	es for BM &	<del>ala Wat</del>	er Auth	ority		47050 000		
		$D^{T}$	11900.000	1.000	1.500	441 Overatite	17850.000		
						tal Quantity		sqm	
						ed Quantity	17850.000	oam	
			Sov 17	70E0 000 oc				<u> </u>	
SI No	Description	No	Say 17	В	D B	33.49 / sqm <sub>CF</sub>	Rs 6485	Remark	
	•		and Allied	work (C	ost Index:3	6.44 %)			
1	100.3.1.1 Earthwork open well conveying and depositing NEW DATA (Prepared	excavation	(above wate	er) for well	s of dia. up Om and lift u	oto 2.50 m i			
	LS1	3.14	1.100	1.100	1.500		5.700		
	LS5	3.14	1.200	1.200	1.500		6.783		
	LS6	3.14	1.100	1.100	1.500		5.700		
	LS7	3.14	1.200	1.200	1.500		6.783		
			1			1			

	LS13	3.14	1.200	1.200	1.500		6.783		
					To	tal Quantity	38.532 cur	n	
				T	otal Deduct	ed Quantity	0.000 cum		
					Net To	tal Quantity	38.532 cum	1	
			S	Say 38.532 c	um @ Rs 5	35.87 / cum	Rs 20	648.14	
2	conveying and banking.	n well excavation depositing the spo	oil within init	ial lead of s	50m and lift				
	LS1	3.14	1.100	1.100	1.500		5.700		
	LS5	3.14	1.200	1.200	1.500		6.783		
	LS6	3.14	1.100	1.100	1.500		5.700		
	LS7	3.14	1.200	1.200	1.500		6.783		
	LS8	3.14	1.200	1.200	1.500		6.783		
	LS13	3.14	1.200	1.200	1.500	L	6.783		
		486			To	tal Quantity	38.532 cur	n	
				HE PLA	otal Deduct	ed Quantity	0.000 cum		
		Ker	ala Wat	er Auth	OT Net To	tal Quantity	38.532 cum	1	
			3	ay 38.532 c	um @ Rs 5	89.49 / cum	Rs 22	714.23	
3	conveying and banking.	n well excavation depositing the spo	oil within init	ial lead of	50m and lift				
	LS1	3.14	1.100	1.100	1.500		5.700		
	LS5	3.14	1.200	1.200	1.500		6.783		
	LS6	3.14	1.100	1.100	1.500		5.700		
	LS7	3.14	1.200	1.200	1.500		6.783		
	LS8	3.14	1.200	1.200	1.500		6.783		
	LS13	3.14	1.200	1.200	1.500		6.783		
					То	tal Quantity	38.532 cur	n	
				7	otal Deduct	ed Quantity	0.000 cum		
	Net Total Quantity 38.532 cum								
			S	Say 38.532 c	um @ Rs 6	43.04 / cum	Rs 24	777.62	

4	100.3.1.4 Earth work open we conveying and depose banking. NEW DATA( Prepared	siting the spo	oil within inti	al lead of 5	0m and lift			
	LS1	3.14	1.100	1.100	1.500		5.700	
	LS5	3.14	1.200	1.200	1.500		6.783	
	LS6	3.14	1.100	1.100	1.500		5.700	
	LS7	3.14	1.200	1.200	1.230		5.562	
	LS8	3.14	1.200	1.200	1.500		6.783	
	LS13	3.14	1.200	1.200	1.290		5.833	
			160	1651	To	tal Quantity	36.361 cur	m
			1.01	11 5	Fotal Deduct			
		1	3/2 9	E 30	Net To	tal Quantity	36.361 cum	า
		1 1 1	S	ay 36.361 d	cum @ Rs 6	Į.		331.25
5	100.3.1.5 Earthwork open well conveying and depos				C/8.28			
5	Earthwork open well conveying and depos banking.	siting the spo	oil within init	ial lead of	50m and lift			
5	Earthwork open well conveying and depos	siting the spo	oil within init	ial lead of	50m and lift			
5	Earthwork open well conveying and depos banking.  NEW DATA (Prepared	d based on P	vil within init	ial lead of s	50m and lift		to 7.5m inc	
5	Earthwork open well conveying and depos banking.  NEW DATA (Prepared LS1	d based on P  3.14  3.14	HED SDB -	ltem No.107	50m and lift 73 & 1076 0.090		0.342	
5	Earthwork open well conveying and depos banking.  NEW DATA (Prepared LS1	d based on P	HED SDB - 1.100 1.200 1.100	ial lead of \$  Item No.107  1.100  1.200	50m and lift 73 & 1076 0.090 0.490		0.342 2.216	
5	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6	d based on Pl 3.14 3.14 3.14	HED SDB - 1.100 1.200	1.100 1.100	0.090 0.490 0.310		0.342 2.216 0.798 1.402	luding neat
5	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6	d based on Pl 3.14 3.14 3.14	HED SDB - 1.100 1.200 1.100	1.100 1.200 1.200	0.090 0.490 0.310	from 6.0m	0.342 2.216 0.798 1.402 4.758 cum	luding neat
5	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6	d based on Pl 3.14 3.14 3.14	HED SDB - 1.100 1.200 1.100	1.100 1.200 1.200	73 & 1076 0.090 0.490 0.210 0.310 Total Deduct	from 6.0m	0.342 2.216 0.798 1.402 4.758 cum	luding neat
5	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6	d based on Pl 3.14 3.14 3.14	1.100 1.200 1.200	1.100 1.200 1.200	73 & 1076 0.090 0.490 0.210 0.310 Total Deduct	tal Quantity ed Quantity tal Quantity	0.342 2.216 0.798 1.402 4.758 cum 0.000 cum 4.758 cum	luding neat
6	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6  LS8  100.3.3.1  Earthwork open well esoil and conveying and banking.	3.14 3.14 3.14 3.14 acceptation (almost depositing the spoor	hil within init HED SDB - 1.100 1.200 1.100 1.200	Item No.107 1.100 1.200 1.100 1.200 Say 4.758 of for wells of ithin initial limitial	0.090 0.490 0.210 0.310 Total Deduct Net Total Deduct Net Total Deduct Out @ Rs 7	tal Quantity ed Quantity tal Quantity 50.22 / cum	0.342 2.216 0.798 1.402 4.758 cum 0.000 cum 4.758 cum Rs 35	luding neat
	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6  LS8  100.3.3.1  Earthwork open well esoil and conveying and banking.  NEW DATA (Prepared LS1)	3.14 3.14 3.14 3.14 3.14 dexcavation (almod depositing	held sold sold within inite  HED SDB - 1.100 1.200 1.100 1.200 bove water) the spoil with the spoil with spoil	1.100 1.200 1.100 1.200 Say 4.758 of for wells of ithin initial litem No.108	0.090 0.490 0.210 0.310 Total Deduct Net To cum @ Rs 7: dia. above 2 lead of 50m	tal Quantity ed Quantity tal Quantity 50.22 / cum	0.342 2.216 0.798 1.402 4.758 cum 0.000 cum 4.758 cum Rs 35	luding neat
	Earthwork open well conveying and depose banking.  NEW DATA (Prepared LS1  LS5  LS6  LS8  100.3.3.1  Earthwork open well esoil and conveying and banking.	3.14 3.14 3.14 3.14 acceptation (almost depositing the spool	hil within init HED SDB - 1.100 1.200 1.100 1.200	Item No.107 1.100 1.200 1.100 1.200 Say 4.758 of for wells of ithin initial limitial	0.090 0.490 0.210 0.310 Total Deduct Net Total Deduct Oum @ Rs 7	tal Quantity ed Quantity tal Quantity 50.22 / cum	0.342 2.216 0.798 1.402 4.758 cum 0.000 cum 4.758 cum Rs 35	luding neat

	LS10	3.14	1.600	1.600	1.500		12.058	
	LS11	3.14	1.450	1.450	1.500		9.903	
	LS12	3.14	1.350	1.350	1.500		8.584	
	LS14	3.14	1.400	1.400	1.500		9.232	
					То	tal Quantity	70.322 cur	n
				٦	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	70.322 cun	1
			S	Say 70.322 d	cum @ Rs 5	13.76 / cum	Rs 36	128.63
	soil and conveying and neat banking.  NEW DATA (Prepared	based on P	HED SDB -	Item No.108	82 & 1085	nd lift from		m includ
	LS2	3.14	1.350	1.350	1.500		8.584	
	LS3	3.14	1.600	1.600	1.500	1	12.058	
	LS9	3.14	1.450	1.450	1.500	سا	9.903	
	LS10	3.14	1.600	1.600	1.500		12.058	
	LS11	3.14	1.450	1.450	1.500		9.903	
	LS12	3.14 <sub>er</sub>	ala1.350at	er1,350†	011.500		8.584	
	LS14	3.14	1.400	1.400	1.500		9.232	
					То	tal Quantity	70.322 cur	n
				7	Total Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	70.322 cum	1
			S	Say 70.322 o	cum @ Rs 5	65.13 / cum	Rs 39	741.07
8	100.3.3.13 Earthwork open well exinds of soil and conversed including neat banking NEW DATA (Prepared	eying and de	epositing the	spoil within	n initial lead		•	
	LS2	3.14	1.350	1.350	1.500		8.584	
	LS3	3.14	1.600	1.600	1.500		12.058	
	LS9	3.14	1.450	1.450	1.500		9.903	
	LS10	3.14	1.600	1.600	1.500		12.058	
	LS11	3.14	1.450	1.450	1.500		9.903	
		i	1	A. Control of the Con		1	i	

	LS14	3.14	1.400	1.400	1.220		7.509	
					То	tal Quantity	68.599 cur	n
				Т	otal Deduct	ed Quantity	0.000 cum	
					Net To	tal Quantity	68.599 cum	1
			S	ay 68.599 c	um @ Rs 7	39.78 / cum	Rs 50	748.17
9	ordinary rock ir from 4.5m to 6.	n well excavation n ordinary rock and .0 m including nea epared based on P	l conveying t banking.	and deposi	ting the spo		•	
	LS2	3.14	1.350	1.350	1.500		8.584	
	LS3	3.14	1.600	1.600	1.500		12.058	
	LS9	3.14	1.450	1.450	1.500		9.903	
	LS10	3.14	1.600	1.600	1.500		12.058	
	LS11	3.14	1.450	1.450	1.500		9.903	
	LS12	3.14	1.350	1.350	1.500	l.	8.584	
		4866			То	tal Quantity	61.090 cur	n
				HE PEA	otal Deduct	ed Quantity	0.000 cum	
		Kera	ala Wat	er Auth	Ori Net To	tal Quantity	61.090 cum	1
		DI	Sa	y 61.090 cu	m @ Rs 20	77.50 / cum	Rs 126	914.48
10	100.3.4.15 Earthwork open	n well excavation	(in or under	water) for	wells of dia	above 2.5	5m and upto	0.50
10	from 6.0m to 7.	n ordinary rock and 5 m including nea epared based on P	t banking. HED SDB -	and deposi	ting the spo		ial lead of 5	
	from 6.0m to 7. NEW DATA (Pr	n ordinary rock and 5 m including near epared based on P	t banking. HED SDB -	and deposi	0.900		5.151	
	from 6.0m to 7. NEW DATA (Pr	n ordinary rock and 5 m including near epared based on P 3.14 3.14	1.350 1.600	and deposi Item No.108 1.350 1.600	0.900 0.330		5.151 2.653	
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9	ordinary rock and 5 m including near epared based on P 3.14 3.14 3.14	1.350 1.600 1.450	and deposi Item No.108 1.350 1.600 1.450	0.900 0.330 0.530		5.151 2.653 3.499	
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9 LS10	ordinary rock and some	1.350 1.600 1.600	1.350 1.600 1.600	0.900 0.330 0.530 0.620		5.151 2.653 3.499 4.984	
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9 LS10 LS11	ordinary rock and some	1.350 1.600 1.450 1.450	1.350 1.600 1.450 1.450	0.900 0.330 0.530 0.620 0.390		5.151 2.653 3.499 4.984 2.575	
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9 LS10	ordinary rock and some	1.350 1.600 1.600	1.350 1.600 1.600	0.900 0.330 0.530 0.620 0.390	oil within init	5.151 2.653 3.499 4.984 2.575 3.663	50m and
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9 LS10 LS11	ordinary rock and some	1.350 1.600 1.450 1.450	1.350 1.600 1.450 1.350	0.900 0.330 0.530 0.620 0.390 0.640	tal Quantity	5.151 2.653 3.499 4.984 2.575 3.663 22.525 cur	50m and
	from 6.0m to 7. NEW DATA (Pr LS2 LS3 LS9 LS10 LS11	ordinary rock and some	1.350 1.600 1.450 1.450	1.350 1.600 1.450 1.350	0.900 0.330 0.530 0.620 0.390 0.640	tal Quantity	5.151 2.653 3.499 4.984 2.575 3.663 22.525 cur	n and

11	100.3.5.1 Earthwork open we soil and conveying banking. NEW DATA (Preparent)	g and depositing	the spoil w	ithin initial l	ead of 50m					
	LS4	3.14	2.150	2.150	1.500		21.772			
						tal Quantity	21.772 cur	n		
				Т						
	Total Deducted Quantity 0.000 cum  Net Total Quantity 21.772 cum									
	Say 21.772 cum @ Rs 473.11 / cum						300.55			
	Earthwork open we soil and conveying neat banking.  NEW DATA (Prepare)	and depositing	the spoil wit	hin initial le	ad of 50m a					
	LS4	3.14	2.150	2.150	1.500		21.772			
		1/55			To	tal Quantity	21.772 cur	n		
		4366		1	otal Deduct	ed Quantity	0.000 cum			
				HE PET	Net To	tal Quantity	21.772 cum	1		
		Ker	ala Wa <mark>\$</mark>	ay 21.772 c	um @ Rs 5	20.45 / cum	Rs 11	331.24		
13	100.3.5.13 Earthwork open w kinds of soil and coincluding neat ban NEW DATA (Preparent)	onveying and de king.	epositing the	spoil within	n initial lead		•			
	LS4									
	LOT	3.14	2.150	2.150	1.500		21.772			
	LOT	3.14	2.150	2.150		tal Quantity		n		
	204	3.14	2.150				21.772 cur	n		
		3.14	2.150		To	ed Quantity	21.772 cur			
		3.14		Ţ	To	ed Quantity tal Quantity	21.772 cur 0.000 cum 21.772 cum			
14	100.3.6.4 Earthwork open w rock and conveying including neat bar	rell excavation (and depositing and depositing).	S above water ng the spoi	ay 21.772 of for wells of I within init	Total Deduct  Net To  cum @ Rs 6  of dia. abov ial lead of	ed Quantity tal Quantity 81.24 / cum e 3.5m and	21.772 cum 0.000 cum 21.772 cum <b>Rs 14</b> 6 upto 6.0 m	n <b>331.96</b> in ordinar		
14	100.3.6.4 Earthwork open w	rell excavation (and depositing and depositing).	S above water ng the spoi	ay 21.772 of for wells of I within init	Total Deduct  Net To  cum @ Rs 6  of dia. abov ial lead of	ed Quantity tal Quantity 81.24 / cum e 3.5m and	21.772 cum 0.000 cum 21.772 cum <b>Rs 14</b> 6 upto 6.0 m	n <b>331.96</b> in ordinar		

				T	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	21.772 cun	n
			Sa	ay 21.772 cu	ım @ Rs 15	555.35 / cum	Rs 33	863.08
15	100.3.6.5 Earthwork open well expression of the conveying and neat banking. NEW DATA (Prepared)	d depositing	the spoil wi	ithin initial le	ead of 50m		-	
	LS4	3.14	2.150	2.150	0.700		10.161	
					To	otal Quantity	10.161 cui	m
			-	Т.	Total Deduc	ted Quantity	0.000 cum	
			1688	161	Net To	otal Quantity	10.161 cun	n
			Sa	y 10.161 cu	ım @ Rs 16	675.01 / cum	Rs 17	019.78
	Bailing out water with 5 and taking back of er complete.  NEW DATA (Prepared	ngine and p	HED SDB -	of fuel lub	ricating oil		stores pay	
	and taking back of er complete.	ngine and p	HED SDB -	of fuel lubr	ricating oil	and other s	2800.000 2800.000	of staff et
	and taking back of er complete.	ngine and p	HED SDB - 200.000	of fuel lubr	70  Total Deduc	and other s	2800.000 2800.000 0.000 Kwh	of staff et
17	and taking back of er complete.	based on P  14  Kera  1 position reas per approvork in transpecified grave te of laying, attures in recashility without content conten	Sa ady mixed Noved designate mixer for a de for reinforcexcluding the commended out impairing considered in	of fuel lubrication in this item is	Total Deduce Net To Kwh @ Rs concrete for a read continuation of the concrete for a read concrete for a read concrete for a read concrete for a read concrete for the concrete f	and other solution and other solutions agitate solution and other solutions agitate solution and other solutions agitate solutions ag	2800.000 2800.000 2800.000 Kwh 2800.000 k Rs 104 cement contactic batching and replacements and replacements of the Extension	Kwh  1104.00  Acrete wor g plant ar anufacture g of R.M. inforceme rd setting Engineer -
17	and taking back of encomplete.  NEW DATA (Prepared  5.37.1  Providing and laying in using cement content a transported to site of was per mix design of signom transit mixer to sit including cost of admix concrete, improve work-charge. Note:- Cemer per design mix is paya  Lifting station -1	based on P  14  Kera  1 position reas per approvok in transpecified grave en flaying, attures in recashility without content coulde/recover	Sa  ady mixed Noved designate mixer for a de for reinfo excluding the ommended out impairing onsidered in able separa	of fuel lubrate litem No.107  er Authority 2800.000  M-25 grade in mix, manuall leads, had orced cemente cost of compositions a strength arm in this item is itely. All wion	Total Deduce Net To Kwh @ Rs  concrete for a single continuation co	and other solution and other solutions agitate solution and other solutions agitate solution and other solutions agitate solutions ag	2800.000 2800.000 Kwh 2800.000 Kwh 2800.000 K Rs 102  cement contactic batching and replacement retains and replacement contaction of the Estion of the Esti	Kwh  Manufacture  g of R.M.  inforceme  rd setting  Engineer -

Lifting station -2 Bottom Plugging	3.14	1.350	1.350	0.300	1.717
,, Well Steaning	3.14	2.400	0.300	6.900	15.600
Cover Slab	3.14	1.350	1.350	0.200	1.145
Lifting station -3 Bottom Plugging	3.14	1.600	1.600	0.300	2.412
,, Well Steaning	3.14	3.000	0.300	6.330	17.889
Cover Slab	3.14	1.600	1.600	0.200	1.608
Lifting station -4 Bottom Plugging	3.14	2.150	2.150	0.300	4.355
,, Well Steaning	3.14	4.000	0.300	6.700	25.246
Cover Slab	3.14	2.150	2.150	0.200	2.903
Lifting station -5 Bottom Plugging	3.14	1.200	1.200	0.300	1.357
,, Well Steaning	3.14	2.100	0.300	6.490	12.839
Cover Slab	3.14	1.200	1.200	0.200	0.905
Lifting station -6 Bottom Plugging	3.14	1.100	1.100	0.300	1.140
,, Well Steaning	3.14	1.900	0.300	6.210	11.115
Cover Slab	3.14	1.100	1.100	0.200	0.760
Lifting station -7 Bottom Plugging	3.14	1.200	1.200	0.300	1.357
,, Well Steaning	3.14	2.100	0.300	5.730	11.336
Cover Slab	3.14	1.200	1.200	0.200	0.905
Lifting station -8 Bottom Plugging	3.14	1.200	1.200	0.300	1.357
,, Well Steaning	3.14	2.100	0.300	6.310	12.483
Cover Slab	3.14	1.200	1.200	0.200	0.905
 Lifting station -9 Bottom Plugging	3.14	1.450	1.450	0.300	1.981
,, Well Steaning	3.14	2.600	0.300	6.530	15.994
Cover Slab	3.14	1.450	1.450	0.200	1.321
Lifting station -10 Bottom Plugging	3.14	1.600	1.600	0.300	2.412
,, Well Steaning	3.14	2.900	0.300	6.620	18.085

	Cover Slab	3.14	1.600	1.600	0.200		1.608	
	Lifting station -11 Bottom Plugging	3.14	1.450	1.450	0.300		1.981	
	,, Well Steaning	3.14	2.600	0.300	6.390		15.651	
	Cover Slab	3.14	1.450	1.450	0.200		1.321	
	Lifting station -12 Bottom Plugging	3.14	1.350	1.350	0.300		1.717	
	,, Well Steaning	3.14	2.400	0.300	6.640		15.012	
	Cover Slab	3.14	1.350	1.350	0.200		1.145	
	Lifting station -13 Bottom Plugging	3.14	1.200	1.200	0.300		1.357	
	,, Well Steaning	3.14	2.100	0.300	5.790		11.454	
	Cover Slab	3.14	1.200	1.200	0.200		0.905	
	Lifting station -14 Bottom Plugging	3.14	1.400	1.400	0.300		1.847	
	,, Well Steaning	3.14	2.500	0.300	4.220	t.	9.939	
	Cover Slab	3.14	1.400	1.400	0.200		1.231	
	Manhole	14	0.450	0.600	0.300		-1.134	
		Ker	ala Wat		J	otal Quantity		
			R		_,	otal Quantity		
			Sav	245.961 cu		47.98 / cum		6815.11
18	5.34.1 Extra for providing riche content used is payable BMC/RMC. (Note:- Cer	e/ recovera	able separate	ely.Providin	g M-30 gra	de concrete	•	
	Richer mix	1	247.095				247.095	
					To	otal Quantity	247.095 cı	ım
				٦	Total Deduc	ted Quantity	0.000 cum	
					Net To	otal Quantity	247.095 cu	m
			S	ay 247.095	cum @ Rs	82.61 / cum	Rs 20	412.52
19	4.12 Extra for providing and cement as per manufac	_	-	material ir	n cement co	oncrete work	in doses b	y weight
	Qty of cement	1	247.095				84012.300	

					Tot	al Quantity	84012.300	kg
				-	Total Deducte	ed Quantity	0.000 kg	
					Net Tot	al Quantity	84012.300 k	g
				Say 8401	2.300 kg @ R	Rs 1.36 / kg	Rs 1142	256.73
20	5.9.2 Centering and shuttering attached pilasters, butter	-	_			for:Walls (a	ny thickness	) inclu
	Stening inside - LS -1	3.14	1.600	6.090			30.597	
	Stening Outside - LS -	3.14	2.200	6.390			44.143	
	Stening inside - LS -2	3.14	2.100	6.900			45.499	
	Stening Outside - LS - 2	3.14	2.700	7.200			61.042	
	Stening inside - LS -3	3.14	2.600	6.330	1 13		51.679	
	Stening Outside - LS - 3	3.14	3.200	6.630	1-A		66.619	
	Stening inside - LS -4	3.14	3.700	6.700			77.841	
	Stening Outside - LS - 4	3.14	4.300	7.000	05		94.514	
	Stening inside - LS -5	3.14er	ala <sub>1.800</sub> at	er <sub>6.490</sub> tl	nority		36.682	
	Stening Outside - LS - 5	3.14	2.400	6.790	IF		51.170	
	Stening inside - LS -6	3.14	1.600	6.210			31.200	
	Stening Outside - LS - 6	3.14	2.200	6.510			44.972	
	Stening inside - LS -7	3.14	1.800	5.730			32.386	
	Stening Outside - LS - 7	3.14	2.400	6.030			45.443	
	Stening inside - LS -8	3.14	1.800	6.310			35.665	
	Stening Outside - LS - 8	3.14	2.400	6.610			49.813	
	Stening inside - LS -9	3.14	2.300	6.530			47.160	
	Stening Outside - LS - 9	3.14	2.900	6.830			62.194	
	Stening inside - LS -	3.14	2.600	6.620			54.046	

	Stening Outside - LS - 10	3.14	3.200	6.920			69.533	
	Stening inside - LS -	3.14	2.300	6.390			46.149	
	Stening Outside - LS - 11	3.14	2.900	6.690			60.920	
	Stening inside - LS - 12	3.14	2.100	6.640			43.785	
	Stening Outside - LS - 12	3.14	2.700	6.940			58.838	
	Stening inside - LS - 13	3.14	1.800	5.790			32.726	
	Stening Outside - LS - 13	3.14	2.400	6.090			45.895	
	Stening inside - LS -	3.14	2.200	4.220	W		29.152	
	Stening Outside - LS - 14	3.14	2.800	4.520		L	39.740	
					Tot	al Quantity	1389.403	sqm
			Value of	4 35	Total Deducte	ed Quantity	0.000 sqm	
		Kera	ala Wat	er Auth	Net Tot	al Quantity	1389.403 s	qm
					$\overline{}$	_		
			Say	1389.403 s	sqm @ Rs 72	1.70 / sqm	Rs 100	2732.15
21	5.9.20 Centering and shutter landings, balconies ar		ng strutting	, etc. and ı	removal of fo	orm for:Su		
21	Centering and shutter		ng strutting	, etc. and ı	removal of fo	orm for:Su		
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover	nd access	ng strutting platform wi	, etc. and i	removal of fo	orm for:Su	spended flo	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab	2*3.14	ng strutting platform wi 0.800	, etc. and i	removal of fo	orm for:Su	spended flo	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab ,, Side LS- 2 &LS 12, Cover	2*3.14 2*3.14	ng strutting platform wi 0.800 2.200	, etc. and ith water pr	removal of fo	orm for:Su	4.020 2.764	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab  "Side LS- 2 &LS 12, Cover slab	2*3.14 2*3.14 2*3.14	ng strutting platform wi 0.800 2.200 1.050	, etc. and ith water pr	removal of food ply 12 n	orm for:Su	4.020 2.764 6.924	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab  "Side LS- 2 &LS 12, Cover slab  "Side LS- 3 & 10, Cover	2*3.14 2*3.14 2*3.14 2*3.14	ng strutting platform wi 0.800 2.200 1.050 2.700	, etc. and ith water pro	removal of food ply 12 n	orm for:Su	4.020 2.764 6.924 3.392	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab  "Side LS- 2 &LS 12, Cover slab  "Side LS- 3 & 10, Cover slab	2*3.14 2*3.14 2*3.14 2*3.14 2*3.14	0.800 2.200 1.050 2.700	, etc. and ith water pro	removal of food ply 12 n  0.200	orm for:Su	4.020 2.764 6.924 3.392	
21	Centering and shutter landings, balconies ar LS- 1 &LS 6, Cover slab  "Side LS- 2 &LS 12, Cover slab  "Side LS- 3 & 10, Cover slab  "Side	2*3.14 2*3.14 2*3.14 2*3.14 2*3.14 2*3.14	0.800 2.200 1.050 2.700 1.300	, etc. and in the water process of the water proces	removal of food ply 12 n  0.200	orm for:Su	4.020 2.764 6.924 3.392 10.614 4.020	

	,, Side	3.14	2.400		0.200		1.508	
	LS- 7, Cover slab	3.14	0.900	0.900			2.544	
	,, Side	3.14	2.400		0.200		1.508	
	LS- 8&13, Cover slab	2*3.14	0.900	0.900			5.087	
	,, Side	2*3.14	2.400		0.200		3.015	
	LS- 9&11, Cover slab	2*3.14	1.150	1.150			8.306	
	,, Side	2*3.14	2.900		0.200		3.643	
	LS- 14, Cover slab	3.14	1.100	1.100			3.800	
	,, Side	3.14	2.800		0.200		1.759	
			-0	65	To	tal Quantity	78.896 sqr	n
			JAB	[P]T	otal Deduct	ed Quantity	0.000 sqm	
					Net To	tal Quantity	78.896 sqn	ı
		6	S	ay 78.896 s	qm @ Rs 9	23.02 / sqm	Rs 72	822.59
	binding all complete u	pto plinth I	evelMild ste	el and Med	dium Tensil	e steel bars	3	
	Steel reinforcement @ 100Kg/ 1Cum of CC	1	247.095		38	100.0	24709.500	
	Steel reinforcement @	1			38	100.0	24709.500	
	Steel reinforcement @	1	247.095	er Auth	ority To	100.0	24709.500 24709.500	
	Steel reinforcement @	1	247.095	er Auth	otal Deduct	100.0 tal Quantity ed Quantity	24709.500 24709.500	kg
	Steel reinforcement @	1	247.095 ala Wat	er Auth	otal Deduct	100.0 tal Quantity ed Quantity	24709.500 24709.500 0.000 kg 24709.500	kg kg
23	Steel reinforcement @	1  Kers  D  ectangular (	247.095  ala Wat	er Auth	Total Deduct Net To	100.0 tal Quantity ed Quantity tal Quantity s 97.28 / kg	24709.500 24709.500 0.000 kg 24709.500 Rs 240	kg kg <b>3740.16</b>
23	Steel reinforcement @ 100Kg/ 1Cum of CC 100Kg/ 1Cum of CC 100.41.34 Supplying and fixing Re	1  Kers  D  ectangular (	247.095  ala Wat	er Auth	Total Deduct Net To	100.0 tal Quantity ed Quantity tal Quantity s 97.28 / kg	24709.500 24709.500 0.000 kg 24709.500 Rs 240	kg kg <b>3740.16</b>
23	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges	1  Kers  ectangular (	247.095  ala Wat	er Auth	Total Deduction Net To Total Deduction Net To Total Deduction Net To Total Deduction Net Total Deduction N	100.0 tal Quantity ed Quantity tal Quantity s 97.28 / kg	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge	kg 3740.16
23	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges	1  Kers  ectangular (	247.095  ala Wat	er Auth Say 24709.	Total Deductors  Net Total Deductors  Net Total Deductors  Net Total Deductors  Net Total Deductors  Total Deductors  Total Deductors  Total Deductors	100.0 tal Quantity ed Quantity tal Quantity s 97.28 / kg	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge 14.000 14.000 No	kg 3740.16 es includ
23	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges	1  Kers  ectangular (	247.095  ala Wat	er Auth Say 24709.	Total Deduct  Net To  500 kg @ R  10 mm with	100.0  tal Quantity  ed Quantity  tal Quantity  s 97.28 / kg  frame (low	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge 14.000 14.000 No 0.000 No	kg 3740.16
23	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges	1  Kers  ectangular (	247.095  Cl manhole dete.	er Auth Say 24709.	Total Deduct  Net To  500 kg @ R  10 mm with  To  Total Deduct  Net To	100.0  tal Quantity ed Quantity tal Quantity s 97.28 / kg frame (low tal Quantity	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge 14.000 14.000 No 0.000 No	kg 3740.16 es includ
23	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges	1  Kera  Pectangular ( etc comple	247.095  ala Wat  Cl manhole dete.	er Auth Say 24709.	Total Deduct  Net To  500 kg @ R  10 mm with  To  Total Deduct  Net To  No @ Rs 2	tal Quantity ed Quantity tal Quantity s 97.28 / kg frame (low tal Quantity ed Quantity	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge 14.000 14.000 No 0.000 No	kg 3740.16 es includ
	Steel reinforcement @ 100Kg/ 1Cum of CC  100.41.34 Supplying and fixing Reall cost, labour charges Fixing on Cover slab	1  Kera  Pectangular ( etc comple	247.095  ala Wat  Cl manhole dete.	er Auth Say 24709.	Total Deduct  Net To  500 kg @ R  10 mm with  To  Total Deduct  Net To  No @ Rs 2	tal Quantity ed Quantity tal Quantity s 97.28 / kg frame (low tal Quantity ed Quantity	24709.500 24709.500 0.000 kg 24709.500 Rs 240 duty) charge 14.000 14.000 No 0.000 No	kg 3740.16 es includ

	LS11	1	500.000				500.000	
	LS12	1	380.000				380.000	
	LS14	1	1050.000				1050.000	
						tal Quantity		
				٦		ted Quantity		
					Net To	tal Quantity	2400.000 n	netre
			Say 240	0.000 metro	e @ Rs 114	3.05 / metre	Rs 274	3320.00
	Excavating trenches of dressing of sides, rame then returning the soil deposited layer by rame lead of 50 m: All kinds of soil (Ref. Item No. 2.10.1 or	ming of bot as required aming, wate	toms, depth	up to 1.5 not exceedir	n, including ng 20 cm in	getting out t depth, inclu	the excavate ding consoli	ed soil, a datingea
	LS1,LS2,LS3,LS4,LS6 ,LS8,LS10,LS13	8	40.000	0.500	1.100	Ł	176.000	
	LS5,LS7,LS9	3	50.000	0.500	1.100		82.501	
	LS11	1	500.000	0.500	1.100		275.000	
	LS12	Ker	380.000	0.500	1.100		209.001	
	LS14	1	1050.000	0.500	1.100		577.500	
			K		To	tal Quantity	1320.002	cum
						ted Quantity		um
			Say	1320.002	cum @ Rs 5	58.99 / cum	Rs 737	867.92
26	100.8.1 Fencing one side of to casuarina pole (girth (Data Prepared based)	15cm to 24	lcm) fixed at	2 m inter		cm plastic c	caution tape	in vert
		1	1000.000				1000.000	
					To	tal Quantity	1000.000 r	netre
				7	Fotal Deduct	ted Quantity	0.000 metre	9
					Net To	tal Quantity	1000.000 n	netre
			Sav 1	000.000 me		8.12 / metre		120.00
27	100.14.1 Conveying and laying excluding cost of pipe	•		ast (Spun)	/ Ductile Ir	on Pipes co	onforming t	o IS: 83

	100 mm dia Ductile Iron Data derived from 18.7		•				
		1	2400.000			2400.000	
		I		1	Total Quantity	2400.000 i	metre
				Total De	ducted Quantity	0.000 metr	е
				Ne	et Total Quantity	2400.000 n	netre
			Say 2400	.000 metre @ F	Rs 59.21 / metre	Rs 142	2104.00
28	18.68.1 Providing and laying D mm dia	.I specials	of class K - 12 s	uitable for push	n - on jointing as	s per IS : 95	23 :Upt 6
		1	7.000			7.000	
			JAN.	1	Total Quantity	7.000 quin	tal
		-	EL MA	Total De	ducted Quantity	0.000 quint	al
		61	SK ZS	Ne	et Total Quantity	7.000 quint	al
		18	Say 7.000 d	ıuintal @ Rs 20	)247.70 / quintal	Rs 141	733.90
29	18.70.1 Providing push - on-joil joints and including the			-CCCCCVENE	or Ductile Iron P	ipes includir	ng testing
		Ke	400.000 rala water	Authority	7	400.000	
			DI	Tulp	Total Quantity		ınt
			K		ducted Quantity		4
			Sov 40		et Total Quantity Rs 108.54 / joint		416.00
30	18.83.2		3ay 40	0.000 joint @	KS 100.54 / JUITE	KS 43	410.00
30	Labour for cutting C.I. p	pipe with s	teel saw.100 mm	diameter C.I. p	ipe		
		30				30.000	
			·			1	
					Total Quantity	30.000 Ea	ch Cut
				Total De	Total Quantity		
						0.000 Each	Cut
			Say 30.000 Ead	Ne	ducted Quantity	0.000 Each	Cut
31	100.35.1 Testing 100mm DI/CI p 100 mm dia Observed Data derived		h potable water to	No. th Cut @ Rs 17	educted Quantity et Total Quantity 72.94 / Each Cut	0.000 Each	Cut ch Cut

				т	otal Deduct	od Quantity	0.000 motro	`
				<u>'</u>			2400.000 m	
			Sav 2	2400.000 me	etre @ Rs 23			376.00
32	od328801/2021_2022 Pumpset- Supply, In: HANDLING TYPE PU		Commission	ning, testing	g and trial			
	LS1	2	1.000				2.000	
	LS2	2	1.000				2.000	
	LS3	2	1.500				3.000	
	LS4	2	3.500				7.000	
	LS5	2	0.500				1.000	
	LS6	2	1.000				2.000	
	LS7	2	0.500	\$ SI	1		1.000	
	LS8	2	1.000	$20/\lambda$	441		2.000	
	LS9	2	2.000		(33)	£	4.000	
	LS10	2	2.000	\$100 X			4.000	
	LS11	2	3.000	10.527	3%		6.000	
	LS12	<del>Z</del> era	3.000	or Auth	ority		6.000	
	LS13	2	3.000				6.000	
	LS14	2	3.000		, F	◀	6.000	
					То	tal Quantity	52.000 L.S	
				Т	otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	52.000 L.S	
			Say	y 52.000 L.S	6 @ Rs 2903	375.00 / L.S	Rs 1509	9500.00
33	od328802/2021_2022 Supple and erection of	Indoor Type	e Generator	(Suitable Ca	apacity)			
	LS1	1	2.400				2.400	
	LS2	1	2.400				2.400	
	LS3	1	3.600				3.600	
	LS4	1	8.400				8.400	
	LS5	1	1.200				1.200	
	LS6	1	2.400				2.400	
	LS7	1	1.200				1.200	

						1	
	LS8	1	2.400			2.400	
	LS9	1	4.800			4.800	
	LS10	1	4.800			4.800	
	LS11	1	7.200			7.200	
	LS12	1	7.200			7.200	
	LS13	1	7.200			7.200	
	LS14	1	7.200			7.200	
					Total Quantity	62.400 L.S	
				Tot	al Deducted Quantity	0.000 L.S	
			- 0	65	Net Total Quantity	62.400 L.S	
			S	ay 62.400 L.S	@ Rs 29037.50 / L.S	Rs 18119	40.00
34	od328803/2021_202 Automatic Control sy						
		14	IN ST	20/44	31	14.000	
		DAY.	1 D.B	12	Total Quantity	14.000 No	
		14/4		Tot	al Deducted Quantity	0.000 No	
			THE SE		Net Total Quantity	14.000 No	
		Ker	ala Wa	ay 14.000 No (	@ Rs 100000.00 / No	Rs 14000	00.00
35	od328804/2021_202 Control Room and G		m				
		14				14.000	
					Total Quantity	14.000 No	
				Tot	al Deducted Quantity	0.000 No	
					Net Total Quantity	14.000 No	
			Sa	ay 14.000 No	@ Rs 320279.00 / No	Rs 44839	06.00
SI No	Description	No	L	В	D CF	Quantity	Remark
	16Water Supply	and Sanatory	/ arrangeme	ents, Electrica	l wiring in pumping		
			<u> </u>		Lump-Sum Total		
SI No	Description	No 471 in a 4	L L	B B	D CF	Quantity	Remark
		1/Line 6	extension , L	Deposit to KS	·	D = 44000	00.00
					Lump-Sum Total		
					Total		
					Centage @	0.0%	
					Centage Amount	0.00	)

Provision for GST payments (in %) @	18.0%
Amount reserved for GST payments	135995463.04
Total & Centage	891525813.27
Lumpsum for round off	0.00
GRAND TOTAL Rs	891525813.27
Rounded Grand	Total Rs 89,15,25,813
Rupees Eighty Nine Crore Fifteen Lakh Twenty Five Thousand Eight Hundr	ed and Thirteen Only



## **Detailed Estimate**

## SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY PHASE 2 - CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT AND LAYING SEWERAGE NETWORK TO ZONE 2 OF KOYILANDY MUNICIPALITY - PART E- O&M

(Dsor year: 2018)

SI No	Description	No	L	В	D	CF	Quantity	Remarl
1STP	Providing skilled and	-	-		_	-	day operati	on and
	maintena	ance of the	all systems fo	or STP	(Cost In	dex:36.44 %)		
1	od328821/2021_2022							
	Plant Manager (Call o	n duty)	C13					
		1	365.000	B 2	10	\ \	365.000	
		16			4	Total Quantity	365.000 D	ау
		12	1019		Total Ded	ucted Quantity	0.000 Day	
		J. Heles		160 Y	Net	Total Quantity	365.000 Da	ıy
			Say	365.000 [	Day @ Rs	1563.28 / Day	Rs 570	597.20
2	100.98.1030 Engaging Operator ( p	oile/ Special	ala Wate Machine)	er Autl	hority			
		3	365.000				1095.000	
						Total Quantity	1095.000 [	Day
					Total Ded	ucted Quantity	0.000 Day	
					Net	Total Quantity	1095.000 🗅	ay
			Say 1	095.000 [	Day @ Rs	1169.56 / Day	Rs 128	0668.20
3	100.98.1032 Engaging Technician							
			Process C	hemist(Ca	all on duty	)		
	Single shift	1	365.000				365.000	
						Total Quantity	365.000 D	ay
					Total Ded	ucted Quantity	0.000 Day	
					Net	Total Quantity	365.000 Da	ıy
			Say	365.000 [	Day @ Rs	1228.16 / Day	Rs 448	278.40
4	100.98.1009							
	Engaging Fitter ( grad	e 1)						

Net Total Quantity   365.000 Day   Rs 426889.40					Т		tal Quantity ted Quantity		ay
100.98.1008   Engaging Coolie							<u> </u>	-	ıy
Engaging Coolie   Sweeper/Cleaner(Gen eral shift)   1095.000   1				Say	/ 365.000 D	ay @ Rs 11	69.56 / Day	Rs 426	889.40
Part	5								
Total Deducted Quantity			3	365.000				1095.000	
Net Total Quantity 1095.000 Day  Say 1095.000 Day @ Rs 884.27 / Day  Rs 968275.65  6 100.98.1036 Supply of Security Guard without gun.  Security guards  1*3 365.000 1095.000 No  Total Deducted Quantity 1095.000 No  Net Total Quantity 1095.000 No  Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SI No Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 500.000  Total Quantity 500.000 sqm  Total Deducted Quantity 500.000 sqm  Net Total Quantity 500.000 sqm				100	6	To	tal Quantity	1095.000 [	Day
Say 1095.000 Day @ Rs 884.27 / Day Rs 968275.65  100.98.1036 Supply of Security Guard without gun.  Security guards  1*3 365.000 1095.000 No  Total Deducted Quantity 1095.000 No  Net Total Quantity 1095.000 No  Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SI No Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 500.000 500.000 sqm  Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm				JAN		Total Deduct	ed Quantity	0.000 Day	
Security guards  1*3 365.000 1095.000 No  Kerala Water Authority Total Quantity 1095.000 No  Total Deducted Quantity 1095.000 No  Net Total Quantity 1095.000 No  Say 1095.000 No ® Rs 977.80 / No  Say 1095.000 No ® Rs 977.80 / No  STRO Description No L B D CF Quantity Remain  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31  Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm			-	£ 2 1		Net To	tal Quantity	1095.000 🗅	ay
Supply of Security Guard without gun.  Security guards  1*3 365.000 1095.000 No  Kerala Water Authority Total Quantity 1095.000 No  Total Deducted Quantity 1095.000 No  Net Total Quantity 1095.000 No  Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SINO Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 500.000 Total Quantity 500.000 sqm  Total Deducted Quantity 500.000 sqm  Net Total Quantity 500.000 sqm			6	Say	/ 1095.000 l	Day @ Rs 8	84.27 / Day	Rs 968	275.65
Total Deducted Quantity 1095.000 No  Net Total Quantity 1095.000 No  Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SI No Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 500.000 500.000 sqm  Total Quantity 500.000 sqm  Net Total Quantity 500.000 sqm  Net Total Quantity 500.000 sqm	6		d without (	gun.		In	Ł		
Net Total Quantity   1095.000 No   Total Quantity   1095.000 No   Net Total Quantity   1095.000 No   Net Total Quantity   1095.000 No   Net Total Quantity   1095.000 No   Say 1095.000 No @ Rs 977.80 / No   Rs 1070691.00		100		S	ecurity guar	ds	-		
Total Deducted Quantity   0.000 No			1*3	365.000	HE PAIN			1095.000	
Net Total Quantity 1095.000 No  Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SI No Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000			Ker	ala Wat	er Auth	nority To	tal Quantity	1095.000	No
Say 1095.000 No @ Rs 977.80 / No Rs 1070691.00  SI No Description No L B D CF Quantity Remark  2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000  Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm						Fotal Deduct	ed Quantity	0.000 No	
2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000  Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm				K		Net To	tal Quantity	1095.000 N	lo
2STP-Periodical cleaning STP units (Cost Index:36.44 %)  1 2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm				5	Say 1095.00	0 No @ Rs	977.80 / No	Rs 107	0691.00
2.31 Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000 Total Quantity 500.000 sqm  Total Deducted Quantity Net Total Quantity 500.000 sqm	SI No	·				1	1	Quantity	Remark
Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of m outside the periphery of the area cleared  2 250.000  Total Quantity  500.000 sqm  Total Deducted Quantity  Net Total Quantity  500.000 sqm			riodical cl	eaning STP	units (0	Cost Index:	36.44 %)		
Total Quantity 500.000 sqm  Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm	1	Clearing jungle including to 30 cm measured at a	height of	1 m above g	-				•
Total Deducted Quantity 0.000 sqm  Net Total Quantity 500.000 sqm			2	250.000				500.000	
Net Total Quantity 500.000 sqm						To	tal Quantity	500.000 sc	ηm
					_	Fotal Deduct	ed Quantity	0.000 sam	
Say 500.000 sqm @ Rs 14.87 / sqm					l	otal Deduc	ca Quantity	0.000 04	
									m

	od328814/2021_2022 Maintaining the garden	as ner the						
	waintaining the garden	as per trie		ch month fo				
		1	12.000		l a you.		12.000	
			1		To	tal Quantity		nth
						ted Quantity		
						otal Quantity		
			Say 12	2.000 Month	@ Rs 5264	I.39 / Month	Rs 63	172.68
2	13.99.1 Painting with synthetic even shade :One or m			oved brand	and manufa	acture ofreq	uired colou	r to give
		1	100.000				100.000	
		Committee of	E. L W	11 8	To	tal Quantity	100.000 s	qm
		611	X Z	5.1	Total Deduct	ed Quantity	0.000 sqm	
		18	<b>HNW</b>		Net To	tal Quantity	100.000 sc	ım
3	13.51.2 Painting with silicon & on wet or patchy portion	•	Ision based	water thinna		94.69 / sqm		169.00 nanufact
3	Painting with silicon & on wet or patchy portion  Painting with in garea:2000m2. Two painting within O& Marea = 2x2000/10=400m2 /	n of plaster	Ision based	water thinna				
3	Painting with silicon & on wet or patchy portion  Painting with in garanting within O& Marea = 1000 painting within O& Area = 1000 painting with silicon & 2000 painting within O& Marea & 2000 painti	n of plaster	Ision based of the surfaces:	water thinna	able sealer of	of approved	brand and r	nanufact
3	Painting with silicon & on wet or patchy portion  Painting with in garea:2000m2. Two painting within O& Marea = 2x2000/10=400m2 /	n of plaster	Ision based of the surfaces:	water thinna Two coats Cr Auth	able sealer of	of approved	400.000 se	nanufact
3	Painting with silicon & on wet or patchy portion  Painting with in garea:2000m2. Two painting within O& Marea = 2x2000/10=400m2 /	n of plaster	Ision based of the surfaces:	water thinna Two coats Cr Auth	ority To	of approved otal Quantity sed Quantity	400.000 sqm	nanufact
3	Painting with silicon & on wet or patchy portion  Painting with in garea:2000m2. Two painting within O& Marea = 2x2000/10=400m2 /	n of plaster	lsion based ved surfaces:	water thinna Two coats	Total Deduct	of approved	400.000 sqm 400.000 sqm	nanufact
3	Painting with silicon & on wet or patchy portion  Painting with in garea:2000m2. Two painting within O& Marea = 2x2000/10=400m2 /	n of plaster	lsion based ved surfaces:	water thinna Two coats	Total Deduct	of approved  otal Quantity  ted Quantity  otal Quantity	400.000 sqm 400.000 sqm	qm 124.00
	Painting with silicon & on wet or patchy portion  Painting with in g  Area:2000m2. Two painting within O& M  Period. Area=  2x2000/10=400m2 / year	n of plaster	lsion based ved surfaces:	water thinna Two coats CT Auti	Total Deduct Net Total Que Rs 1	of approved  otal Quantity ted Quantity otal Quantity otal Quantity	400.000 sqm 400.000 sc 0.000 sqm 400.000 sc	qm 124.00
	Painting with silicon & on wet or patchy portion  Painting with in g  Area:2000m2. Two painting within O& M  Period. Area=  2x2000/10=400m2 / year	n of plaster  1  No  Annual Che	lsion based ved surfaces: 400.000  Sa	water thinna Two coats Of Autority ay 400.000 s	Total Deduct Net Total Description of the sealer of the se	of approved  otal Quantity ted Quantity otal Quantity otal Quantity	400.000 sqm 400.000 sc 0.000 sqm 400.000 sc	qm 124.00
SI No	Painting with silicon & on wet or patchy portion  Painting with in garea: 2000m2. Two painting within O& Marea: 2000/10=400m2 // year  Description  4STP-7  od328816/2021_2022	n of plaster  1  No  Annual Che	lsion based ved surfaces: 400.000  Sa	water thinna Two coats Of Autority ay 400.000 s	Total Deduct Net Total Description of the sealer of the se	of approved  otal Quantity ted Quantity otal Quantity otal Quantity	400.000 sqm 400.000 sc 0.000 sqm 400.000 sc	qm 124.00
SI No	Painting with silicon & on wet or patchy portion  Painting with in garea: 2000m2. Two painting within O& Marea: 2000/10=400m2 // year  Description  4STP-7  od328816/2021_2022	No Annual Che	lsion based yed surfaces: 400.000  Sa L  Emicals cha	water thinna Two coats CT Autr  ay 400.000 s  B  rges (C	To Total Deduct Net To sqm @ Rs 1 Dost Index:3	of approved  otal Quantity ted Quantity otal Quantity otal Quantity	400.000 sqm 400.000 sqm 400.000 sq Quantity	manufact  qm  124.00  Remark

					Not To	tal Ouantity	5475.000 k	α
				Sav 5475	000 kg @ R			
2	od328817/2021_2022	<u> </u>		Jay 3473.	ooo kg @ K	3 20.43 / Kg	113 177	013.73
۷	Supply and delivery o		ne as per sp	pecification (	7 PPM dosa	ge)		
		3	7.000	365.000			7665.000	
					To	tal Quantity	7665.000 k	(d
				7	otal Deduct			<u> </u>
							7665.000 k	α
				Say 7665.	000 kg @ R			
3	od328822/2021_2022	<u> </u>	130 101					
	Supply and delivery of	r>						
		3	7.000	365.000	3		7665.000	
					То	tal Quantity	7665.000 k	κg
		ed Quantity	0.000 kg					
		tal Quantity	ty 7665.000 kg					
		s 13.75 / kg	Rs 105	393.75				
4	od328826/2021_2022			uit of Service	S.P.			
	Other Chemicals		1 777	A 4		Г	T	
		Kera	ala Wai	ter Auth	ority		1.000	
		$D \perp 1$			То	tal Quantity	1.000 L.S	
				1	otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
				Say 1.000 L	S @ Rs 580	75.00 / L.S	Rs 580	075.00
SI No	Description	No	L	В	D	CF	Quantity	Remark
5STP-	-Major repairs and mai	ntenance of			ork (Break o	down maint	tanence).	(Cost
	~ d220020/2024 2022	<b>.</b>	index.	36.44 %)				
1	od328830/2021_2022 Repair and Rewinding		nd its asse	mbly and pu	itting into us	e for the bro	eak down m	aintenan
	for the pumps.			, ,				
		1					1.000	
					То	tal Quantity	1.000 set	
					otal Deduct	ed Quantity	0.000 set	
					Net To	tal Quantity	1.000 set	
				Say 1.000 s	set @ Rs 60	000.00 / set	Rs 600	00.00
SI No	Description	No	L	В	D	CF	Quantity	Remark

		6STP-Others	(Cost Index:3	36.44 %)			
1	od328820/2021_2022 Testing and calibration of ELCB,testing of earth testing,transformer test Govt.agencies.	n pit,testing and ca	athodic protection	on of MS lin	e,environme	ental monito	ring,sluc
		1				1.000	
		·		Т	tal Quantity		
			Т		ted Quantity		
			·		otal Quantity		
			Sav 1 000		5000.00 / No		00.00
2	od328828/2021_2022	7	Cay 11000	110 0 110 0		110 01	
_	Attending the repairs in	the valves,actuato	rs,electro magne	etic flow me	ters and con	nected work	(S
		1	60 50	2		1.000	
		FITT	fan/A	To	otal Quantity	1.000 No	
		ATI	NAME	otal Deduc	ted Quantity	0.000 No	
			all by	otal Quantity	1.000 No		
		5000.00 / No	Rs 50	00.00			
3	od328829/2021_2022 Attending repairs in the	E.O.T crane includ	Jater Auth ding changing of	spare if any	during serv	icing	
		1				1.000	
			1	Т	otal Quantity	1.000 No	
			Т	otal Deduc	ted Quantity	0.000 No	
				Net To	otal Quantity	1.000 No	
			Say 1.000	No @ Rs 4	000.00 / No	Rs 40	00.00
4	od328831/2021_2022 Transformer air filt mechanism,replaceme transformer etc.						
		1				1.000	
				To	tal Quantity	1.000 No	<u> </u>
		ted Quantity					
		otal Quantity					
			Sav 1.000		1000.00 / No		00.00
			,		· ·		-

	replacement of fixed of isolator, isolator b contacts, moving concontrol circuit etc.	ridges,repair	of oil circu	uit breaker an	d air circuit	breaker lik	e replacem	nent of fi					
		1					1.000						
					To	tal Quantity	1.000 No						
				٦	otal Deduct	ed Quantity	0.000 No						
					Net To	tal Quantity	1.000 No						
		000.00 / No	Rs 5	00.00									
6	od328833/2021_202 Hire charges of Tools		equired for	the day to da	y operation	of the Plant	and equipr	ment s					
		1	18		2		1.000						
		_	345	\$ W	To	tal Quantity	1.000 No						
		11		40/A	otal Deduct	ed Quantity	0.000 No						
					Net To	tal Quantity	uantity 1.000 No						
							<del> </del>						
7	od328834/2021_202 Supply and maintena	ance of emerg	4	onal and fire	No @ Rs 5	•	cluding perio						
7		ance of emerging sanction	from conc	onal and fire	No @ Rs 5	ipment s inc se renewal	etc except	odical ch					
7	Supply and maintenaup,refilling and getti	ance of emerging sanction	from conc	onal and fire erned depart ctorate	No @ Rs 5	ipment s inc se renewal tal Quantity	etc exception 1.000 No	odical ch					
7	Supply and maintenaup,refilling and getti	ance of emerging sanction	from conc	onal and fire erned depart ctorate	No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity	1.000 No	odical ch					
7	Supply and maintenaup,refilling and getti	ance of emerging sanction	from conc	onal and fire erned depart ctorate	No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity	1.000 No 1.000 No	odical ch					
7	Supply and maintenaup,refilling and getti	ance of emerging sanction	from conc	onal and fire erned depart ctorate	No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity	1.000 No 1.000 No	odical ch					
8	Supply and maintenaup,refilling and getti	ance of emerging sanction rs and Electr  1 2 nance of continuous proper upke	trol/instrum	onal and fire erned depart ctorate  Say 1.000	fighting equiments, licentrol  Total Deductrol  Net Total  No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity 000.00 / No unication c	1.000 No 1.000 No 1.000 No Rs 5	odical ch t renewa 000.00					
	Supply and maintena up,refilling and getti Factories and Boile od328835/2021_202 Repair and maintena cabling etc for the	ance of emerging sanction rs and Electr  1 2 nance of continuous proper upke	trol/instrum	onal and fire erned depart ctorate  Say 1.000	fighting equiments, licentrol  Total Deductrol  Net Total  No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity 000.00 / No unication c	1.000 No 1.000 No 1.000 No Rs 5	odical ch t renewa 000.00					
	Supply and maintena up,refilling and getti Factories and Boile od328835/2021_202 Repair and maintena cabling etc for the	ance of emerging sanction rs and Electron 1  22 nance of contact proper upkers and exercises are exercised and exercises and exercises and exercises and exercises are exercised and exercises and exercises and exercises are exercised and exercises are exe	trol/instrum	onal and fire erned depart ctorate  Say 1.000	fighting equiments, licental Deductor Net To No @ Rs 5	ipment s income se renewal tal Quantity ed Quantity 000.00 / No unication c	1.000 No 1.000 No 1.000 No Rs 5 abling,instring repair	odical ch t renewa 000.00					
	Supply and maintena up,refilling and getti Factories and Boile od328835/2021_202 Repair and maintena cabling etc for the	ance of emerging sanction rs and Electron 1  22 nance of contact proper upkers and exercises are exercised and exercises and exercises and exercises and exercises are exercised and exercises and exercises and exercises are exercised and exercises are exe	trol/instrum	onal and fire erned depart ctorate  Say 1.000 mentation cal	fighting equiments, licental Deductor Net To No @ Rs 5 coling, commementry sys	ipment s inc se renewal tal Quantity ed Quantity tal Quantity 000.00 / No unication c tem includi	1.000 No 1.000 No 1.000 No Rs 5 abling,instring repair 1.000 1.000 No	odical ch t renewa 000.00					
	Supply and maintena up,refilling and getti Factories and Boile od328835/2021_202 Repair and maintena cabling etc for the	ance of emerging sanction rs and Electron 1  22 nance of contact proper upkers and exercises are exercised and exercises and exercises and exercises and exercises are exercised and exercises and exercises and exercises are exercised and exercises are exe	trol/instrum	onal and fire erned depart ctorate  Say 1.000 mentation cal	fighting equiments, licentotal Deductors No @ Rs 5 coling, commementry sys	ipment s incose renewal tal Quantity ed Quantity 000.00 / No unication cotem includi	1.000 No 1.000 No 1.000 No Rs 5 abling,instring repair 1.000 1.000 No 0.000 No	odical ch t renewa 000.00					

	Scada,office stationary necessary	items.soft	ware for , e	tc including	replacing o	n all laulty	components	s wnene	
		1					1.000		
					То	tal Quantity	1.000 No		
				Т	Total Deduct	ed Quantity	0.000 No		
					Net To	tal Quantity	y 1.000 No		
				Say 1.000 N	No @ Rs 25	000.00 / No	Rs 25000.00		
10	od328837/2021_2022		l . (	. 40					
	Replacement of Catridg		between 5 to	o 10 years					
		1	180				1.000		
					То	tal Quantity	1.000 L.S		
		ed Quantity	0.000 L.S						
		tal Quantity	1.000 L.S						
		Bu	8	Say 1.000 L.	.S @ Rs 400	000.00 / L.S	Rs 40	00.00	
11	od328838/2021_2022 Generator Fuel charges	ماي							
		1	100.000	HOLDEN			100.000		
		tal Quantity	100.000 ho	our					
					Total Deduct	ed Quantity	0.000 hour		
			R		Net To	tal Quantity	100.000 ho	ur	
			Say	100.000 ho	ur @ Rs 660	08.93 / hour	Rs 660	893.00	
SI No	Description	No	L	В	D	CF	Quantity	Rema	
7STF	P-Annual Operation and	Maintenan	ice for 9 yea	rs (2nd yea	ar to 10th ye	ear) (Co	st Index:36	.44 %)	
1	od336210/2021_2022 STP-Annual Operation a	and Mainte	nance for 9	year					
	2 nd Year - Add 8 % to 1st year	1	1.080				1.080		
	3rd Year - Add 16 % to 1st year	1	1.160				1.160		
	4th Year - Add 24 % to 1st year	1	1.240				1.240		
	5th Year - Add 32 % to 1st year	1	1.320				1.320		
	6th Year - Add 40 % to 1st year	1	1.400				1.400		

				1	I		ı	Г
	7th Year - Add 48 % to 1st year	1	1.480				1.480	
	8th Year - Add 56 % to 1st year	1	1.560				1.560	
	9th Year - Add 64 % to 1st year	1	1.640				1.640	
	10th Year - Add 72 % to 1st year	1	1.720				1.720	
			•		To	tal Quantity	12.600 No	
				Т	otal Deduct	ted Quantity	0.000 No	
					Net To	otal Quantity	12.600 No	
			Sa	y 12.600 No	@ Rs 6147	469.29 / No	Rs 7745	8113.05
SI No	Description	No	L	В	D	CF	Quantity	Remark
	8SEWER- O&M OF	WET WE	LLS AND C	ONNECTED	WORKS	(Cost Ind	lex:36.44 %	)
1	100.98.1030 Engaging Operator ( pile	e/ Special	Machine)		4	1		
		1	3.000	365.000		ميا	1095.000	
		TO SE			To	tal Quantity	1095.000 [	Day
			AN CO	T T	otal Deduct	ted Quantity	0.000 Day	
		Ker	ala Wat	ter Auth	OTITY Net To	tal Quantity	1095.000 🗅	ay
			Say	1095.000 D	ay @ Rs 11	69.56 / Day	Rs 128	0668.20
2	100.98.1008 Engaging Coolie							
		1	3.000	365.000			1095.000	
					To	tal Quantity	1095.000 [	Day
				Т	otal Deduct	ed Quantity	0.000 Day	
					Net To	tal Quantity	1095.000 🗅	ay
			Sa	y 1095.000 [	Day @ Rs 8	84.27 / Day	Rs 968	275.65
SI No	Description	No	L	В	D	CF	Quantity	Remark
SEWER	- O&M OF CIVIL, E	LECTRICA		NICAL WOR dex:36.44 %		p;M OF LIF	TING STATI	ONS, ETC
1	od329441/2021_2022 Civil structures mainten	ance and <	//sbr>painting					
		1					1.000	
			1	I	Tc	tal Quantity		I
				Т		ted Quantity		
				<u>'</u>		.ca additity	3.000 2.0	

						tal Quantity		
			S	ay 1.000 L.S	@ Rs 1000	)00.00 / L.S	Rs 100	00.000
2	od329442/2021_2022					,		
	Replacement of mech		(Including <b< th=""><th>or&gt;painting e</th><th>xisting item</th><th>S )</th><th></th><th></th></b<>	or>painting e	xisting item	S )		
		1					1.000	
					То	tal Quantity	1.000 L.S	
				T	otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
		000.00 / L.S	Rs 100	00.000				
3	od329443/2021_2022 Replacement of electr							
		1	1/10				1.000	
		-	230	8 27	To	tal Quantity		1
		619	N. R.	53 /3	7 1 1	ed Quantity		
		otal Quantity						
		000.00 / L.S						
	Devices, Cleaning e	1201	 t>well/and	d pumping :	station		40.000	
	Cotton waste ,Lubric Devices, Cleaning e	,				, , ,		
		12				1,0	12.000	
						tal Quantity		5
				T		ed Quantity		
						tal Quantity		
				Say 12.000 I	S @ Rs 80	)00.00 / L.S	Rs 96	00.00
5	100.98.1032 Engaging Technician							
		1	365.000				365.000	
				7	То	tal Quantity	365.000 D	ay
		ed Quantity	0.000 Day					
		tal Quantity	365.000 Da	ау				
			Sa	y 365.000 D				3278.40
6	od336221/2021_2022 Generator Fuel Charg				•	•	ı	
	- Constant and onling	1	1 (1.10)			,	1.000	
					<u> </u>	<u> </u>	1.000	1
					<b>T</b> .	tal Quantity	1.000 set	

				-	Total Deduct	ed Quantity	0.000 set				
					Net To	tal Quantity	1.000 set				
			S	ay 1.000 se	et @ Rs 330	000.00 / set	Rs 330	00.00			
SI No	Description	No	L	В	D	CF	Quantity	Remark			
	10SEWEF	R-O&	M OF SEWE	R LINE	(Cost Index	(:36.44 %)					
1	100.98.1008										
	Engaging Coolie										
		1	365.000				365.000				
					Тс	tal Quantity	365.000 D	ay			
					Total Deduct	ed Quantity	0.000 Day				
			1Ca	123	Net To	tal Quantity	365.000 Da	ay			
			Sa	ay 365.000	Day @ Rs 8	84.27 / Day	Rs 322	2758.55			
2	100.98.1009 Engaging Fitter ( grade	1)									
		1	365.000	73/2/	1-2		365.000				
		151	303.000		3 20	tal Ovantitu					
	-				Alexa-	tal Quantity		ay			
		1433					0.000 Day				
		IV as	volo Wot	on A 2241	0 4	<u>·</u>	365.000 Day				
		Kel	rala W <sub>Say</sub>	/ 365.000 E	ay @ Rs 11	69.56 / Day	Rs 426889.40				
3	100.98.1035 Supply of sewer man.	P	R			7					
		2	365.000				730.000				
					To	tal Quantity	730.000 N	0			
				-	Total Deduct	ed Quantity	0.000 No				
						tal Quantity		)			
				Sav 730 00	00 No @ Rs			5517.10			
4	od328827/2021_2022						110011				
7	Vehicle hire charges										
		12					12.000				
		1			To	tal Quantity		onth			
				-	Total Deduct						
						tal Quantity					
			Say 12.	000 Month	@ Rs 29037			3450.00			
5	od329445/2021_2022										
	Rent for sewer cleaning	g machine									

			1					
		1					1.000	
					То	tal Quantity	1.000 L.S	
				Т	otal Deduct	ed Quantity	0.000 L.S	
					Net To	tal Quantity	1.000 L.S	
			S	ay 1.000 L.S	@ Rs 2000	000.00 / L.S	Rs 200	00.00
SI No	Description	No	L	В	D	CF	Quantity	Remark
	11SEWER-O&	amp;M for	2nd year t	o 10th Year	(Cost II	ndex:36.44	%)	
1	od336211/2021_2022 SEWER-Annual Operati	on and Ma	intenance f	or 9 year				
	2 nd Year - Add 8 % to 1st year	1	1.080	0			1.080	
	3rd Year - Add 16 % to 1st year	1	1.160				1.160	
	4th Year - Add 24 % to 1st year	1	1.240	5.7	L		1.240	
	5th Year - Add 32 % to 1st year	1	1.320			Ł	1.320	
	6th Year - Add 40 % to 1st year	1	1.400		Sp.		1.400	
	7th Year - Add 48 % to 1st year	Kera	ala Wat	er Auth	ority		1.480	
	8th Year - Add 56 % to 1st year	1	1.560		Ĺ	<b>+</b> 1	1.560	
	9th Year - Add 64 % to 1st year	1	1.640				1.640	
	10th Year - Add 45 % to 1st year	1	1.720				1.720	
					То	tal Quantity	12.600 No	
				Т	otal Deduct	ed Quantity	0.000 No	
		tal Quantity	12.600 No					
		837.30 / No	Rs 6762	2149.98				
SI No	Description	No	L	В	D	CF	Quantity	Remark
	12Elec	tricity Cha	arges for 10	years @ R	s14009601.	6/year		
					Lump	Sum Total	Rs 14009	96016.00
						Total	296690	585.61
						Centage @	0.0	0%

Centage Amount	0.00
Provision for GST payments (in %) @	18.0%
Amount reserved for GST payments	53404305.41
Total & Centage	350094891.02
Lumpsum for round off	0.00
GRAND TOTAL Rs	350094891.02
Rounded Grand	Total Rs 35,00,94,891
Rupees Thirty Five Crore Ninety Four Thousand Eight Hundred	and Ninety One Only



## APPENDIX-IV-DESIGN OF WETWELLS AND LIFTING STATIONS

Sl no.	Name of wetwel	Peak flowLPS	Detentio n Period in min.	Storage capacity m <sup>3</sup>	SWD (m)	Area m <sup>2</sup>	Size	Depth upto invert of pipe	Total Depth
	LS1	3.01					1.52		
1		3.01	10.00	1.81	1.00	1.81		5.09	6.09
	LS2	5.72					say 1.6 m dia		
2	L52	3.72	10.00	3.43	1.00	3.43	2.09	5.9	6.90
		5.72					say 2.1 m dia		
	LS3	8.26	4000			4.0.5	2.51		
3		9.26	10.00	4.96	1.00	4.96		5.33	6.33
	LS4	8.26 17.21					say 2.6 m dia		
4	LDT	17.21	10.00	10.33	1.00	10.33	3.63	5.7	6.70
		17.21					say 3.7 m dia		
	LS5	1.42					1.04		
5			10.00	0.85	1.00	0.85		5.49	6.49
	1.00	1.42					say 1.2 m dia		
6	LS6	3.31	10.00	1.99	1.00	1.99	1.59	5.21	6.21
		3.31	10.00	1.99	1.00	1.99	say 1.6 m dia		0.21
	LS7	1.21							
7			10.00	0.73	1.00	0.73	0.96	4.73	5.73
		1.21					say 1 m dia		
8	LS8	3.87	10.00	2.22	1.00	2.22	1.72	5.21	6.21
		3.87	10.00	2.32	1.00	2.32		5.31	6.31
9	LS9	6.75					say 1.8m dia		
	LS7	0.73	10.00	4.05	1.00	4.05	2.27	5.53	6.53
		6.75					say 2.3m dia		
10	LS10	15.26					2.55		
		17.06	10.00	9.16	1.80	5.09		4.82	6.62
11	LS11	15.26 6.84					say2.6m dia		
11	LSII	0.04	10.00	4.10	1.00	4.10	2.29	5.39	6.39
		6.84					say 2.3m dia		0.07
12	LS12	5.41					2.03		
		5.41	10.00	3.25	1.00	3.25		5.64	6.64
13	LS13	5.41 4.21					say 2.1m dia		
13	LS13	4.21	10.00	2.52	1.00	2.52	1.79	4.79	5.79
		4.21				_	say 1.8m dia		
14	LS14	5.94					2.13		
		5.04	10.00	3.56	1.00	3.56		3.22	4.22
15	PH-1	5.94 34.25					say 2.2m dia		
	111-1	JT.4J	10.00	20.55	1.50	13.70	4.18	4.65	6.15
		34.25		<del>-</del>			say 4.2m dia	- <del></del>	-
16	STPWEL	78.25					6.92		
		70.27	10.00	46.95	1.25	37.56		5.8	7.05
		78.25					say 7.0m dia		

## **APPENDIX-V-Design of Pumpsets & Pumping mains**

SI no.	Name	of station	length	Q Avg.	Q Peak		Area	Velocity	Pipe dia (Pumping main)	Provided Dia.( mm) (DI PIPE)	Provided Dia.( m)	Actual velocity	Hf For 1000m (4flv²/2gd)	Total Hf	Static head(m)	Residual head(m)	Total Head (m)	Pump BHP
	From	То																
1	PH1	STP	3850	13.7000	34.2520	Ltrs/sec								23.347	15.00	2.00	40.35	26.32
				0.0137	0.0343	m3/sec	0.0343	1.00	0.2089	200	0.200	1.0908	6.06					
				0.8220	2.0550	m3/mint												27 HP
					0.0000													
2	COLLEC TION WELL	receiving chamber	20	31.3000	78.2530	Ltrs/sec	0.0704	1.00	0.2995	300	0.3000	0.9968	3.38	0.068	16.00	2.00	18.07	24.24
				0.0313	0.0704	m3/sec												
				1.8780	4.2255	m3/mint												25HP
					0.0000													
3	LS1	mh	40	1.2040	3.0100	Ltrs/sec		1.00	0.0587	100	0.1000	0.3451	1.21	0.049	10.00	2.00	12.05	0.54
	МН	МН		0.0012	0.0027	m3/sec	0.0027											
				0.0722	0.1625	m3/mint												1 HP
4	LS2		40	2.2800	5.7200	Ltrs/sec		1.00	0.0808	100	0.1000	0.6535	4.35	0.174	10.00	2.00	12.17	1.04
	МН	MH		0.0023	0.0051	m3/sec	0.0051											
				0.1368	0.3078	m3/mint												1 HP
5	LS3	mh	40	3.3040	8.2600	Ltrs/sec		1.00	0.0973	100	0.1000	0.9470	9.14	0.366	9.00	2.00	11.37	1.41
	МН	MH		0.0033	0.0074	m3/sec	0.0074											
				0.1982	0.4460	m3/mint												1.5 HP
6	LS4	mh	40	6.8800	17.2100	Ltrs/sec		1.00	0.1404	150	0.1500	0.8764	5.22	0.209	10.00	2.00	12.21	3.15
	MH	MH		0.0069	0.0155	m3/sec	0.0155											
				0.4128	0.9288	m3/mint												3.50 HP
7	LS5	MH	50	0.5680	1.4200	Ltrs/sec		1.00	0.0425	100	0.1000	0.1809	0.33	0.017	12.00	2.00	14.02	0.33
				0.0006	0.0014	m3/sec	0.0014											
				0.0341	0.0852	m3/mint												0.5 HP
8	LS 6	mh	40	1.3240	3.3100	Ltrs/sec		1.00	0.0616	100	0.1000	0.3795	1.47	0.059	12.00	2.00	14.06	0.70
	MH	MH		0.0013	0.0030	m3/sec	0.0030											<u> </u>

				0.0794	0.1787	m3/mint												1HP
9	LS7	MH	50	0.4840	1.2100	Ltrs/sec		1.00	0.0393	100	0.1000	0.1541	0.24	0.012	12.00	2.00	14.01	0.28
				0.0005	0.0012	m3/sec	0.0012											
				0.0290	0.0726	m3/mint												0.5 HP
10	LS8	mh	40	1.5480	3.8700	Ltrs/sec		1.00	0.0666	100	0.1000	0.4437	2.01	0.080	15.00	2.00	17.08	0.99
	MH	MH		0.0015	0.0035	m3/sec	0.0035											
				0.0929	0.2090	m3/mint												1HP
11	LS9	МН	50	2.7000	6.7500	Ltrs/sec		1.00	0.0927	100	0.1000	0.8599	7.54	0.377	12.00	2.00	14.38	1.62
				0.0027	0.0068	m3/sec	0.0068											
				0.1620	0.4050	m3/mint												2 HP
12	LS10	mh	40	3.4000	15.2600	Ltrs/sec		1.00	0.0987	100	0.1000	0.9745	9.68	0.387	12.00	2.00	14.39	1.83
	МН	MH		0.0034	0.0077	m3/sec	0.0077											
				0.2040	0.4590	m3/mint												2 HP
14	LS11	MH N566	500	2.7360	6.8400	Ltrs/sec		1.00	0.0886	100	0.1000	0.7842	6.27	3.134	18.00	2.00	23.13	2.37
	МН	MH		0.0027	0.0062	m3/sec	0.0062											
				0.1642	0.3694	m3/mint												3 HP
15	LS12	MH N 566	380	2.1640	5.4100	Ltrs/sec		1.00	0.0830	100	0.1000	0.6892	4.84	1.840	18.00	2.00	21.84	1.97
				0.0022	0.0054	m3/sec	0.0054											
				0.1298	0.3246	m3/mint												3HP
16	LS13	mh	40	1.6900	4.2100	Ltrs/sec		1.00	0.0696	100	0.1000	0.4844	2.39	0.096	10.00	2.00	12.10	0.77
	MH	MH		0.0017	0.0038	m3/sec	0.0038											
				0.1014	0.2282	m3/mint												1 HP
17	LS14	n2726	1050	2.3760	5.9400	Ltrs/sec												
				0.0024	0.0059	m3/sec	0.0059	1.00	0.0870	100	0.100	0.7567	5.84	6.128	11.00	2.00	19.13	2.16
				0.1426	0.3564	m3/mint												
					0.0000													3НР

## **APPENDIX- VI-POWER CALCULATION**

Sl no.	Name	Pumpset Capacity in HP	Pumpset Capacity in KW	No of Pumpset	No of Stand by	Working Time	Power Consumpti on/ day	Power Consumpti on/ year	Power cost @Rs7/unit	Remarks
					STP					
1	Raw Sewage Sump	25	18.65	2	1	24	447.6	163374	1143618	
2	Air Blower	46	34.316	4	1	24	2470.752	901824.48	6312771.36	
3	Sludge Transfer to Thickner Pump	2	1.492	2	1	24	35.808	13069.92	91489.44	
4	Sludge Transfer to Centrifuge Pump	1	0.746	2	1	24	17.904	6534.96	45744.72	
5	Clarified water to ASF/PSF Pump	20	14.92	3	1	24	716.16	261398.4	1829788.8	
6	Mixer	3	2.238	2	1	24	53.712	19604.88	137234.16	
7	Clarifier to Sludge Sump Pump	2	1.492	2	1	24	35.808	13069.92	91489.44	
8	Centrate Sump to EQ Tank	2	1.492	2	1	24	35.808	13069.92	91489.44	
9	High Pressure Jet Pump	1	0.746	1	0	1	0.746	272.29	1906.03	
					NET WOR	K				
1	LS1	1	0.746	2	1	24	17.904	6534.96	45744.72	
2	LS2	1	0.746	2	1	24	17.904	6534.96	45744.72	
3	LS3	1.5	1.119	2	1	24	26.856	9802.44	68617.08	
4	LS4	3.5	2.611	2	1	24	62.664	22872.36	160106.52	
5	LS5	0.5	0.373	2	1	24	8.952	3267.48	22872.36	
6	LS6	1	0.746	2	1	24	17.904	6534.96	45744.72	
7	LS7	0.5	0.373	2	1	24	8.952	3267.48	22872.36	
8	LS8	1	0.746	2	1	24	17.904	6534.96	45744.72	
9	LS9	2	1.492	2	1	24	35.808	13069.92	91489.44	
10	LS10	2	1.492	2	1	24	35.808	13069.92	91489.44	

11	LS11	3	2.238	2	1	24	53.712	19604.88	137234.16	
12	LS12	3	2.238	2	1	24	53.712	19604.88	137234.16	
13	LS13	3	2.238	2	1	24	53.712	19604.88	137234.16	
14	LS14	3	2.238	2	1	24	53.712	19604.88	137234.16	
15	PH-1	27	20.142	2	1	24	483.408	176443.92	1235107.44	
16	STP Ligting		15			24	360	131400	919800	
	Ligting-Well and Lifting stations		15			24	360	131400	919800	
								2001371.7	14009601.6	

## **APPENDIX- VII- FLEX TABLE-CONDUITS**

		<u> </u>	1							
			Invert		Invert	Length	Slope	Elevation	Elevation	
		Start	(Start)		(Stop)	_	1 -	Ground	Ground	Size
ID	Label	Node	(m)	Stop Node		d) (m)	ted) (%)	(Start) (m)	(Stop) (m)	(Display)
5443	CO-598	MH-453	7.04	n926	12.86	35	16.757	8.16		200 mm
3359	p910(2)	MH-279	17.18	n1334	13.53	24	15.471	18.3	14.65	200 mm
3000	p603(1)	n900	14.07	MH-473	11.37	19	14.43	15.19	12.49	200 mm
3468	p1447	n1465	2.14	n2094	5.24	23	13.59	6.48	6.36	200 mm
3347	p900	n1318	9.35	n1319	12.09	22	12.361	10.47	13.21	200 mm
2735	p366	n567	7.03	n568	8.51	13	11.547	9.02	9.62	200 mm
4595	p1959(2)	MH-109	14.91	n2856	12.35	22	11.532	16.02	13.47	200 mm
4252	p1668	n2424	8.28	n2425	11.54	30	11.002	9.39	12.66	200 mm
4247	p1662	n2415	51.72	n2416	48.11	36	10.119	52.84	49.23	200 mm
2999	CO-138	MH-474	7.83	n899	11.51	37	9.885	8.95	12.63	200 mm
3363	p916	n1339	8.2	n1340	10.73	29	8.702	9.32	11.84	200 mm
	p1274	n1854	4.44	n594	2.13	27	8.692	5.56	5.76	200 mm
4946	p2269	n3293	8.59	n3295	9.66	12	8.633	9.71	10.78	200 mm
3086	p675(1)	n1004	10.62	MH-686	9	20	8.095	11.74	10.12	200 mm
3693	p1190	n1739	17.91	n1740	16.5	19	7.265	19.03	17.64	200 mm
4818	p2146	n3128	13.3	n3129	14.83	24	6.502	14.41	15.95	200 mm
3784	p1268(1)	n1844	5.05	MH-703	7.14	35	5.94	6.16	8.26	200 mm
4015	p1475	n2140	9.77	n2139	8.24	30	5.121	10.89	9.36	200 mm
4111	p1551(2)	MH-190	20.74	n2254	21.59	18	4.837	21.85	22.71	200 mm
	p926	n1352	6.37	n1353	4.97	30	4.677	7.49	6.09	200 mm
4017	p1477	n2144	7.61	n2142	8.99	30	4.606	8.73	10.11	200 mm
3619	p1127	n1637	9.07	n1639	7.73	30	4.468	10.19	8.85	200 mm
3173	CO-280	n1116	6.81	n1112	8.01	28	4.243	9.05	9.13	200 mm
3027	p625(1)	n929	12.34	MH-457	11.01	32	4.099	13.46	12.13	200 mm
	p688	n1022		n1023	9.57		4.075	11.91		200 mm
4931	p2252	n3270	5.47	n3269	6.69	30	4.059	6.59	7.81	200 mm
3316	p875	n1283	17.22	n1281	18.4	30	3.964	18.34	19.52	200 mm
3002	p603(2)	MH-473	11.37	n901	8.17	22	14.479	12.49	9.28	200 mm
4817	p2145	n3126	9.35	n3128	13.3	27	14.347	10.47	14.41	200 mm
4461	p1848	n2687	5.97	n2689	6.53	19	2.934	7.09	7.65	200 mm
	p600(1)	n248	6.08	MH-474	7.83	17	10.568	7.2	8.95	200 mm
5217	CO-186	n2483	7.31	n2487	11.5	43	9.745	8.43	12.73	200 mm
3395	p950	n1387	6.54	n1388	7.36	36	2.26	7.66	8.48	200 mm
3692	CO-68	n1736	18.45	MH-393	19.31	38	2.249	19.57	20.43	200 mm
	p672	n1000	10.23	n1001	12.44	25	8.734	11.34	13.56	200 mm
4063	p1516	n2203	5.87	n2201	5.06	38	2.127	6.98	6.18	200 mm
3867	p1349	n1954	5.51	n1956	5.87	17	2.12	6.63	6.99	200 mm
4937	p2259	n3279	9.6	n3281	10.16	26	2.113	10.72	11.28	200 mm
4594	p1960	n2856	12.35	n2858	9.86	30	8.389	13.47	10.97	200 mm

5284 (CO-314   n2204   7.2   n2205   6.59   2.9   2.079   8.31   7.7   200 mm   4936   p2258   n3278   7.25   n3279   9.6   30   7.978   8.36   10.72   200 mm   3312   p872   n1277   19.64   n1276   18.02   21   7.833   20.93   19.14   200 mm   3312   p872   n1277   19.64   n1276   18.02   21   7.833   20.93   19.14   200 mm   346   p899   n1316   7.38   n1318   9.35   30   1.933   19.94   20.52   200 mm   346   p899   n1316   7.38   n1318   9.35   30   1.639   8.55   10.47   200 mm   346   p899   n1316   7.38   n1318   9.35   30   1.646   8.52   9.01   200 mm   3474   p1767   7.56   6.65   n3293   8.59   30   6.672   7.77   9.71   200 mm   3474   p1767   n2561   35   n2562   39.1   30   13.804   36.12   40.22   200 mm   308   p675(2)   MH-686   9   n1006   8.2   14   5.875   10.12   9.31   200 mm   308   p675(2)   MH-686   9   n1006   8.2   14   5.875   10.12   9.31   200 mm   3726   CO-330   n1842   4.68   n1782   0.74   30   13.197   5.8   5.65   200 mm   3726   CO-330   n1842   4.68   n1782   0.74   30   13.197   5.8   5.65   200 mm   3726   CO-330   n1842   4.68   n1782   0.74   30   13.197   5.8   5.65   200 mm   3701   p1195(2)   MH-395   16.63   n1746   13.41   5.25   30   1.457   6.14   6.37   200 mm   3701   p1195(2)   MH-395   16.63   n1746   13.41   31.45   5.85   9.15   200 mm   3701   p1195(2)   MH-395   16.63   n1746   13.41   2.6   12.159   18.01   14.53   200 mm   3701   p1195(2)   MH-395   16.63   n1746   13.41   2.6   12.159   18.01   14.53   200 mm   303   p673(1)(1) n1001   12.44   MH-685   12.59   12   12.63   13.56   13.71   200 mm   303   p604   n901   8.17   n902   5.71   23   10.698   9.28   6.83   200 mm   304   p366   n2550   n2550   n2560   n256		•									
3312   p872   n1277	5284	CO-314	n2204	7.2	n2205	6.59	29	2.079	8.31	7.7	200 mm
Sact   CO-464   n.2422	4936	p2258	n3278	7.25	n3279	9.6	30	7.978	8.36	10.72	200 mm
2829   p446   n682   18.82   n683   19.4   30   1.933   19.94   20.52   200 mm   3346   p899   n1316   7.38   n1318   9.35   30   6.592   8.5   10.47   200 mm   4945   p2268   n3291   6.65   n3293   8.59   30   6.472   7.77   9.71   200 mm   4945   p2268   n3291   6.65   n3293   8.59   30   6.472   7.77   9.71   200 mm   4945   p2268   n3291   6.65   n3293   8.59   30   13.804   36.12   40.22   200 mm   4047   p1767   n2561   35   n2562   39.1   30   13.804   36.12   40.22   200 mm   3088   p675(2)   MH-686   9   n1006   8.2   14   5.875   10.12   9.31   200 mm   4189   p1616   n2348   3.13   n2347   3.44   21   1.468   4.43   4.55   200 mm   4189   p1616   n2348   3.13   n2347   3.44   21   1.468   4.43   4.55   200 mm   4494   p1882   n2733   8.46   n2735   8.03   30   1.457   6.14   6.37   200 mm   4494   p1882   n2733   8.46   n2735   8.03   30   1.457   6.14   6.37   200 mm   4494   p1882   n2733   8.46   n2735   8.03   30   1.435   9.58   9.15   200 mm   4589   p1956   n2850   15.06   n2852   16.6   30   1.357   19.28   18.88   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   4372   p1766   n2559   20.17   MH-90   0.74   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3083   p673(1)(1)   n255   5.09   n260   n2850   15.06   n2852   16.6   30   5.116   16.18   17.79   200 mm   3083   p673(1)(1)   n2001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n201   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n201   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   3083   p673(1)(1)   n201   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   300   0.001   0.001   0.001   0.001   0.001   0.001   0.001   0.001	3312	p872	n1277	19.64	n1276	18.02	21	7.833	20.93	19.14	200 mm
3346   p899   n1316	5361	CO-464	n2422	8.11	n1534	2.88	30	17.487	9.64	5.57	200 mm
2567   p96	2829	p446	n682	18.82	n683	19.4	30	1.933	19.94	20.52	200 mm
4945   p.2268   n.3291   6.65   n.3293   8.59   30   6.472   7.77   9.71   200 mm   3641   p.1143   n.1664   4.41   n.1666   1.93   18   14.119   5.86   5.35   200 mm   3701   2739   p.369   n.571   9.55   n.573   8.61   16   5.927   10.67   9.72   200 mm   3088   p.675(2)   MH-686   9   n.1006   8.2   14   5.875   10.12   9.31   200 mm   3088   p.675(2)   MH-686   9   n.1006   8.2   14   5.875   10.12   9.31   200 mm   3726   CO-330   n.1842   4.68   n.1782   0.74   30   13.197   5.8   5.65   200 mm   2702   p.924   n.524   4.81   n.1351   5.25   30   1.457   6.14   6.37   200 mm   2702   p.924   n.524   4.81   n.1351   5.25   30   1.457   6.14   6.37   200 mm   2579   p.108   n.191   18.17   n.193   1.7.76   30   1.357   19.28   1.88   200 mm   2579   p.108   n.191   18.17   n.193   1.7.76   30   1.357   19.28   1.8.8   200 mm   3701   p.1195(2)   MH-395   16.63   n.1746   13.41   2.6   12.159   18.01   14.53   200 mm   4.589   p.1956   n.2850   15.06   n.2852   16.6   30   5.116   16.18   17.9   200 mm   4.589   p.1956   n.2850   15.06   n.2852   16.6   30   5.116   16.18   17.9   200 mm   4.113   p.1551(1)   n.2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   4.113   p.1551(1)   n.2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   n.1338   6.85   n.1339   8.2   30   4.669   7.7   6.32   200 mm   3.275   3.200   m.2575   3.200   m.	3346	p899	n1316	7.38	n1318	9.35	30	6.592	8.5	10.47	200 mm
4945   p.2268   n.3291   6.65   n.3293   8.59   30   6.472   7.77   9.71   200 mm   3641   p.1143   n.1664   4.41   n.1666   1.93   18   14.119   5.86   5.35   200 mm   3701   2739   p.369   n.571   9.55   n.573   8.61   16   5.927   10.67   9.72   200 mm   3088   p.675(2)   MH-686   9   n.1006   8.2   14   5.875   10.12   9.31   200 mm   3088   p.675(2)   MH-686   9   n.1006   8.2   14   5.875   10.12   9.31   200 mm   3726   CO-330   n.1842   4.68   n.1782   0.74   30   13.197   5.8   5.65   200 mm   2702   p.924   n.524   4.81   n.1351   5.25   30   1.457   6.14   6.37   200 mm   2702   p.924   n.524   4.81   n.1351   5.25   30   1.457   6.14   6.37   200 mm   2579   p.108   n.191   18.17   n.193   1.7.76   30   1.357   19.28   1.88   200 mm   2579   p.108   n.191   18.17   n.193   1.7.76   30   1.357   19.28   1.8.8   200 mm   3701   p.1195(2)   MH-395   16.63   n.1746   13.41   2.6   12.159   18.01   14.53   200 mm   4.589   p.1956   n.2850   15.06   n.2852   16.6   30   5.116   16.18   17.9   200 mm   4.589   p.1956   n.2850   15.06   n.2852   16.6   30   5.116   16.18   17.9   200 mm   4.113   p.1551(1)   n.2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   4.113   p.1551(1)   n.2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   p.166   n.2559   28.94   n.2561   3.5   3.2   18.786   30.06   36.12   200 mm   3.275   n.1338   6.85   n.1339   8.2   30   4.669   7.7   6.32   200 mm   3.275   3.200   m.2575   3.200   m.	2567	p96	n172	7.4	n174	7.9	30	1.646	8.52	9.01	200 mm
3641   1143		·		6.65	n3293	8.59	30			9.71	200 mm
4374   p1767		_									
2739   p369   n571   9.55   n573   8.61   16   5.927   10.67   9.72   200 mm						_					
3088   p675(2)   MH-686		•				_					
Harrow   H		•					<del></del>				
3726         CO-330         n1842         4.68         n1782         0.74         30         13.197         5.8         5.65         200 mm           2702         p924         n524         4.81         n1351         5.25         30         1.457         6.14         6.37         200 mm           5583         CO-62         n2248         20.02         MH-192         22.79         41         6.768         21.14         23.91         200 mm           4494         p1882         n2733         8.46         n2735         8.03         30         1.435         9.58         9.15         200 mm           3701         p195(2)         MH-395         16.63         n1746         13.41         26         12.159         18.01         14.53         200 mm           4589         p1956         n2850         15.06         n2852         16.6         30         5.116         16.18         17.9         200 mm           4014         p1674         n2139         8.24         n2137         6.75         30         4.988         9.36         7.86         200 mm           4113         p1551(1)         n2213         8.24         n2137         6.75         30		. , ,									
2702         p924         n524         4.81         n1351         5.25         30         1.457         6.14         6.37         200 mm           5583         CO-662         n2248         20.02         MH-192         22.79         41         6.768         21.14         23.91         200 mm           4494         p1882         n2733         8.46         n2735         8.03         30         1.435         9.58         9.15         200 mm           3701         p1195(2)         MH-395         16.63         n1746         13.41         26         12.159         18.01         14.53         200 mm           4589         p1956         n2850         15.06         n2852         16.6         30         5.116         16.18         17.9         200 mm           4014         p1474         n2139         8.24         n2137         6.75         30         4.988         9.36         7.86         200 mm           4013         p1551(1)         n2255         20.17         MH-190         20.74         12         4.796         21.28         21.85         200 mm           3001         p604         n901         8.17         n902         5.71         23		•				_					
5583         CO-662         n2248         20.02         MH-192         22.79         41         6.768         21.14         23.91         200 mm           4494         p1882         n2733         8.46         n2735         8.03         30         1.435         9.58         9.15         200 mm           2579         p108         n191         18.17         n193         17.76         30         1.357         19.28         18.88         200 mm           4589         p1956         n2850         15.06         n2852         16.6         30         5.116         16.18         17.9         200 mm           3083         p673(1)(1)         n1001         12.44         MH-685         12.59         12         1.263         13.56         13.71         200 mm           4014         p1474         n2139         8.24         n2137         6.75         30         4.988         9.36         7.86 200 mm           4113         p155(1)         n2255         20.17         MH-190         20.74         12         4.796         21.28         21.85         200 mm           4113         p156(2)         n5259         28.94         n2561         35         32         18.						_					
4494         p1882         n2733         8.46         n2735         8.03         30         1.435         9.58         9.15         200 mm           2579         p108         n191         18.17         n193         17.76         30         1.357         19.28         18.88         200 mm           3701         p1956         n2850         15.06         n2850         16.6         30         5.116         16.18         17.9         200 mm           4589         p1956         n2850         15.06         n2850         16.6         30         5.116         16.18         17.9         200 mm           4014         p1474         n2139         8.24         n2137         6.75         30         4.988         9.36         7.86         200 mm           4113         p1551(1)         n2255         20.17         MH-190         20.74         12         4.796         21.28         21.85         200 mm           4372         p1766         n2559         28.94         n2561         35         32         18.786         30.06         36.12         200 mm           4372         p1766         n2559         28.94         n2561         35         32 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
2579   p108   n191   18.17   n193   17.76   30   1.357   19.28   18.88   200 mm   3701   p1195(2)   MH-395   16.63   n1746   13.41   26   12.159   18.01   14.53   200 mm   4589   p1956   n2850   15.06   n2852   16.6   30   5.116   16.18   17.9   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   4113   p1551(1)   n2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3001   p604   n901   8.17   n902   5.71   23   10.698   9.28   6.83   200 mm   3010   p604   n901   8.17   n902   5.71   23   10.698   9.28   6.83   200 mm   322   p1766   n2559   28.94   n2561   35   32   18.786   30.06   36.12   200 mm   3362   p915   n1338   6.85   n1339   8.2   30   4.669   7.7   6.32   200 mm   3362   p915   n1338   6.85   n1339   8.2   30   4.519   7.79   9.32   200 mm   3228   p795   n1177   4.64   n1179   4.94   27   1.115   6.14   6.06   200 mm   3317   p876(2)(2)   MH-281   16.58   n1283   17.22   14   4.439   17.7   18.34   200 mm   4288   p1653   n2416   48.11   n2418   47.08   23   4.416   49.23   48.47   200 mm   4588   p1955   n2848   12.43   n2850   15.06   27   9.89   13.55   16.18   200 mm   3406   p956(2)   MH-262   7.51   n1396   7.73   20   1.08   8.68   8.84   200 mm   3406   p956(2)   MH-262   7.51   n1396   7.73   20   1.08   8.68   8.84   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.013   7.04   6.85   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.6						_		-			
3701   p1195(2)   MH-395   16.63   n1746   13.41   26   12.159   18.01   14.53   200 mm   4589   p1956   n2850   15.06   n2852   16.6   30   5.116   16.18   17.9   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   4014   p1474   n2139   8.24   n2137   6.75   30   4.988   9.36   7.86   200 mm   4113   p1551(1)   n2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   4372   p1766   n2559   28.94   n2561   35   32   18.786   30.06   36.12   200 mm   4372   p1766   n2559   28.94   n2561   35   32   18.786   30.06   36.12   200 mm   4372   p1766   n2559   6.59   n2207   5.21   30   4.669   7.7   6.32   200 mm   4372   p1531   n1338   6.85   n1339   8.2   30   4.519   7.97   9.32   200 mm   3362   p915   n1338   6.85   n1339   8.2   30   4.519   7.97   9.32   200 mm   3228   p795   n1177   4.64   n1179   4.94   27   1.115   6.14   6.06   200 mm   4248   p1663   n2416   48.11   n2418   47.08   23   4.416   49.23   48.47   200 mm   4588   p1955   n2848   12.43   n2850   15.06   27   9.89   13.55   16.18   200 mm   4990   p1549(2)(1 MH-191   22.84   MH-192   22.79   5   1.075   23.96   23.91   200 mm   3406   p956(2)   MH-262   7.51   n1396   7.73   20   1.08   8.68   8.84   200 mm   4990   p1549(2)(1 MH-191   22.84   MH-192   22.79   5   1.075   23.96   23.91   200 mm   3193   p768   n1138   6.35   n1139   6.04   30   1.015   7.46   7.3   200 mm   3193   p768   n1138   6.35   n1139   6.04   30   1.015   5.73   5.49   200 mm   4938   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   3163   p743   n1101   5.4   n1102   5.9   4.94   1.015   5.77   5.98   200 mm   4579   p1944   n2832   8.62   n2833   8.86   24   1.015   9.77   9.98   200 mm   3173   p748   n1104   5.4   n1102   5.9   4.94   1.014   6.78   7.02   200 mm   4659   p2025   n2957   5.97   n2959   5.67   30   1.013   7.09   6.98   200 mm   4669   p2025   n2957   5.97   n2959   5.67   30   1.013   7.09   6.98   200 mm   4669   p2025   n2957   5.97   n2959   5.67   30   1.											
4589   p1956   n2850   15.06   n2852   16.6   30   5.116   16.18   17.9   200 mm   3083   p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   4014   p1474   n2139   8.24   n2137   6.75   30   4.988   9.36   7.86   200 mm   4113   p1551(1)   n2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3001   p604   n901   8.17   n902   5.71   23   10.698   9.28   6.83   200 mm   4372   p1766   n2559   28.94   n2561   35   32   18.786   30.06   36.12   200 mm   36.205   6.59   n2207   5.21   30   4.669   7.7   6.32   200 mm   36.205   6.59   n2207   5.21   30   4.669   7.7   6.32   200 mm   36.20   p915   n1338   6.85   n1339   8.2   30   4.519   7.97   9.32   200 mm   3228   p795   n1177   4.64   n1179   4.94   27   1.115   6.14   6.06   200 mm   3317   p876(2)(2)   MH-281   16.58   n1283   17.22   14   4.439   17.7   18.34   200 mm   4588   p1955   n2848   12.43   n2850   15.06   27   9.89   13.55   16.18   200 mm   3030   CO-136   n931   10.62   MH-457   11.01   9   4.367   11.74   12.13   200 mm   4990   p1549(2)(1 MH-191   22.84   MH-192   22.79   5   1.075   23.96   23.91   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.018   7.04   6.85   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.018   7.04   6.85   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.018   7.04   6.85   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.73   5.49   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.73   5.49   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.73   5.49   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.76   5.75   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.76   5.75   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.76   5.75   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.015   5.76   5.75   200 mm   3774   n1101   5.4   n1102   5.9   49   1.015   5.77   5.90   200 mm   3774   n1101   5.4   n1102							<del></del>				
3083 p673(1)(1)   n1001   12.44   MH-685   12.59   12   1.263   13.56   13.71   200 mm   4014 p1474   n2139   8.24   n2137   6.75   30   4.988   9.36   7.86   200 mm   4113 p1551(1)   n2255   20.17   MH-190   20.74   12   4.796   21.28   21.85   200 mm   3001 p604   n901   8.17   n902   5.71   23   10.698   9.28   6.83   200 mm   4372 p1766   n2559   28.94   n2561   35   32   18.786   30.06   36.12   200 mm   2738 p368   n569   9.64   n571   9.55   7   1.151   10.76   10.67   200 mm   3362 p915   n1338   6.85   n1339   8.2   30   4.519   7.97   9.32   200 mm   3228 p795   n1177   4.64   n1179   4.94   27   1.115   6.14   6.06   200 mm   3317 p876(2)(2) MH-281   16.58   n1283   17.22   14   4.439   17.7   18.34   200 mm   4588 p1955   n2848   12.43   n2850   15.06   27   9.89   13.55   16.18   200 mm   300   CO-136   n931   10.62   MH-457   11.01   9   4.367   11.74   12.13   200 mm   4990 p1549(2)(1 MH-191   22.84   MH-192   22.79   5   1.075   23.96   23.91   200 mm   3426   p975   n1420   5.92   n1421   5.61   30   1.013   7.04   6.85   200 mm   3426   p375   n1420   5.92   n1421   5.61   30   1.015   5.73   5.49   200 mm   3493   p266   n3283   4.33   n3282   4.63   30   1.015   5.73   5.49   200 mm   3406   p3743   n1138   6.35   n1139   6.04   30   1.015   5.77   5.78   200 mm   3493   p266   n3283   4.33   n3282   4.63   30   1.015   5.77   5.79   200 mm   3493   p768   n1138   6.35   n1139   6.04   30   1.015   5.77   5.79   200 mm   3493   p266   n3283   4.33   n3282   4.63   30   1.015   5.77   5.79   200 mm   3407   p344   n2832   8.62   n2833   8.86   24   1.015   9.77   9.98   200 mm   3407   p344   n2832   8.62   n2833   8.86   24   1.015   9.77   9.98   200 mm   3407   p344   n120   9.91   n1906   10.11   20   1.015   11.41   11.23   200 mm   3407   p344   n1204   9.91   n1906   10.11   20   1.015   11.41   11.23   200 mm   3408   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   3408   p2261   n3283   4.33   n3282   4.63   30   1.015   5.67   5.75   200 mm   3408   p2261		, ,									
4014         p1474         n2139         8.24         n2137         6.75         30         4.988         9.36         7.86         200 mm           4113         p1551(1)         n2255         20.17         MH-190         20.74         12         4.796         21.28         21.85         200 mm           3001         p604         n901         8.17         n902         5.71         23         10.698         9.28         6.83         200 mm           4372         p1766         n2559         28.94         n2561         35         32         18.786         30.06         36.12         200 mm           2738         p368         n569         9.64         n571         9.55         7         1.151         10.76         10.67         200 mm           3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         10.61         6.66         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115						_					
4113         p1551(1)         n2255         20.17         MH-190         20.74         12         4.796         21.28         21.85         200 mm           3001         p604         n901         8.17         n902         5.71         23         10.698         9.28         6.83         200 mm           4372         p1766         n2559         28.94         n2561         35         32         18.786         30.06         36.12         200 mm           5285         CO-316         n2205         6.59         n2207         5.21         30         4.669         7.7         6.32         200 mm           3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         6.14         6.06         200 mm           3317         p876(2)(2)         MH-281         16.58         n1283         17.22         14         4.439         17.7         18.34         200 mm           4248         p1663         n2416         48.11 <tn>n2418         47.08         23         &lt;</tn>											
3001         p604         n901         8.17         n902         5.71         23         10.698         9.28         6.83         200 mm           4372         p1766         n2559         28.94         n2561         35         32         18.786         30.06         36.12         200 mm           5285         CO-316         n2205         6.59         n2207         5.21         30         4.669         7.7         6.32         200 mm           2738         p368         n569         9.64         n571         9.55         7         1.151         10.76         10.67         200 mm           3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         6.14         6.06         200 mm           3317         p876(2)(2)         MH-281         16.58         n1283         17.22         14         4.439         17.7         18.34         200 mm           4588         p1955         n2848         12.43         n2850         15.06         27         9.89 <td></td>											
4372         p1766         n2559         28.94         n2561         35         32         18.786         30.06         36.12         200 mm           5285         CO-316         n2205         6.59         n2207         5.21         30         4.669         7.7         6.32         200 mm           2738         p368         n569         9.64         n571         9.55         7         1.151         10.76         10.67         200 mm           3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         6.14         6.06         200 mm           3317         p876(2)(2)         MH-281         16.58         n1283         17.22         14         4.439         17.7         18.34         200 mm           4248         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           4588         p1955         n2848         12.43         n2850         15.06         27         9											
5285         CO-316         n2205         6.59         n2207         5.21         30         4.669         7.7         6.32         200 mm           2738         p368         n569         9.64         n571         9.55         7         1.151         10.76         10.67         200 mm           3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         6.14         6.06         200 mm           3317         p876(2)(2)         MH-281         16.58         n1283         17.22         14         4.439         17.7         18.34         200 mm           4248         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           4588         p1955         n2848         12.43         n2850         15.06         27         9.89         13.55         16.18         200 mm           3030         CO-136         n931         10.62         MH-457         11.01         9						_					
2738 p368         n569         9.64 n571         9.55         7         1.151         10.76         10.67 200 mm           3362 p915         n1338         6.85 n1339         8.2         30         4.519         7.97         9.32 200 mm           3228 p795         n1177         4.64 n1179         4.94         27         1.115         6.14         6.06 200 mm           3317 p876(2)(2) MH-281         16.58 n1283         17.22         14         4.439         17.7         18.34 200 mm           4248 p1663         n2416         48.11 n2418         47.08         23         4.416         49.23         48.47 200 mm           4588 p1955         n2848         12.43 n2850         15.06         27         9.89         13.55         16.18 200 mm           3030 C0-136         n931         10.62 MH-457         11.01         9         4.367         11.74         12.13 200 mm           3406 p956(2)         MH-262         7.51 n1396         7.73         20         1.08         8.68         8.84 200 mm           4990 p1549(2)(1 MH-191         22.84 MH-192         22.79         5         1.075         23.96         23.91 200 mm           3426 p975         n1420         5.92 n1421         5.61         30 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		•									
3362         p915         n1338         6.85         n1339         8.2         30         4.519         7.97         9.32         200 mm           3228         p795         n1177         4.64         n1179         4.94         27         1.115         6.14         6.06         200 mm           3317         p876(2)(2)         MH-281         16.58         n1283         17.22         14         4.439         17.7         18.34         200 mm           4248         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           4588         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           4588         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           4588         p1663         n2416         48.11         n2418         47.08         23         4.416         49.23         48.47         200 mm           3000         0.136         0.146         7.51         n138         15.06         27							-				
3228 p795         n1177         4.64 n1179         4.94         27         1.115         6.14         6.06 200 mm           3317 p876(2)(2) MH-281         16.58 n1283         17.22         14         4.439         17.7         18.34 200 mm           4248 p1663         n2416         48.11 n2418         47.08         23         4.416         49.23         48.47 200 mm           4588 p1955         n2848         12.43 n2850         15.06         27         9.89         13.55         16.18 200 mm           3030 CO-136 n931         10.62 MH-457         11.01         9         4.367         11.74         12.13 200 mm           3406 p956(2)         MH-262         7.51 n1396         7.73         20         1.08         8.68         8.84 200 mm           4990 p1549(2)(1 MH-191         22.84 MH-192         22.79         5         1.075         23.96         23.91 200 mm           2831 p448 n684         19.53 n686         19.22         30         1.033         20.65         20.34 200 mm           3426 p975 n1420         5.92 n1421         5.61         30         1.018         7.04         6.85 200 mm           3193 p768 n1138         6.35 n1139         6.04         30         1.015         7.46         7.3						_	-				
3317 p876(2)(2) MH-281		·				-					
4248 p1663         n2416         48.11 n2418         47.08         23         4.416         49.23         48.47 200 mm           4588 p1955         n2848         12.43 n2850         15.06         27         9.89         13.55         16.18 200 mm           3030 CO-136         n931         10.62 MH-457         11.01         9         4.367         11.74         12.13 200 mm           3406 p956(2)         MH-262         7.51 n1396         7.73         20         1.08         8.68         8.84 200 mm           4990 p1549(2)(1 MH-191         22.84 MH-192         22.79         5         1.075         23.96         23.91 200 mm           2831 p448         n684         19.53 n686         19.22         30         1.033         20.65         20.34 200 mm           3426 p975         n1420         5.92 n1421         5.61         30         1.018         7.04         6.85 200 mm           3193 p768         n1138         6.35 n1139         6.04         30         1.015         7.46         7.3 200 mm           5059 p599(2)(1) MH-498         4.18 MH-499         4.37         19         1.015         5.73         5.49 200 mm           4575 p1944         n2832         8.62 n2833         8.86         24		·					<del></del>				
4588         p1955         n2848         12.43         n2850         15.06         27         9.89         13.55         16.18         200 mm           3030         CO-136         n931         10.62         MH-457         11.01         9         4.367         11.74         12.13         200 mm           3406         p956(2)         MH-262         7.51         n1396         7.73         20         1.08         8.68         8.84         200 mm           4990         p1549(2)(1         MH-191         22.84         MH-192         22.79         5         1.075         23.96         23.91         200 mm           2831         p448         n684         19.53         n686         19.22         30         1.033         20.65         20.34         200 mm           3426         p975         n1420         5.92         n1421         5.61         30         1.018         7.04         6.85         200 mm           3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19											
3030 CO-136						_					
3406         p956(2)         MH-262         7.51         n1396         7.73         20         1.08         8.68         8.84         200 mm           4990         p1549(2)(1 MH-191         22.84         MH-192         22.79         5         1.075         23.96         23.91         200 mm           2831         p448         n684         19.53         n686         19.22         30         1.033         20.65         20.34         200 mm           3426         p975         n1420         5.92         n1421         5.61         30         1.018         7.04         6.85         200 mm           3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015											
4990         p1549(2)(1 MH-191         22.84 MH-192         22.79         5         1.075         23.96         23.91         200 mm           2831         p448         n684         19.53         n686         19.22         30         1.033         20.65         20.34         200 mm           3426         p975         n1420         5.92         n1421         5.61         30         1.018         7.04         6.85         200 mm           3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78											
2831         p448         n684         19.53         n686         19.22         30         1.033         20.65         20.34         200 mm           3426         p975         n1420         5.92         n1421         5.61         30         1.018         7.04         6.85         200 mm           3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014 <td></td>											
3426         p975         n1420         5.92         n1421         5.61         30         1.018         7.04         6.85         200 mm           3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78         7.02         200 mm           3171         p748         n1109         7.78         n1110         8.08         30         1.013		. , , ,									
3193         p768         n1138         6.35         n1139         6.04         30         1.015         7.46         7.3         200 mm           5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78         7.02         200 mm           3171         p748         n1109         7.78         n1110         8.08         30         1.013         9.24         9.2         200 mm           4659         p2025         n2957         5.97         n2959         5.67         30         1.013		·					<del></del>				
5059         p599(2)(1)         MH-498         4.18         MH-499         4.37         19         1.015         5.73         5.49         200 mm           4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78         7.02         200 mm           3171         p748         n1109         7.78         n1110         8.08         30         1.013         9.24         9.2         200 mm           4659         p2025         n2957         5.97         n2959         5.67         30         1.013         7.09         6.98         200 mm           4464         p1852         n2693         6.45         n2695         6.75         30         1.013 <td></td>											
4938         p2261         n3283         4.33         n3282         4.63         30         1.015         5.67         5.75         200 mm           4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78         7.02         200 mm           3171         p748         n1109         7.78         n1110         8.08         30         1.013         9.24         9.2         200 mm           4659         p2025         n2957         5.97         n2959         5.67         30         1.013         7.09         6.98         200 mm           4464         p1852         n2693         6.45         n2695         6.75         30         1.013         7.87         7.87         200 mm		•									
4575         p1944         n2832         8.62         n2833         8.86         24         1.015         9.77         9.98         200 mm           3827         p1314         n1904         9.91         n1906         10.11         20         1.015         11.41         11.23         200 mm           3163         p743         n1101         5.4         n1102         5.9         49         1.014         6.78         7.02         200 mm           3171         p748         n1109         7.78         n1110         8.08         30         1.013         9.24         9.2         200 mm           4659         p2025         n2957         5.97         n2959         5.67         30         1.013         7.09         6.98         200 mm           4464         p1852         n2693         6.45         n2695         6.75         30         1.013         7.87         7.87         200 mm											
3827       p1314       n1904       9.91       n1906       10.11       20       1.015       11.41       11.23       200 mm         3163       p743       n1101       5.4       n1102       5.9       49       1.014       6.78       7.02       200 mm         3171       p748       n1109       7.78       n1110       8.08       30       1.013       9.24       9.2       200 mm         4659       p2025       n2957       5.97       n2959       5.67       30       1.013       7.09       6.98       200 mm         4464       p1852       n2693       6.45       n2695       6.75       30       1.013       7.87       7.87       200 mm											
3163 p743     n1101     5.4 n1102     5.9     49     1.014     6.78     7.02 200 mm       3171 p748     n1109     7.78 n1110     8.08     30     1.013     9.24     9.2 200 mm       4659 p2025     n2957     5.97 n2959     5.67     30     1.013     7.09     6.98 200 mm       4464 p1852     n2693     6.45 n2695     6.75     30     1.013     7.87     7.87 200 mm		•									
3171     p748     n1109     7.78     n1110     8.08     30     1.013     9.24     9.2     200 mm       4659     p2025     n2957     5.97     n2959     5.67     30     1.013     7.09     6.98     200 mm       4464     p1852     n2693     6.45     n2695     6.75     30     1.013     7.87     7.87     200 mm						_					
4659 p2025     n2957     5.97 n2959     5.67     30     1.013     7.09     6.98 200 mm       4464 p1852     n2693     6.45 n2695     6.75     30     1.013     7.87     7.87 200 mm		·				-					
4464 p1852 n2693 6.45 n2695 6.75 30 1.013 7.87 7.87 200 mm		-	n1109	7.78	n1110	8.08	30	1.013	9.24		
	4659	p2025	n2957	5.97	n2959	5.67	30	1.013	7.09	6.98	200 mm
4640 p2007 n2930 1.99 n2931 2.34 35 1.013 3.64 3.46 200 mm	4464	p1852	n2693	6.45	n2695	6.75	30	1.013	7.87	7.87	200 mm
	4640	p2007	n2930	1.99	n2931	2.34	35	1.013	3.64	3.46	200 mm

3788	p1273	n1851	4.08	n1853	4.26	18	1.013	5.42	5.38	200 mm
3204	p776	n1151	5.61	n1152	5.31	30	1.013	6.73	6.53	200 mm
3698	p1193	n1742	17.12	n1743	16.82	30	1.013	18.24	19.01	200 mm
3812	p1298	n1887	4.34	n1888	4.03	30	1.013	5.46	5.55	200 mm
3302	p863	n1266	7.62	n1267	8.07	44	1.013	9.41	9.19	200 mm
4376	p1769	n2563	39.7	n2564	39.91	20	1.013	41.48	41.03	200 mm
3407	p958	n1397	7.77	n1399	7.47	30	1.013	8.89	8.63	200 mm
2576	•	n187	17.36	n188	17.66	30	1.013	18.49	18.78	200 mm
3007	•	n907		n906	5.43	30	1.013	6.42		200 mm
	CO-380	n3210		MH-356	3.74	38	1.013	5.24		200 mm
_	CO-106	n2795		n2796	5.47	26	1.013	6.7		200 mm
	CO-136	MH-110		n2852	16.6	40	1.013	18.12		200 mm
	CO-614	MH-30		n2525	1.66	46	1.013	3.25		200 mm
	CO-580	n2418		MH-211	47.14	5	1.013	48.47		200 mm
3424		n1417		n1419	6.67	30	1.013	7.8		200 mm
	p1191	n1740		n1741	16.6	10	1.013	17.64		200 mm
3314	•	n1279		n1277	19.64	30	1.012	21.06		200 mm
	p2021	n2950		n2952	5.77	30	1.012	7.19		200 mm
	•				+	<del></del>		4.71		
$\overline{}$	p1614	n2345		n2344	3.29	30	1.012			200 mm
	p1141	n1660		n1662	4.58	30	1.012	6.01		200 mm
	p2152	n3137		n3138	5.46	39	1.012	6.35		200 mm
	p2244	n3259		n3261	4.59	19	1.012	5.56		200 mm
	p1121	n1629		n1631	33.85	36	1.012	35.87		200 mm
_	p1737(2)	MH-29		n2522	2	6	1.008	3.13		200 mm
	CO-430	n2124		n2126	5.28	14	15.47	6		200 mm
3081	•	n999		n1000	10.23	25	8.329	9.23		200 mm
3101	•	n1023		n1024	8.54	28	3.688	10.69		200 mm
	p1128	n1639		n1641	6.65	30	3.616	8.85		200 mm
	CO-276	n1274		n1276	18.02	30	8.065	16.68		200 mm
	CO-526	MH-592	18.51		19.22	20	3.552	19.63		200 mm
	. ,	n2489		MH-330	11.69	12	0.847	12.92		200 mm
_	p1187	n1735	17.44	n1736	18.45	30	3.38	18.55	19.57	200 mm
	p1210	n1740	16.5	n1766	14.29	30	7.393	17.64	15.41	200 mm
2580	p109	n193	17.76	n194	16.78	30	3.256	18.88	17.9	200 mm
	p1714	n2490	11.6	n2491	7.88	30	12.582	12.87	9	200 mm
4811	p2144	n3120	7.3	n3126	9.35	30	6.873	8.42	10.47	200 mm
2827	p445	n680	18.26	n682	18.82	19	2.92	19.38	19.94	200 mm
4107	p1547(1)	n2248	20.02	MH-193	19.14	14	6.39	21.14	20.26	200 mm
4007	p1478	n2129	6.77	n2144	7.61	30	2.816	7.89	8.73	200 mm
4300	p1708	n2481	5.45	n2483	7.31	30	6.2	6.57	8.43	200 mm
2574	p103	n183	14.95	n185	16.77	30	6.059	16.07	17.89	200 mm
4303	p1711	n2487	11.5	n2488	11.81	47	0.653	12.73	12.92	200 mm
3358	p911(1)	n1334	13.53	MH-278	11.36	18	11.766	14.65	12.48	200 mm
2833	p450	n687	18.17	n689	15.72	26	9.324	19.29	16.84	200 mm
2835	p451(1)(1)	n689	15.72	MH-591	13.15	18	14.016	16.84	14.26	200 mm
	p676	n1006	8.2	n1007	6.97	26	4.623	9.31	8.09	200 mm
	p1768	n2562		n2563	39.7	30	2.021	40.22		200 mm
		<u> </u>								

4932   p2254   n3272		Π			Г		-				
2752   p104   n185		•	n3272			5.47	30	2.008	5.99		
2732 p  1303	5011	p876(2)(1)	MH-280	16.24	MH-281	16.58	8	4.439	17.36	17.7	200 mm
4587   p1954   n2846   9.95   n2848   12.43   33   7.518   11.07   13.55   200 mm   14600   p2026(1)   n2959   5.67   MH-57   5.32   19   1.874   6.98   6.44   200 mm   24.737   p1.65(2)   MH-570   28.49   a2559   28.94   4   11.05   29.6   30.06   200 mm   2503   p1884(1)   n2737   7.86   MH-50   7.29   15   3.893   9.2   8.41   200 mm   200 p1473   n2137   6.75   n2126   5.28   38   3.891   7.86   6.4   200 mm   200 p1473   n2137   6.75   n2126   5.28   38   3.891   7.86   6.4   200 mm   200 p1473   n2133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   200 p1473   n1133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   200 p1473   n1133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   200 p1473   n1133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   200 p1473   n1133   4.74   n1315   15   14.282   12.07   14.26   200 mm   200 p1473   n1140   14.75   n1161   1.34   112   25.502   6.2   6.19   200 mm   200 p1473   n1140   14.75   n1161   1.34   112   25.502   6.2   6.19   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.982   14.28   16.07   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.982   14.28   16.07   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.982   14.28   16.07   200 mm   2573   p102   n184   13.6   n183   14.95   30   5.982   14.28   16.07   200 mm   2573   p102   n184   13.6   n184   14.95   30   5.982   14.28   16.07   200 mm   2573   p102   n184   13.6   n184   14.95   30   5.983   14.28   16.07   200 mm   2573   p102   n184   13.6   n184   14.95   30   5.983   14.28   16.07   200 mm   2573   p102   n184   13.6   n184   24.24   16.27   30.3   21.24   20.24	2575	p104	n185	16.77	n187	17.36	30	1.968	17.89	18.49	200 mm
4587   p1954   n2846   9.95   n2848   12.43   33   7.518   11.07   13.55   200 mm   14600   p2026(1)   n2959   5.67   ml-75   5.32   19   1.874   6.98   6.44   200 mm   14737   p1765(2)   ml-750   28.49   n2559   28.94   4   11.05   29.6   30.06   200 mm   2503   p1884(1)   n2737   7.86   ml-50   7.29   15   3.893   9.2   8.41   200 mm   200	2732	p1303	n1893	3.53	n563	1.22	13	17.375	5.71	6.04	200 mm
4660   p2026(1)   n2959   5.67   MH-57   5.32   19   1.874   6.98   6.44   200 mm   4373   p1765(2)   MH-750   28.49   n2559   28.94   4   11.05   29.6   30.06   200 mm   4003   p1473   n2137   7.86   MH-50   7.29   15   3.893   9.2   8.41   200 mm   4003   p1473   n2137   6.75   n2126   5.28   38   3.891   7.86   6.4   200 mm   3357   p911(2)   MH-278   11.36   n1332   10.27   9   11.814   12.48   11.39   200 mm   3191   p897   n1133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   3191   p897   n1160   4.53   n1161   1.34   12   25.502   6.2   6.19   200 mm   3211   p783   n1160   4.53   n1161   1.34   12   25.502   6.2   6.19   200 mm   3911   p783   n1160   4.53   n1161   1.34   11.35   15   14.282   11.07   14.26   200 mm   4.991   p1547(2)(1 MH-193   19.14   MH-194   18.79   6   6.344   20.26   19.9   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   3728   C0-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   3728   C0-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.42   200 mm   3739   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   3439   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   3608   p1715   n2491   7.78   n2493   5.2   30   8.976   9   6.32   200 mm   3604   p1715   n2491   7.78   n2493   5.2   30   8.976   9   6.32   200 mm   3604   p1715   n2491   7.78   n2493   5.2   30   1.595   1.53   11.62   200 mm   3730   p1765(1)   n2557   25.86   MH-250   28.49   3.11   3.8   3.38   3.9   9.00 mm   3730   p1765(1)   n2557   25.86   MH-283   12.93   5   11.935   13.4   14.05   200 mm   3730   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76	4587	p1954	n2846	9.95	n2848	12.43	33	7.518	11.07	13.55	200 mm
4373   1765(2)   MH-750   28.49   n2559   28.94   4   11.05   29.6   30.06   200 mm		•		5.67	MH-57		19		6.98		
5503   p1884(1)   p2737   7.86   MH-50   7.29   15   3.893   9.2   8.41   200 mm   2000 mm   20137   6.75   p2126   5.28   38   3.891   7.86   6.4   200 mm   20137   911(2)   MH-278   11.36   n1332   10.27   9   11.814   12.48   11.39   200 mm   2668   189   n316   33.71   n318   38   48   9.001   34.83   39.12   200 mm   2668   189   n316   33.71   n318   38   48   9.001   34.83   39.12   200 mm   200					l						
4003 p1473   n2137   n2137   n2126   n2126   n228   n38   n3.891   n3.89   n4.88   n3.89   n3.387   n911(2)   mH-278   n1.36   n1332   n1.27   n2.88   n3.89   n3.88   n3.891   n3.88   n3.891   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.81   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.81   n3.81   n3.88   n3.89   n3.89   n3.89   n3.89   n3.81   n3.88   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.81   n3.88   n3.89   n3.89   n3.89   n3.89   n3.89   n3.89   n3.81   n3.89   n3.											
3357   p911(2)   MH-278   11.36   n1332   10.27   9   11.814   12.48   11.39   200 mm   3191   p897   n1133   4.74   n1315   6.69   30   6.496   7.86   7.81   200 mm   2668   p189   n316   33.71   n318   38   48   9.001   34.83   39.12   200 mm   3211   p783   n1160   4.53   n1161   1.34   12   25.502   6.2   6.19   200 mm   3391   0.524   n690   10.95   MH-991   13.15   15   14.282   12.07   14.26   200 mm   4991   p1547(2)(1   MH-193   19.14   MH-194   18.79   6   6.344   20.26   19.9   200 mm   3728   C0-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   3728   C0-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   3728   c0-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   3728   20137   n3117   6.88   n2566   a.93   32   13.216   8.71   7.48   200 mm   4379   p2137   n3117   6.88   n2566   a.93   32   13.216   8.71   7.48   200 mm   4308   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   4308   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   34.39   200 mm   4371   p1765(1)   n2557   25.86   MH-283   12.93   5   13.84   8.41   7.71   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   3   12.22   5   8   6.42   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   C0-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   40.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   10.00   1											
3191 p897		•									
2668   p189   n316   33.71   n318   38   48   9.001   34.83   39.12   200 mm   3211   p783   n1160   4.53   n1161   1.34   12   25.502   6.2   6.19   200 mm   34.89   11547(2)(1 MH-193   19.14   MH-194   18.79   6   6.344   20.26   19.99   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   3728   CO-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   4576   p1961   n2858   9.86   n2832   8.62   22   5.721   10.97   9.77   200 mm   4379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   4379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   4379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   4308   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   4308   p1118(2)   MH-254   32.11   n1627   33.2   12   8.694   33.23   34.83   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   4371   p1765(1)   n2557   25.86   MH-750   24.89   23   11.935   13.4   14.05   200 mm   4371   p1765(1)   n2557   25.86   MH-750   24.89   23   11.647   26.98   29.6   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   17.01   14.05   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   17.01   14.05   200 mm   4008   p1664   n2385   46.64   n2418   47.08   9   4.95   47.76   48.47   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3080   p607   n1007   6.97   n1009   5.59   30   4.619   8.09   6.71   200 m						<del> </del>					
3211 p783		•									
S391   CO-524   n690   10.95   MH-591   13.15   15   14.282   12.07   14.26   200 mm   14.991   p1547(2)(1   MH-193   19.14   MH-194   18.79   6   6.344   20.26   19.9   200 mm   2581   p110   n194   16.78   n196   16.01   22   3.566   17.9   17.13   200 mm   2573   p102   n181   13.16   n183   14.95   30   9.824   5.39   5.64   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   24379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   2438   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   2400   0.550   MH-848   29.26   n316   33.71   39   11.387   30.38   34.83   200 mm   3608   p1118(2)   MH-254   32.11   n1627   33.2   12   8.694   33.23   34.39   200 mm   2404   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   2504   p1884(2)   MH-50   7.29   n2739   6.59   13   5.384   8.41   7.71   200 mm   2507   p878(2)(1)   MH-282   12.28   MH-283   12.93   5   11.935   13.4   14.05   200 mm   2499   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   2499   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   2419   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   2419   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   2419   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   3733   n267   n1842   4.68   n1844   5.05   30   1.213   5.8   6.62   200 mm   3739   0.052   n691   7.27   n690   10.95   25   14.714   8.38   12.07   200 mm   3739   0.052   n691   7.27   n690   10.95   25   14.714   8.38   12.07   200 mm   3711   n1207   n1759   10.76   n1758   8.97   13   14.289   11.88   10.09   200 mm   3711   n1207   n1759   10.76   n1758   8.97   13   14.289   11.88   10.09   200 mm   3711   n1207   n1759   10.76   n1758   8.97   13   14.289   11.88   10.09   200 mm   3714   n1207   n1759   10.7		•				_					
4991         p1547(2)(1 MH-193         19.14         MH-194         18.79         6         6.344         20.26         19.9         200 mm           2581         p110         n194         16.78         n196         16.01         22         3.566         17.9         17.13         200 mm           3728         CO-334         n1846         3.66         n1784         0.72         30         9.824         5.39         5.64         200 mm           4576         p1961         n2858         9.86         n2832         8.62         22         5.721         10.97         9.77         200 mm           2573         p102         n181         13.16         n183         14.95         30         5.988         14.28         16.07         200 mm           4308         p1715         n2491         7.88         n2493         5.2         30         8.976         9         6.32         200 mm           4308         p1136(2)         MH-848         29.26         n316         33.71         39         11.387         30.38         34.39         200 mm           4004         p1545         n2244         15.41         n2243         10.5         30         16.59		•	n1160	4.53	n1161	1.34	12	25.502			
2581   p110	5391	CO-524	n690	10.95	MH-591	13.15	15	14.282	12.07	14.26	200 mm
3728   CO-334   n1846   3.66   n1784   0.72   30   9.824   5.39   5.64   200 mm   4576   p1961   n2858   9.86   n2832   8.62   22   5.721   10.97   9.77   200 mm   4379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   5404   CO-550   MH-848   29.26   n316   33.71   39   11.387   30.38   34.32   200 mm   3608   p1118(2)   MH-254   32.11   n1627   33.2   12   8.694   33.23   34.39   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   5504   p1884(2)   MH-50   7.29   n2739   6.59   13   5.384   8.41   7.71   200 mm   2012   p878(2)(1)   MH-282   12.28   MH-283   12.93   5   11.935   13.44   14.05   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4219   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   3608   p1117(2)   MH-253   29.2   n1626   30.49   9   4.756   30.32   31.6   200 mm   3714   p1207   n1759   10.76   n1758   8.97   n1909   4.76   n907   5.13   30. 16.59   5.88   6.42   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4992   CO-4   MH-2   1.72   n2924   0.51   43   2.801   3.78   3.72   200 mm   4219   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   3606   p1117(2)   MH-253   29.2   n1626   30.49   9   4.755   30.32   31.6   200 mm   3714   p1207   n1759   10.76   n1758   8.97   13   4.289   11.88   10.09   200 mm   3714   p1207   n1759   10.76   n1758   8.97   13   4.289   11.88   10.09   200 mm   3309   p677   n1007   6.97   n1009   5.59   30   4.619   8.09   6.71   200 mm   4935   p2257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   3319   p876(1)   n180   11.03   n181   13.16   30   7.105   12.15   14.28   200 mm   3714   p1217   n1759   10.76   n1758   8.97   31   4.289   11.88   10.09   200 mm   3319   p876(1)   n1284   15.89   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3319   p876(1)   n1284   15.89   MH-280   16.24   8   4.444   17.01   17.36   20	4991	p1547(2)(1	MH-193	19.14	MH-194	18.79	6	6.344	20.26	19.9	200 mm
4576         p1961         n2858         9.86         n2832         8.62         22         5.721         10.97         9.77         200 mm           2573         p102         n181         13.16         n183         14.95         30         5.988         14.28         16.07         200 mm           4379         p2137         n3117         6.88         n2566         3.93         22         13.216         8.71         7.48         200 mm           4308         p1715         n2491         7.88         n2493         5.2         30         8.976         9         6.32         200 mm           4604         CO-550         MH-848         29.26         n316         33.71         39         11.387         30.38         34.83         200 mm           4104         p1545         n2244         15.41         n2243         10.5         30         16.59         16.53         11.62         200 mm           5040         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5 11.935	2581	p110	n194	16.78	n196	16.01	22	3.566	17.9	17.13	200 mm
4576         p1961         n2858         9.86         n2832         8.62         22         5.721         10.97         9.77         200 mm           2573         p102         n181         13.16         n183         14.95         30         5.988         14.28         16.07         200 mm           4379         p2137         n3117         6.88         n2566         3.93         22         13.216         8.71         7.48         200 mm           4308         p1715         n2491         7.88         n2493         5.2         30         8.976         9         6.32         200 mm           4604         CO-550         MH-848         29.26         n316         33.71         39         11.387         30.38         34.83         200 mm           4104         p1545         n2244         15.41         n2243         10.5         30         16.59         16.53         11.62         200 mm           5040         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5 11.935	3728	CO-334	n1846	3.66	n1784	0.72	30	9.824	5.39	5.64	200 mm
2573   p102   n181   13.16   n183   14.95   30   5.988   14.28   16.07   200 mm   4379   p2137   n3117   6.88   n2566   3.93   22   13.216   8.71   7.48   200 mm   4308   p1715   n2491   7.88   n2493   5.2   30   8.976   9   6.32   200 mm   5404   CO-550   MH-848   29.26   n316   33.71   39   11.387   30.38   34.83   200 mm   3608   p1118(2)   MH-254   32.11   n1627   33.2   12   8.694   33.23   34.39   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   5504   p1884(2)   MH-50   7.29   n2739   6.59   13   5.384   8.41   7.71   200 mm   5012   p878(2)(1)   MH-282   12.28   MH-283   12.93   5   11.935   13.4   14.05   200 mm   4371   p1765(1)   n2557   25.86   MH-750   28.49   23   11.647   26.98   29.6   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   4513   CO-612   n1284   15.89   MH-283   12.93   78   8.008   17.01   14.05   200 mm   4219   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   4219   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   4371   p1207   n1759   10.76   n1758   8.97   13   4.289   11.88   10.09   200 mm   4371   p1207   n1759   10.76   n1758   8.97   13   4.289   11.88   10.09   200 mm   4389   p677   n1007   6.67   n1009   5.59   30   4.619   8.99   1.88   1.207   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   3389   p870   n1007   6.67   n1338   6.85   30   2.584   7.19   7.97   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25   30   2.57   7.59   8.36   200 mm   4.953   p257   n3277   6.48   n3278   7.25				9.86	n2832	8.62					
4379         p2137         n3117         6.88         n2566         3.93         22         13.216         8.71         7.48         200 mm           4308         p1715         n2491         7.88         n2493         5.2         30         8.976         9         6.32         200 mm           5404         CO-550         MH-848         29.26         n316         33.71         39         11.387         30.38         34.83         200 mm           4104         p1545         n2244         15.41         n627         33.2         12         8.694         33.23         34.39         200 mm           4104         p1545         n2244         15.41         n2243         10.5         30         16.59         11.653         11.62         200 mm           5504         p1884(2)         MH-50         7.29 n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4371         p165(1)         n2557         25.86         MH-750         28.49         23         11.		<u>'</u>									
4308         p1715         n2491         7.88         n2493         5.2         30         8.976         9         6.32         200 mm           5404         CO-550         MH-848         29.26         n316         33.71         39         11.387         30.38         34.83         200 mm           3608         p1118(2)         MH-254         32.11         n1627         33.2         12         8.694         33.23         34.39         200 mm           4104         p1545         n2244         15.41         n2243         10.5         30         16.59         16.53         11.62         200 mm           5504         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4371         p1765(1)         n2557         25.86         MH-750         28.49         23         11.647         26.98         29.6         200 mm           4979         p69(1)         n896         4.1         MH-498         4.18		·				+					
5404         CO-550         MH-848         29.26         n316         33.71         39         11.387         30.38         34.83         200 mm           3608         p1118(2)         MH-254         32.11         n1627         33.2         12         8.694         33.23         34.39         200 mm           4104         p1545         n2244         15.41         n2243         10.5         30         16.59         16.53         11.62         200 mm           5504         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4972         CP-61         n896         4.1         MH-498         4.18         6         1.29         5.9         5.73         200 mm           4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93						<del> </del>					
3608   p1118(2)   MH-254   32.11   n1627   33.2   12   8.694   33.23   34.39   200 mm   4104   p1545   n2244   15.41   n2243   10.5   30   16.59   16.53   11.62   200 mm   5504   p1884(2)   MH-50   7.29   n2739   6.59   13   5.384   8.41   7.71   200 mm   5012   p878(2)(1)   MH-282   12.28   MH-283   12.93   5   11.935   13.4   14.05   200 mm   4371   p1765(1)   n2557   25.86   MH-750   28.49   23   11.647   26.98   29.6   200 mm   2997   p599(1)   n896   4.1   MH-498   4.18   6   1.29   5.9   5.73   200 mm   4992   CO-4   MH-194   18.79   MH-195   16.51   28   8.038   19.9   17.63   200 mm   5453   CO-612   n1284   15.89   MH-283   12.93   37   8.008   17.01   14.05   200 mm   4219   p1664   n2385   46.64   n2418   47.08   9   4.953   47.76   48.47   200 mm   3008   p609   n909   4.76   n907   5.13   30   1.222   5.88   6.42   200 mm   3783   p1267   n1842   4.68   n1844   5.05   30   1.213   5.8   6.16   200 mm   3606   p1117(2)   MH-253   29.2   n1626   30.49   9   14.75   30.32   31.6   200 mm   3711   p1207   n1759   10.76   n1758   8.97   13   14.289   11.88   10.09   200 mm   3308   p677   n1007   6.97   n1009   5.59   30   4.619   8.09   6.71   200 mm   3309   p876(1)   n1880   11.03   n181   13.16   30   7.105   12.15   14.28   200 mm   3714   p1211   n1766   14.29   n1763   12.96   30   4.427   15.41   14.08   200 mm   3714   p1211   n1766   14.29   n1763   12.96   30   4.427   15.41   14.08   200 mm   3431   p876(1)   n1284   15.89   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3423   p972   n1416   6.09   n1417   6.37   25   1.104   7.21   7.8   200 mm   3431   p876(1)   n1284   15.89   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3431   p876(1)   n1284   15.89   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3423   p972   n1416   6.09   n1417   6.37   25   1.104   7.21   7.8   200 mm   3431   p67(1)   MH-23   6.98   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3431   p67(1)   MH-23   6.98   MH-280   16.24   8   4.444   17.01   17.36   200 mm   3431   p621(1)(2)		·			l	+					
4104         p1545         n2244         15.41         n2243         10.5         30         16.59         16.53         11.62         200 mm           5504         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4371         p1765(1)         n2557         25.86         MH-750         28.49         23         11.647         26.98         29.6         200 mm           2997         p599(1)         n896         4.1         MH-498         4.18         6         1.29         5.9         5.73         200 mm           4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43<											
5504         p1884(2)         MH-50         7.29         n2739         6.59         13         5.384         8.41         7.71         200 mm           5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4371         p1765(1)         n2557         25.86         MH-750         28.49         23         11.647         26.98         29.6         200 mm           2997         p599(1)         n896         4.1         MH-498         4.18         6         1.29         5.9         5.73         200 mm           4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           3107         CO-4         MH-2         1.72         n2924         0.51         43						<del> </del>					
5012         p878(2)(1)         MH-282         12.28         MH-283         12.93         5         11.935         13.4         14.05         200 mm           4371         p1765(1)         n2557         25.86         MH-750         28.49         23         11.647         26.98         29.6         200 mm           2997         p599(1)         n896         4.1         MH-498         4.18         6         1.29         5.9         5.73         200 mm           4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30		•				+					
4371         p1765(1)         n2557         25.86         MH-750         28.49         23         11.647         26.98         29.6         200 mm           2997         p599(1)         n896         4.1         MH-498         4.18         6         1.29         5.9         5.73         200 mm           4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30 <td< td=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		•									
2997 p599(1)         n896         4.1 MH-498         4.18         6         1.29         5.9         5.73 200 mm           4992 CO-4         MH-194         18.79 MH-195         16.51         28 8.038         19.9         17.63 200 mm           5453 CO-612         n1284         15.89 MH-283         12.93         37 8.008         17.01         14.05 200 mm           5107 CO-4         MH-2         1.72 n2924         0.51 43 2.801         3.78 3.72 200 mm           4219 p1664         n2385         46.64 n2418         47.08 9 4.953         47.76 48.47 200 mm           3008 p609         n909         4.76 n907         5.13 30 1.222         5.88 6.42 200 mm           3783 p1267         n1842         4.68 n1844         5.05 30 1.213         5.8 6.16 200 mm           3606 p1117(2)         MH-253         29.2 n1626         30.49 9 14.75 30.32         31.6 200 mm           3390 CO-522 n691         7.27 n690         10.95 25 14.714 8.38 12.07 200 mm         11.08 10.09 200 mm           3711 p1207 n1759         10.76 n1758         8.97 13 14.289 11.88 10.09 6.71 200 mm           380 p577 n1007         6.97 n1009 5.59 30 4.619 8.09 6.71 200 mm           3360 p914 n1337         6.07 n1338 6.85 30 2.584 7.19 7.97 200 mm           4935 p2257 n3277 6.48 n3278 7.25 30 2.57 7.59 8.36 200 mm											
4992         CO-4         MH-194         18.79         MH-195         16.51         28         8.038         19.9         17.63         200 mm           5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           3790         CO-522         n691         7.27         n699         10.95         25         1					l	<del> </del>					
5453         CO-612         n1284         15.89         MH-283         12.93         37         8.008         17.01         14.05         200 mm           5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14											
5107         CO-4         MH-2         1.72         n2924         0.51         43         2.801         3.78         3.72         200 mm           4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619<	4992	CO-4	MH-194	18.79	MH-195	16.51		8.038	19.9		
4219         p1664         n2385         46.64         n2418         47.08         9         4.953         47.76         48.47         200 mm           3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584							37	8.008			
3008         p609         n909         4.76         n907         5.13         30         1.222         5.88         6.42         200 mm           3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584         7.19         7.97         200 mm           4935         p2257         n3277         6.48         n3278         7.25         30         2.57 <td>5107</td> <td>CO-4</td> <td>MH-2</td> <td>1.72</td> <td>n2924</td> <td>0.51</td> <td>43</td> <td>2.801</td> <td>3.78</td> <td>3.72</td> <td>200 mm</td>	5107	CO-4	MH-2	1.72	n2924	0.51	43	2.801	3.78	3.72	200 mm
3783         p1267         n1842         4.68         n1844         5.05         30         1.213         5.8         6.16         200 mm           3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584         7.19         7.97         200 mm           4935         p2257         n3277         6.48         n3278         7.25         30         2.57         7.59         8.36         200 mm           2572         p101         n180         11.03         n181         13.16         30         7.105 </td <td>4219</td> <td>p1664</td> <td>n2385</td> <td>46.64</td> <td>n2418</td> <td>47.08</td> <td>9</td> <td>4.953</td> <td>47.76</td> <td>48.47</td> <td>200 mm</td>	4219	p1664	n2385	46.64	n2418	47.08	9	4.953	47.76	48.47	200 mm
3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584         7.19         7.97         200 mm           4935         p2257         n3277         6.48         n3278         7.25         30         2.57         7.59         8.36         200 mm           2572         p101         n180         11.03         n181         13.16         30         7.105         12.15         14.28         200 mm           3319         p876(1)         n1284         15.89         MH-280         16.24         8	3008	p609	n909	4.76	n907	5.13	30	1.222	5.88	6.42	200 mm
3606         p1117(2)         MH-253         29.2         n1626         30.49         9         14.75         30.32         31.6         200 mm           5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584         7.19         7.97         200 mm           4935         p2257         n3277         6.48         n3278         7.25         30         2.57         7.59         8.36         200 mm           2572         p101         n180         11.03         n181         13.16         30         7.105         12.15         14.28         200 mm           3319         p876(1)         n1284         15.89         MH-280         16.24         8	3783	p1267	n1842	4.68	n1844	5.05	30	1.213	5.8	6.16	200 mm
5390         CO-522         n691         7.27         n690         10.95         25         14.714         8.38         12.07         200 mm           3711         p1207         n1759         10.76         n1758         8.97         13         14.289         11.88         10.09         200 mm           3089         p677         n1007         6.97         n1009         5.59         30         4.619         8.09         6.71         200 mm           3360         p914         n1337         6.07         n1338         6.85         30         2.584         7.19         7.97         200 mm           4935         p2257         n3277         6.48         n3278         7.25         30         2.57         7.59         8.36         200 mm           2572         p101         n180         11.03         n181         13.16         30         7.105         12.15         14.28         200 mm           3319         p876(1)         n1284         15.89         MH-280         16.24         8         4.444         17.01         17.36         200 mm           3714         p1211         n1766         14.29         n1763         12.96         30         4		•									
3711       p1207       n1759       10.76       n1758       8.97       13       14.289       11.88       10.09       200 mm         3089       p677       n1007       6.97       n1009       5.59       30       4.619       8.09       6.71       200 mm         3360       p914       n1337       6.07       n1338       6.85       30       2.584       7.19       7.97       200 mm         4935       p2257       n3277       6.48       n3278       7.25       30       2.57       7.59       8.36       200 mm         2572       p101       n180       11.03       n181       13.16       30       7.105       12.15       14.28       200 mm         3319       p876(1)       n1284       15.89       MH-280       16.24       8       4.444       17.01       17.36       200 mm         3714       p1211       n1766       14.29       n1763       12.96       30       4.427       15.41       14.08       200 mm         3423       p972       n1416       6.09       n1417       6.37       25       1.104       7.21       7.8       200 mm         2834       p449(2)       MH-592											
3089 p677 n1007 6.97 n1009 5.59 30 4.619 8.09 6.71 200 mm  3360 p914 n1337 6.07 n1338 6.85 30 2.584 7.19 7.97 200 mm  4935 p2257 n3277 6.48 n3278 7.25 30 2.57 7.59 8.36 200 mm  2572 p101 n180 11.03 n181 13.16 30 7.105 12.15 14.28 200 mm  3319 p876(1) n1284 15.89 MH-280 16.24 8 4.444 17.01 17.36 200 mm  3714 p1211 n1766 14.29 n1763 12.96 30 4.427 15.41 14.08 200 mm  3423 p972 n1416 6.09 n1417 6.37 25 1.104 7.21 7.8 200 mm  2834 p449(2) MH-592 18.51 n687 18.17 14 2.413 19.63 19.29 200 mm  5431 p621(1)(2) MH-23 6.98 MH-453 7.04 6 1.061 8.1 8.16 200 mm						<del> </del>					
3360 p914 n1337 6.07 n1338 6.85 30 2.584 7.19 7.97 200 mm  4935 p2257 n3277 6.48 n3278 7.25 30 2.57 7.59 8.36 200 mm  2572 p101 n180 11.03 n181 13.16 30 7.105 12.15 14.28 200 mm  3319 p876(1) n1284 15.89 MH-280 16.24 8 4.444 17.01 17.36 200 mm  3714 p1211 n1766 14.29 n1763 12.96 30 4.427 15.41 14.08 200 mm  3423 p972 n1416 6.09 n1417 6.37 25 1.104 7.21 7.8 200 mm  2834 p449(2) MH-592 18.51 n687 18.17 14 2.413 19.63 19.29 200 mm  5431 p621(1)(2) MH-23 6.98 MH-453 7.04 6 1.061 8.1 8.16 200 mm		•									
4935         p2257         n3277         6.48         n3278         7.25         30         2.57         7.59         8.36         200 mm           2572         p101         n180         11.03         n181         13.16         30         7.105         12.15         14.28         200 mm           3319         p876(1)         n1284         15.89         MH-280         16.24         8         4.444         17.01         17.36         200 mm           3714         p1211         n1766         14.29         n1763         12.96         30         4.427         15.41         14.08         200 mm           3423         p972         n1416         6.09         n1417         6.37         25         1.104         7.21         7.8         200 mm           2834         p449(2)         MH-592         18.51         n687         18.17         14         2.413         19.63         19.29         200 mm           5431         p621(1)(2)         MH-23         6.98         MH-453         7.04         6         1.061         8.1         8.16         200 mm		•									
2572         p101         n180         11.03         n181         13.16         30         7.105         12.15         14.28         200 mm           3319         p876(1)         n1284         15.89         MH-280         16.24         8         4.444         17.01         17.36         200 mm           3714         p1211         n1766         14.29         n1763         12.96         30         4.427         15.41         14.08         200 mm           3423         p972         n1416         6.09         n1417         6.37         25         1.104         7.21         7.8         200 mm           2834         p449(2)         MH-592         18.51         n687         18.17         14         2.413         19.63         19.29         200 mm           5431         p621(1)(2)         MH-23         6.98         MH-453         7.04         6         1.061         8.1         8.16         200 mm		·				_					
3319 p876(1) n1284 15.89 MH-280 16.24 8 4.444 17.01 17.36 200 mm  3714 p1211 n1766 14.29 n1763 12.96 30 4.427 15.41 14.08 200 mm  3423 p972 n1416 6.09 n1417 6.37 25 1.104 7.21 7.8 200 mm  2834 p449(2) MH-592 18.51 n687 18.17 14 2.413 19.63 19.29 200 mm  5431 p621(1)(2) MH-23 6.98 MH-453 7.04 6 1.061 8.1 8.16 200 mm						<b>—</b>					
3714     p1211     n1766     14.29     n1763     12.96     30     4.427     15.41     14.08     200 mm       3423     p972     n1416     6.09     n1417     6.37     25     1.104     7.21     7.8     200 mm       2834     p449(2)     MH-592     18.51     n687     18.17     14     2.413     19.63     19.29     200 mm       5431     p621(1)(2)     MH-23     6.98     MH-453     7.04     6     1.061     8.1     8.16     200 mm		•				<del> </del>					
3423     p972     n1416     6.09     n1417     6.37     25     1.104     7.21     7.8     200 mm       2834     p449(2)     MH-592     18.51     n687     18.17     14     2.413     19.63     19.29     200 mm       5431     p621(1)(2)     MH-23     6.98     MH-453     7.04     6     1.061     8.1     8.16     200 mm						<del>                                     </del>					
2834 p449(2) MH-592 18.51 n687 18.17 14 2.413 19.63 19.29 200 mm 5431 p621(1)(2) MH-23 6.98 MH-453 7.04 6 1.061 8.1 8.16 200 mm		<u> </u>				<del> </del>					
5431 p621(1)(2) MH-23 6.98 MH-453 7.04 6 1.061 8.1 8.16 200 mm	3423	p972	n1416	6.09	n1417	6.37	25	1.104	7.21	7.8	200 mm
	2834	p449(2)	MH-592	18.51	n687	18.17	14	2.413	19.63	19.29	200 mm
3607 p1118(1) n1626 30.49 MH-254 32.11 17 9.436 31.6 33.23 200 mm	5431	p621(1)(2)	MH-23	6.98	MH-453	7.04	6	1.061	8.1	8.16	200 mm
	3607	p1118(1)	n1626	30.49	MH-254	32.11	17	9.436	31.6	33.23	200 mm

3345	p898	n1315	6.69	n1316	7.38	30	2.296	7.81	8.5	200 mm
4105	p1546(2)	MH-195	16.51	n2244	15.41	12	8.927	17.63	16.53	200 mm
3321	p878(1)	n1287	10.2	MH-282	12.28	17	12.088	11.32	13.4	200 mm
4832	p2253	n3146	4.21	n3272	4.87	30	2.214	5.68	5.99	200 mm
	p669	n996		n997	6.88	21	6.033	6.73		200 mm
	p1117(1)	n1624		MH-253	29.2	21	14.792	27.22		200 mm
	p1309(2)(1			MH-309	8.33	8	10.788	8.64		200 mm
	p1953	n2844		n2846	9.95	30	5.494	9.42		200 mm
	p1933	n2675		n2690	6.15	30	3.473	7.65		200 mm
	•						5.351	14.08		200 mm
	p1209	n1763		n1761	11.36	30				
	p1182	n1720	_	n1728	13.75	30	10.388	11.77		200 mm
	p1472	n2135		n2134	6.09	27	10.374	7.12		200 mm
	p610	n910		n909	4.76	30	1.904	5.36		200 mm
	p1129	n1641		n1643	6.08	30	1.898	7.77		200 mm
5377	CO-496	MH-252	19.91	n1624	26.1	36	17.004	21.03	27.22	200 mm
4944	p2267	n3289	6.1	n3291	6.65	30	1.863	7.21	7.77	200 mm
4220	p1641(2)	MH-212	45.67	n2385	46.64	19	5.133	46.78	47.76	200 mm
3700	p1196	n1746	13.41	n1747	9.14	30	14.39	14.53	10.26	200 mm
3408	p959(1)	n1399	7.47	MH-263	7.35	14	0.81	8.63	8.47	200 mm
	p1764	n2556	22.9	n2557	25.86	30	9.913	24.02	26.98	200 mm
	p670	n997		n999	8.12	39	3.173	8		200 mm
	p1544	n2243		n2242	6.75	30	12.621	11.62		200 mm
	p2171	n3161		n3163	9.96	30	4.792	9.65		200 mm
	CO-292	n1389		n1390	6.7	29	9.282	7.45		200 mm
<b>-</b>	p1348	n1953		n1954	5.51	39	0.742	6.34		200 mm
	p1548 p1552	n2257		n2255	20.17	34	1.663	20.72		200 mm
	·			n1629	+					
	p1120	n1628			33.49	24	0.734	36.2		200 mm
	p1622	n2323		n2358	2.35	30	11.723	4.29		200 mm
	p1185	n1731		n1733	17	34	2.848	17.17		200 mm
	CO-112	n180	11.03		9.12	30	6.4	12.15		200 mm
		n2207		n2209	4.73	30	1.598	6.32		200 mm
	CO-478	MH-262		MH-260	7.36	21	0.707	8.68	8.47	200 mm
4119	p1556	n2262	10.69	n2260	14.82	30	13.895	11.81	15.94	200 mm
4117	p1555	n2260	14.82	n2259	18.44	33	10.832	15.94	19.56	200 mm
5155	CO-78	n2962	4.69	MH-57	5.32	41	1.522	5.81	6.44	200 mm
3821	p1309(1)	n1897	6.85	MH-308	7.52	6	10.794	7.97	8.64	200 mm
3615	p1124	n1633	6.73	n1635	9.81	21	14.689	10.18	11.07	200 mm
3690	p1186	n1733	17	n1735	17.44	30	1.442	18.12	18.55	200 mm
	p2209(2)(1			MH-356	3.74	15	0.634	5.34		200 mm
	p1667	n2422		n2424	8.28	26	0.624	9.64		200 mm
	p742(2)	MH-828		n1101	5.4	24	0.623	6.75		200 mm
	CO-108	MH-848		MH-839	27.58	24	7.033	30.38		200 mm
	p927	n1353		n1354	4.79	28	0.614	6.09		200 mm
	CO-638	n921		n923	6.91	28	2.848	7.23		200 mm
	CO-582	n2384		MH-212	45.67	10	5.372	46.23		200 mm
<b>-</b>	CO-70	n1747		n1748	6.23	22	13.226	10.26		200 mm
3003	p605	n902	5.71	n903	5.06	27	2.378	6.83	6.18	200 mm

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		MH-133	4.86	n2201	5.06	33	0.591	5.98	6.18	200 mm
5455	p1737(1)	n2521	1.8	MH-29	1.93	23	0.585	3.18	3.13	200 mm
3787	p1272	n1849	3.9	n1851	4.08	30	0.584	5.38	5.42	200 mm
4190	p1617	n2350	2.96	n2348	3.13	30	0.581	4.33	4.43	200 mm
3640	p1142	n1662	4.58	n1664	4.41	30	0.581	6	5.86	200 mm
3194	p769	n1139	6.04	n1141	5.87	30	0.581	7.3	7.15	200 mm
3170	p747	n1107	7.61	n1109	7.78	30	0.581	9.29	9.24	200 mm
	p1740	n2525	1.66	n2526	1.49	30	0.581	3.36	3.23	200 mm
	p1847	n2685		n2687	5.97	30	0.581	7.05		200 mm
	p1883	n2735		n2737	7.86	30	0.581	9.15		200 mm
	p777	n1152		n1153	5.13	30	0.581	6.53		200 mm
2566	·	n171		n172	7.4	30	0.581	8.4		200 mm
	CO-266	n2794		n2795	5.21	28	0.581	6.52		200 mm
	CO-266	MH-176		n3137	5.06	35	0.581	6.48		200 mm
	CO-366	n2344		MH-163	3.00	15	0.581	4.68		200 mm
				ļ						
	CO-224	n2930		MH-2	1.72	46	0.581	3.64		200 mm
	CO-348	MH-395		n1743	16.82	32	0.581	18.01		200 mm
	p1851	n2691		n2693	6.45	30	0.581	7.82		200 mm
	p949	n1386		n1387	6.54	30	0.581	7.59		200 mm
	p976	n1421		n1422	5.44	30	0.581	6.85		200 mm
	p862	n1265		n1266	7.62	30	0.581	9.57		200 mm
	p2243	n3258		n3259	4.4	30	0.581	5.55		200 mm
3813	p1299(1)	n1888	4.03	MH-766	3.94	16	0.581	5.55	5.53	200 mm
3687	p1183	n1728	13.75	n1729	15.31	30	5.217	14.87	16.43	200 mm
4847	p2172(1)	n3163	9.96	MH-465	10.59	27	2.318	11.08	11.75	200 mm
3712	p1208	n1761	11.36	n1759	10.76	12	5.137	12.48	11.88	200 mm
3306	p867	n1272	12.86	n1271	9.88	26	11.268	13.97	11	200 mm
4844	p2169	n3158	5.66	n3160	7.12	22	6.622	6.78	8.24	200 mm
4939	p2262	n3285	4.15	n3283	4.33	33	0.531	5.74	5.67	200 mm
3308	p868	n1273	14.87	n1272	12.86	25	8.142	15.99	13.97	200 mm
5191	CO-138	n2840	6.65	n2573	4.38	28	8.242	7.77	7.28	200 mm
	p794	n1176	4.47	n1177	4.64	34	0.512	6.03		200 mm
	p959(2)	MH-263		n1400	7.17	16	1.134	8.47		200 mm
	CO-448	MH-751		n2551	15.81	25	15.046	20.65		200 mm
	p1541	n2239		n2106	1.98	14	17.809	5.64		200 mm
	p619	n920		n921	6.11	20	3.079	6.61		200 mm
	p1713(2)(1			MH-331	11.65	8	0.486	12.9		200 mm
	p1715(2)(1 p1716	n2493		n2495	4.41	18	4.35	6.32		200 mm
	p955(1)	n1394		MH-260	7.36	17	1.086	8.29		200 mm
		MH-284		n1287	10.2	6	7.692	10.85		200 mm
	p879(2) p186(2)(1)			MH-839	27.58	11	7.092	27.94		200 mm
		MH-850			25.77		10.869	27.94		
	· ` '		24.28	<u> </u>	<b></b>	14				200 mm
	p1309(2)(2			n1898	9.37	25	4.06	9.45		200 mm
	p1313	n1903		n1904	9.91	39	0.446	11.61		200 mm
	p1184	n1729		n1731	16.05	27	2.777	16.43		200 mm
	p1554(2)	MH-186		n2258	19.49	22	3.914	19.74		200 mm
4299	p1707	n2480	4.93	n2481	5.45	30	1.734	6.05	6.57	200 mm

4933 p/2256   n3275   n3277   n3277   n4.79   30   2.657   n5.91   200 mm											
3355   CO-278   n1331   8.96   n1329   7.79   20   5.7   10.08   8.91   200 mm	4933	p2256	n3275	6.1	n3277	6.48	22	1.722	7.22	7.59	200 mm
5376   CO-494   n1621   17.66   MH-252   19.91   21   10.488   18.78   21.03   200 mm   4845   p2170   n3160   7.12   n3161   8.53   38   3.725   8.24   9.65   200 mm   4364   p1757   n2546   6.72   n2548   10.04   16   20.139   7.83   11.16   200 mm   4362   p1757   n2546   6.72   n2548   10.04   16   20.139   7.83   11.16   200 mm   4362   p1757   n2546   4.07   n3258   4.22   18   0.889   5.51   5.55   200 mm   4362   p3791   n1289   7.88   MH-284   9.73   24   7.767   9   10.85   200 mm   3324   p8791   n1289   7.88   MH-284   9.73   24   7.767   9   10.85   200 mm   2663   p185(1)   n312   22.53   MH-850   24.28   16   10.719   23.65   25.4   200 mm   2664   p186(1)   n313   25.77   MH-838   26.82   15   6.988   26.88   27.94   200 mm   2005   p1864   p1864   n2128   6.52   n2129   6.77   30   0.816   7.64   7.89   200 mm   3195   p770   n1141   5.87   n1142   5.77   12   0.799   7.15   7.07   200 mm   3005   p2153   n903   5.06   n3139   4.77   13   2.020   6.18   5.89   200 mm   3356   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   3360   p1114   n1619   14.63   n1621   17.66   30   0.148   15.75   18.78   200 mm   2602   p184(2)   MH-837   20.98   n312   22.25   14.069   30   8.169   9.37   11.81   200 mm   3169   p746   n1016   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   310   p869(1)   n1274   15.56   MH-811   15.36   11   1.19   9.55   10.94   200 mm   3485   p151   n1244   15.56   n1416   6.09   30   8.109   9.37   11.81   200 mm   3485   p152   n2242   6.75   MH-811   15.36   n1416   6.09   30   8.109   9.37   11.81   200 mm   3485   p151   n1274   15.56   MH-811   15.36   n1416   6.09   30   8.109   9.37   11.81   200 mm   3485   p152   n2842   7.55   n2844   8.31   30   2.524   6.22   7.41   200 mm   3485   p152   n2842   7.55   n2844   8.31   30   2.524   6.69   7.22   6.99   200 mm   3409   p1531   n1274   15.56   m1416   6.09   30   8.06   6.98   7.21   200 mm   3409   p1531   n2210   4.4   n2209   4.73   30   0.621   6.15   6.34   200 mm   3409   p1	3090	p678	n1009	5.59	n1010	4.79	30	2.657	6.71	5.91	200 mm
4845 p2170         n3160         7.12 n3161         8.53         38         3.725         8.24         9.65 p00 mm           4364 p1759         n2549         11.39 n2551         15.81         30 14.872         12.51         16.93 200 mm           2569 p98         n175         8.49 n177         9.12         13 4.853         9.61         10.24 200 mm           4920 p2242         n3525         4.07 n3258         4.22         18 0.889         5.51         5.55 200 mm           2664 p186(1)         n312         22.53 MH-850         24.28         16 10.719         23.65         25.4 200 mm           2664 p186(1)         n313         25.77 MH-838         26.82         15 6.988         26.88         27.94 200 mm           3195 p770         n1141         5.87 n1142         5.77         12 0.799         7.15 7.07 200 mm           3305 p2153         n903         5.06 n3139         4.77         13 2.202         6.18 5.89 200 mm           4118 p1554(1)         n2259         18.44 MH-186         18.62 4 4 2.18 19.56         19.74 200 mm           3305 p909         n1332         10.27 n1331         8.96         39 3.361         11.39 10.08 200 mm           4100 p1557         n2264         8.55 n2262         10.69 30 10.148 15.5	3355	CO-278	n1331	8.96	n1329	7.79	20	5.7	10.08	8.91	200 mm
4364   1759   n2549   11.39   n2551   15.81   30   14.872   12.51   16.93   200 mm     4362   1757   n2546   6.72   n2548   10.04   16   20.139   7.83   11.16   200 mm     4920   p2242   n3252   4.07   n3258   4.22   18   0.889   5.51   5.55   200 mm     4920   p2242   n3252   4.07   n3258   4.22   18   0.889   5.51   5.55   200 mm     4920   p2242   n3252   4.07   n3258   4.22   18   0.889   5.51   5.55   200 mm     3324   p879(11)   n1289   7.88   MH-284   9.73   24   7.767   9   10.85   200 mm     2663   p185(1)   n312   22.53   MH-850   24.28   16   10.719   23.65   25.4   200 mm     4005   p1468   n2128   6.52   n2129   6.77   30   0.816   7.64   7.89   200 mm     4005   p1468   n2128   6.52   n2129   6.77   30   0.816   7.64   7.89   200 mm     4005   p1468   n2128   6.52   n319   4.77   13   2.202   6.18   5.89   200 mm     4118   p1554(1)   n2259   18.44   MH-186   18.62   4   4.218   19.56   19.74   200 mm     4118   p1554(1)   n2259   18.44   MH-186   18.62   4   4.218   19.56   19.74   200 mm     4120   p1557   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm     4120   p1557   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm     4120   p1557   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm     4120   p1543(1)   m1274   m1619   m163   m1621   m164   m1619   m164   m1619	5376	CO-494	n1621	17.66	MH-252	19.91	21	10.488	18.78	21.03	200 mm
4362   1757   12546   6.72   12548   10.04   16   20.139   7.83   11.16   200 mm     2569   p98   1175   8.49   1177   9.12   13   4.853   9.61   10.24   200 mm     3234   p879(1)   11289   7.88   MH-284   9.73   24   7.767   9   10.85   200 mm     3234   p879(1)   11289   7.88   MH-284   9.73   24   7.767   9   10.85   200 mm     2664   p186(1)   1313   25.77   MH-830   24.28   16   10.719   23.65   25.4   200 mm     2664   p186(1)   1313   25.77   MH-830   24.28   16   10.719   23.65   25.4   200 mm     3195   p770   1141   5.87   1142   5.77   12   0.799   7.15   7.07   200 mm     3195   p770   1141   5.87   1142   5.77   12   0.799   7.15   7.07   200 mm     3195   p770   1141   5.87   1142   5.77   13   2.202   6.18   5.89   200 mm     3195   p780   1332   10.27   13331   8.96   39   3.361   11.39   10.08   200 mm     3366   p909   1332   10.27   13331   8.96   39   3.361   11.39   10.08   200 mm     3601   p1114   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm     3602   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm     3609   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm     3109   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm     3109   p869(1)   n1274   15.56   MH-811   15.36   11   1812   16.68   16.48   200 mm     3100   p869(1)   n1274   15.56   MH-811   15.36   11   1812   16.68   16.48   200 mm     3422   p971   n1415   5.86   n1416   6.09   35   0.642   6.98   7.21   200 mm     3585   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm     3674   CO-224   n1715   5.88   MH-839   9.22   1   0.599   0.515   0.58   200 mm     3675   CO-6492   MH-250   11.31   16.19   4.63   35   9.564   12.42   15.75   200 mm     3676   D706   n1758   8.79   n1840   9.99   9.77   2.00 mm     3700   p1869(1)   n1274   5.56   n1569   9.73   30   0.691   5.52   5.65   200 mm     3701   p1804   n1902   9.61   n1903   9.73   2.1   0.592   11.51   1.61   200 mm     3702   p1804   n1902   9.61   n1903	4845	p2170	n3160	7.12	n3161	8.53	38	3.725	8.24	9.65	200 mm
2569   p98   n175	4364	p1759	n2549	11.39	n2551	15.81	30	14.872	12.51	16.93	200 mm
2569   p98   n175	4362	p1757	n2546	6.72	n2548	10.04	16	20.139	7.83	11.16	200 mm
4920   p2242   n3252		•		8.49	n177		13				
3324 p879(1)         n1289         7.88 MH-284         9.73         24 7.767         9         10.85 200 mm           2663 p185(1)         n312         22.53 MH-850         24.28         16 10.719         23.65         25.4 200 mm           4005 p1468         n2128         6.52 n2129         6.77         30 0.816         7.64         7.89 200 mm           3005 p153         n903         5.06 n3139         4.77         12 0.799         7.15 7.07 200 mm           3356 p2153         n903         5.06 n3139         4.77         13 2.202         6.18 5.89 200 mm           3356 p909         n1332         10.27 n1331         8.96 39 33.361         11.39 10.08 200 mm           3601 p1114         n1619         14.63 n1621         17.66 30 10.148 15.75 18.78 200 mm           4120 p1557         n2264         8.25 n2262         10.69 30 8.169 9.37 11.81 200 mm           2838 p453         n691         7.27 n692         5.73 30 5.131 8.38 6.85 200 mm           2662 p184(2)         MH-837         20.98 n312         22.53 14 10.899 22.1 23.65 20.00 mm           3169 p746         n1106         7.48 81.107 7.61 18 0.696 9.4         9.29 200 mm           4103 p1543(1)         n2242 6.75 MH-197 5.38 22 6.22 3 7.87 6.5 200 mm         6.5 200 mm           4103 p244 5.10 1.		•									
2663 p185(1)         n312         22.53 MH-850         24.28         16         10.719         23.65         25.4 200 mm           2664 p186(1)         n313         25.77 MH-838         26.82         15         6.988         26.88         27.94 200 mm           3195 p770         n1141         5.87 n1142         5.77         12         0.799         7.15         7.07 200 mm           3005 p2153         n903         5.06 n3139         4.77         13         2.202         6.18         5.89 200 mm           4118 p1554(1)         n2259         18.44 MH-186         18.62         4         4.218         19.56         19.74 200 mm           3601 p1114         n1619         14.63 n1621         17.66         30         10.148         15.75         18.78 200 mm           4120 p1557         n2264         8.25 n2262         10.69         30         8.169         9.37         11.81 200 mm           2828 p453         n691         7.27 n692         5.73         30         5.131         8.38         6.85 200 mm           5569 C0-634         n3275         6.1 n1915         5.28         36         2.271         7.22         6.99 200 mm           4103 p1543(1)         p1244         5.56 MH-811		•									
2664   p186(1)   n313   25.77   MH-838   26.82   15   6.988   26.88   27.94   200 mm   2005   p1468   n2128   6.52   n2129   6.77   30   0.816   7.64   7.89   200 mm   2005   p1468   n2128   6.52   n2129   6.77   31   2.029   6.76   7.67   200 mm   2005   p2153   n903   5.06   n3139   4.77   13   2.020   6.18   5.89   200 mm   2005   p2153   n903   5.06   n3139   4.77   13   2.020   6.18   5.89   200 mm   2005   p2153   n903   5.06   n3139   4.77   13   2.020   6.18   5.89   200 mm   2005   p336   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   2007   p1144   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   2838   p453   n691   7.27   n692   5.73   30   5.131   8.38   6.85   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   2306   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   2407   p346   1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   2408   p9746   n1105   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   2408   p9740   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   2408   p9740   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   2408   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   2408   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   2408   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   2407   p1521   n2210   4.4   n2209   4.73   30   1.61   5.57   6.05   200 mm   2661   p184(1)   n311   19.26   MH-837   20.98   16   10.918   20.38   22.1   200 mm   2661   p184(1)   n311   19.26   MH-837   20.98   16   10.918   20.38   22.1   200 mm   2409   p1763   n2555   21.65   n2556   22.9   30   4.177   22.77   24.02   200 mm   2409   p1763   n2555   21.65   n2556   22.9   30   4.177   22.77   24.02   200 mm   2409   p1763   n2555   21.65   n2556   22.9   30   4.177   22.77											
4005   p1468   n2128   6.52   n2129   6.77   30   0.816   7.64   7.89   200 mm   3195   p770   n1141   5.87   n1142   5.77   12   0.799   7.15   7.07   200 mm   3195   p2153   n903   5.06   n3139   4.77   13   2.202   6.18   5.89   200 mm   4118   p1554(1)   n2259   18.44   MH-186   18.62   4   4.218   19.56   19.74   200 mm   3356   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   3601   p1114   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   4120   p1557   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm   2628   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   2569   C0-634   n3275   6.1   n1915   5.28   36   2.271   7.22   6.99   200 mm   3109   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3109   p869(1)   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3422   p971   n1415   5.36   n1416   6.09   36   0.642   6.98   7.21   200 mm   3422   p971   n1415   5.38   MH-389   9.82   14   10.149   9.5   10.94   200 mm   34585   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   3459   p152   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   3460   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3601   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   3601   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   3605   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3605   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3605   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3605   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3077   0.0124   n992   4.19   n994   4.61   n996   5.61   4.77   7.50											
3195   p770											
3005   p2153   p303   5.06   p3139   4.77   13   2.202   6.18   5.89   200 mm   4118   p1554(1)   p2259   18.44   MH-186   18.62   4   4.218   19.56   19.74   200 mm   3356   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   4120   p1514   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   4120   p1557   p2264   8.25   p2262   10.69   30   8.169   9.37   11.81   200 mm   2838   p453   n691   7.27   n692   5.73   30   5.131   8.38   6.85   200 mm   2662   p184(2)   MH-837   20.98   p312   22.53   14   10.899   22.1   23.65   200 mm   5569   C0-634   n3275   6.1   n1915   5.28   36   2.271   7.22   6.99   200 mm   4103   p1543(1)   p2242   6.75   MH-197   5.38   22   6.223   7.87   6.5   200 mm   4103   p1543(1)   p2242   6.75   MH-197   5.38   22   6.223   7.87   6.5   200 mm   3310   p869(1)   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3422   p971   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   3422   p971   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   5497   C0-618   p.7744   5.1   MH-47   6.29   35   3.429   6.22   7.41   200 mm   3865   p1952   p2842   7.55   p2844   8.31   30   2.524   8.67   9.42   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3875   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   3077   C0-124   n992   4.19   n994   4.61   12   3.317   5.31   5.72   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   20   0.683   17		•				_					
4118   p1554(1)   n2259   18.44   MH-186   18.62   4   4.218   19.56   19.74   200 mm   3356   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   3601   p1114   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   2838   p453   n691   7.27   n692   5.73   30   5.131   8.38   6.85   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3109   p346   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3120   p341   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3422   p971   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   3674   CO-324   n1715   8.38   MH-389   9.82   14   10.149   9.5   10.94   200 mm   3865   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4369   p1763   n2555   21.65   n2556   22.9   30   4.177   22.77   24.02   200 mm   4369   p1763   n2555   21.65   n2556   22.9   30   4.177   22.77   24.02   200 mm   4289   p1706   n2478   4.45   n2480   4.93   30   1.61   5.57   6.05   200 mm   4298   p1706   n2478   4.45   n2480   4.93   30   1.61   5.57   6.05   200 mm   4298   p1706   n1758   8.97   n1757   7.56   36   3.934   10.09   8.68   200 mm   3078   p668   n994   4.61   n996   5.61   47   2.152   5.72   6.73   200 mm   4297   p1705   n2477   4.03   n2478   4.45   20   2.105   5.15   5.57   200 mm		•									
3356   p909   n1332   10.27   n1331   8.96   39   3.361   11.39   10.08   200 mm   3601   p1114   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   4120   p1557   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm   2838   p453   n691   7.27   n692   5.73   30   5.131   8.38   6.85   200 mm   5569   C0-634   n3275   6.1   n1915   5.28   36   2.271   7.22   6.99   200 mm   3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   4103   p1543(1)   n2242   6.75   MH-197   5.38   22   6.223   7.87   6.5   200 mm   3310   p869(1)   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3674   CO-324   n1715   8.38   MH-389   9.82   14   10.149   9.5   10.94   200 mm   4585   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   4585   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4070   p1521   n2210   4.4   n2209   4.73   30   1.093   5.52   5.85   200 mm   4369   p695(2)(1)   MH-677   7.25   MH-678   6.78   9   5.401   8.37   7.9   200 mm   5375   CO-492   MH-250   11.31   n1619   14.63   35   9.564   12.42   15.75   200 mm   4369   p1763   n2575   21.65   n2556   22.9   30   0.621   6.15   6.34   200 mm   5375   CO-492   MH-250   11.31   n1619   14.63   35   9.564   12.42   15.75   200 mm   4369   p1763   n255   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n255   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n255   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n255   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n255   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n3120   7.3   n3119   7   30   0.984   8.42   8.12   200 mm   4369   p1763   n355   21.65   n2556   22.9   30   0.984   8.42   8.12   200 mm   4369   p1763   n3120   7.3   n3119   7   30   0.984   8.42   8.12   200		·									
3601   p1114   n1619   14.63   n1621   17.66   30   10.148   15.75   18.78   200 mm   17.57   n2264   8.25   n2262   10.69   30   8.169   9.37   11.81   200 mm   2838   p453   n691   7.27   n692   5.73   30   5.131   8.38   6.85   200 mm   2662   p184(2)   MH-837   20.98   n312   22.53   14   10.899   22.1   23.65   200 mm   3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   3109   p1543(1)   n2242   6.75   MH-197   5.38   22   6.223   7.87   6.5   200 mm   310   p869(1)   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3422   p971   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   4585   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3875   p184(1)   n311   19.26   MH-837   20.98   16   10.918   20.38   22.1   200 mm   20.38   20.524   MH-250   11.31   n1619   14.63   35   9.564   12.42   15.75   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3875   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3885   p1304   n1026   n1758   8.97   n1757   7.56   36   3.						_					
4120 p1557         n2264         8.25 n2262         10.69         30         8.169         9.37         11.81 200 mm           2838 p453         n691         7.27 n692         5.73         30         5.131         8.38         6.85 200 mm           2662 p184(2)         MH-837         20.98 n312         22.53         14 10.899         22.1         23.65 200 mm           5569 CO-634         n3275         6.1 n1915         5.28         36 2.271         7.22         6.99 200 mm           3169 p746         n1106         7.48 n1107         7.61         18 0.696         9.4         9.29 200 mm           4103 p1543(1)         n2242         6.75 MH-197         5.38         22 6.223         7.87         6.5 200 mm           3310 p869(1)         n1274         15.56 MH-811         15.36         11 1.812         16.68         16.48 200 mm           3422 p971         n1415         5.86 n1416         6.09         36 0.642         6.98         7.21 200 mm           3674 CO-324 n1715         8.38 MH-389         9.82 14 10.149         9.5 10.94 200 mm           4585 p1952         n2842         7.55 n2844         8.31 30 2.524         8.67 9.42 200 mm           5497 CO-618 n2744         5.1 MH-47 6.29         35 3.429 6.22 7.41 200		•									
2838 p453         n691         7.27 n692         5.73         30         5.131         8.38         6.85 200 mm           2662 p184(2)         MH-837         20.98 n312         22.53         14         10.899         22.1         23.65 200 mm           5569 CO-634         n3275         6.1 n1915         5.28         36         2.271         7.22         6.99 200 mm           3169 p746         n1106         7.48 n1107         7.61         18         0.696         9.4         9.29 200 mm           4103 p1543(1)         n2242         6.75 MH-197         5.38         22         6.223         7.87         6.5 200 mm           3310 p869(1)         n1274         15.56 MH-811         15.36         11         1.812         16.68         16.48 200 mm           3422 p971         n1415         5.86 n1416         6.09         36 0.642         6.98         7.21 200 mm           4585 p1952         n2842         7.55 n2844         8.31         30         2.524         8.67         9.42 200 mm           4970 p1521         n2210         4.4 n2209         4.73         30         1.093         5.52         5.85 200 mm           3078 p695(2)(1)         MH-677         7.25 MH-678         6.78         <		•									
2662         p184(2)         MH-837         20.98         n312         22.53         14         10.899         22.1         23.65         200 mm           5569         CO-634         n3275         6.1         n1915         5.28         36         2.271         7.22         6.99         200 mm           3169         p746         n1106         7.48         n1107         7.61         18         0.696         9.4         9.29         200 mm           310         p869(1)         n1274         15.56         MH-1197         5.38         22         6.223         7.87         6.5         200 mm           3422         p971         n1415         5.86         n1416         6.09         36         0.642         6.98         7.21         200 mm           3674         CO-324         n1715         8.38         MH-389         9.82         14         10.149         9.5         10.94         200 mm           4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           497         CO-618         n2744         5.1         MH-47         6.29         35         3.429		•									
5569         CO-634         n3275         6.1         n1915         5.28         36         2.271         7.22         6.99         200 mm           3169         p746         n1106         7.48         n1107         7.61         18         0.696         9.4         9.29         200 mm           4103         p1543(1)         n2242         6.75         MH-197         5.38         22         6.223         7.87         6.5         200 mm           3310         p869(1)         n1274         15.56         MH-811         15.36         11         1.812         16.68         16.48         200 mm           3422         p971         n1415         5.86         n1416         6.09         36         0.642         6.98         7.21         200 mm           3674         CO-324         n1715         8.38         MH-389         9.82         14         10.149         9.5         10.94         200 mm           4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           4970         p1521         n2210         4.4         n2209         4.73         30         0.62		-									
3169   p746   n1106   7.48   n1107   7.61   18   0.696   9.4   9.29   200 mm   4103   p1543(1)   n2242   6.75   MH-197   5.38   22   6.223   7.87   6.5   200 mm   310   p869(1)   n1274   15.56   MH-811   15.36   11   1.812   16.68   16.48   200 mm   3422   p971   n1415   5.86   n1416   6.09   36   0.642   6.98   7.21   200 mm   3674   CO-324   n1715   8.38   MH-389   9.82   14   10.149   9.5   10.94   200 mm   4585   p1952   n2842   7.55   n2844   8.31   30   2.524   8.67   9.42   200 mm   4585   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3865   p1347   n1952   5.03   n1953   5.22   30   0.621   6.15   6.34   200 mm   3077   CO-124   n992   4.19   n994   4.61   12   3.317   5.31   5.72   200 mm   3077   CO-124   n992   4.19   n994   4.61   12   3.317   5.31   5.72   200 mm   5078   p695(2)(1)   MH-677   7.25   MH-678   6.78   9   5.401   8.37   7.9   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   3825   p1312   n1902   9.61   n1903   9.73   21   0.592   11.51   11.61   200 mm   4298   p4763   n2575   21.65   n2556   22.9   30   4.177   22.77   24.02   200 mm   4298   p439   n672   16.15   n674   17.67   30   5.083   17.27   18.79   200 mm   4810   p2139   n3120   7.3   n3119   7.56   36   3.934   10.09   8.68   200 mm   4810   p2139   n3120   7.3   n3119   7.56   36   3.934   10.09   8.68   200 mm   4819   p668   n994   4.61   n996   5.61   47   2.152   5.72   6.73   200 mm   4297   p1705   n2477   4.03   n2478   4.45   200   2.105   5.15   5.57   200 mm   4297   p1705   n2477   4.03   n2478   4.45   200   2.105   5.15   5.57   200 mm   4298   D439   n310   16.07   n311   19.26   30   10.683   17.19   20.38   200 mm   4583   p1951   n2840   6.65   n2842   7.55   32   2.778   7.77   8.67   200 mm   4583   p1951   n2840   6.65   n2842   7.55   32   2.778   7.77   8.67   200 mm   4583   p1951   n2840   6.65   n2842   7.55   32   2.778   7.77   8.67   200 mm   4583   p1951   n2840   6.65   n2842   7.55   32   2.778   7.77   8.67   200 mm					l						
4103         p1543(1)         n2242         6.75         MH-197         5.38         22         6.223         7.87         6.5         200 mm           3310         p869(1)         n1274         15.56         MH-811         15.36         11         1.812         16.68         16.48         200 mm           3422         p971         n1415         5.86         n1416         6.09         36         0.642         6.98         7.21         200 mm           3674         CO-324         n1715         8.38         MH-389         9.82         14         10.149         9.5         10.94         200 mm           4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           5497         CO-618         n2744         5.1         MH-47         6.29         35         3.429         6.22         7.41         200 mm           3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.											
3310       p869(1)       n1274       15.56       MH-811       15.36       11       1.812       16.68       16.48       200 mm         3422       p971       n1415       5.86       n1416       6.09       36       0.642       6.98       7.21       200 mm         3674       CO-324       n1715       8.38       MH-389       9.82       14       10.149       9.5       10.94       200 mm         4585       p1952       n2842       7.55       n2844       8.31       30       2.524       8.67       9.42       200 mm         5497       CO-618       n2744       5.1       MH-47       6.29       35       3.429       6.22       7.41       200 mm         3865       p1347       n1952       5.03       n1953       5.22       30       0.621       6.15       6.34       200 mm         4070       p1521       n2210       4.4       n2209       4.73       30       1.093       5.52       5.85       200 mm         3077       CO-124       n992       4.19       n994       4.61       12       3.317       5.31       5.72       200 mm         2661       p184(1)       n311       1		•									
3422         p971         n1415         5.86         n1416         6.09         36         0.642         6.98         7.21         200 mm           3674         CO-324         n1715         8.38         MH-389         9.82         14         10.149         9.5         10.94         200 mm           4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           5497         CO-618         n2744         5.1         MH-47         6.29         35         3.429         6.22         7.41         200 mm           3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918 <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		-									
3674         CO-324         n1715         8.38         MH-389         9.82         14         10.149         9.5         10.94         200 mm           4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           5497         CO-618         n2744         5.1         MH-47         6.29         35         3.429         6.22         7.41         200 mm           3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9											
4585         p1952         n2842         7.55         n2844         8.31         30         2.524         8.67         9.42         200 mm           5497         CO-618         n2744         5.1         MH-47         6.29         35         3.429         6.22         7.41         200 mm           3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5375         CO-492         MH-250         11.31         n1619         14.63         35		·									
5497         CO-618         n2744         5.1         MH-47         6.29         35         3.429         6.22         7.41         200 mm           3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           3825         p1312         n1902         9.61         n1903         9.73         21 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
3865         p1347         n1952         5.03         n1953         5.22         30         0.621         6.15         6.34         200 mm           4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5375         CO-492         MH-250         11.31         n1619         14.63         35         9.564         12.42         15.75         200 mm           3825         p1312         n1902         9.61         n1903         9.73         21         0.592         11.51         11.61         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30											
4070         p1521         n2210         4.4         n2209         4.73         30         1.093         5.52         5.85         200 mm           3077         CO-124         n992         4.19         n994         4.61         12         3.317         5.31         5.72         200 mm           2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5375         CO-492         MH-250         11.31         n1619         14.63         35         9.564         12.42         15.75         200 mm           3825         p1312         n1902         9.61         n1903         9.73         21         0.592         11.51         11.61         200 mm           4369         p1763         n2555         21.65         n2556         22.9         30         4.177         22.77         24.02         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30											
3077 CO-124         n992         4.19 n994         4.61         12 3.317         5.31         5.72 200 mm           2661 p184(1)         n311         19.26 MH-837         20.98         16 10.918         20.38         22.1 200 mm           5078 p695(2)(1)         MH-677         7.25 MH-678         6.78         9 5.401         8.37         7.9 200 mm           5375 CO-492         MH-250         11.31 n1619         14.63         35 9.564         12.42         15.75 200 mm           3825 p1312         n1902         9.61 n1903         9.73         21 0.592         11.51         11.61 200 mm           4369 p1763         n2555         21.65 n2556         22.9         30 4.177         22.77         24.02 200 mm           4298 p1706         n2478         4.45 n2480         4.93         30 1.61         5.57         6.05 200 mm           2819 p439         n672         16.15 n674         17.67         30 5.083         17.27         18.79 200 mm           4810 p2139         n3120         7.3 n3119         7 30 0.984         8.42         8.12 200 mm           3710 p1206         n1758         8.97 n1757         7.56         36 3.934         10.09         8.68 200 mm           4297 p1705         n2477         4		•									
2661         p184(1)         n311         19.26         MH-837         20.98         16         10.918         20.38         22.1         200 mm           5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5375         CO-492         MH-250         11.31         n1619         14.63         35         9.564         12.42         15.75         200 mm           3825         p1312         n1902         9.61         n1903         9.73         21         0.592         11.51         11.61         200 mm           4369         p1763         n2555         21.65         n2556         22.9         30         4.177         22.77         24.02         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30         1.61         5.57         6.05         200 mm           2819         p439         n672         16.15         n674         17.67         30         5.083         17.27         18.79         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36											
5078         p695(2)(1)         MH-677         7.25         MH-678         6.78         9         5.401         8.37         7.9         200 mm           5375         CO-492         MH-250         11.31         n1619         14.63         35         9.564         12.42         15.75         200 mm           3825         p1312         n1902         9.61         n1903         9.73         21         0.592         11.51         11.61         200 mm           4369         p1763         n2555         21.65         n2556         22.9         30         4.177         22.77         24.02         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30         1.61         5.57         6.05         200 mm           2819         p439         n672         16.15         n674         17.67         30         5.083         17.27         18.79         200 mm           4810         p2139         n3120         7.3         n3119         7         30         0.984         8.42         8.12         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36         3						_					
5375         CO-492         MH-250         11.31 n1619         14.63         35         9.564         12.42         15.75 200 mm           3825         p1312         n1902         9.61 n1903         9.73         21 0.592         11.51         11.61 200 mm           4369         p1763         n2555         21.65 n2556         22.9         30 4.177         22.77         24.02 200 mm           4298         p1706         n2478         4.45 n2480         4.93         30 1.61         5.57         6.05 200 mm           2819         p439         n672         16.15 n674         17.67         30 5.083         17.27         18.79 200 mm           4810         p2139         n3120         7.3 n3119         7 30 0.984         8.42         8.12 200 mm           3710         p1206         n1758         8.97 n1757         7.56         36 3.934         10.09         8.68 200 mm           3078         p668         n994         4.61 n996         5.61         47 2.152         5.72         6.73 200 mm           4297         p1705         n2477         4.03 n2478         4.45         20 2.105         5.15         5.57 200 mm           5189         CO-134         n2830         7.98 n2832											
3825         p1312         n1902         9.61         n1903         9.73         21         0.592         11.51         11.61         200 mm           4369         p1763         n2555         21.65         n2556         22.9         30         4.177         22.77         24.02         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30         1.61         5.57         6.05         200 mm           2819         p439         n672         16.15         n674         17.67         30         5.083         17.27         18.79         200 mm           4810         p2139         n3120         7.3         n3119         7         30         0.984         8.42         8.12         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36         3.934         10.09         8.68         200 mm           3078         p668         n994         4.61         n996         5.61         47         2.152         5.72         6.73         200 mm           4297         p1705         n2477         4.03         n2478         4.45         20         2.105		. ,,,,									
4369         p1763         n2555         21.65         n2556         22.9         30         4.177         22.77         24.02         200 mm           4298         p1706         n2478         4.45         n2480         4.93         30         1.61         5.57         6.05         200 mm           2819         p439         n672         16.15         n674         17.67         30         5.083         17.27         18.79         200 mm           4810         p2139         n3120         7.3         n3119         7         30         0.984         8.42         8.12         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36         3.934         10.09         8.68         200 mm           3078         p668         n994         4.61         n996         5.61         47         2.152         5.72         6.73         200 mm           4297         p1705         n2477         4.03         n2478         4.45         20         2.105         5.15         5.57         200 mm           5189         CO-134         n2830         7.98         n2832         8.62         32         1.989											
4298         p1706         n2478         4.45         n2480         4.93         30         1.61         5.57         6.05         200 mm           2819         p439         n672         16.15         n674         17.67         30         5.083         17.27         18.79         200 mm           4810         p2139         n3120         7.3         n3119         7         30         0.984         8.42         8.12         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36         3.934         10.09         8.68         200 mm           3078         p668         n994         4.61         n996         5.61         47         2.152         5.72         6.73         200 mm           4297         p1705         n2477         4.03         n2478         4.45         20         2.105         5.15         5.57         200 mm           5189         CO-134         n2830         7.98         n2832         8.62         32         1.989         9.09         9.77         200 mm           2660         p183         n310         16.07         n311         19.26         30         10.683		•									
2819       p439       n672       16.15       n674       17.67       30       5.083       17.27       18.79       200 mm         4810       p2139       n3120       7.3       n3119       7       30       0.984       8.42       8.12       200 mm         3710       p1206       n1758       8.97       n1757       7.56       36       3.934       10.09       8.68       200 mm         3078       p668       n994       4.61       n996       5.61       47       2.152       5.72       6.73       200 mm         4297       p1705       n2477       4.03       n2478       4.45       20       2.105       5.15       5.57       200 mm         5189       CO-134       n2830       7.98       n2832       8.62       32       1.989       9.09       9.77       200 mm         2660       p183       n310       16.07       n311       19.26       30       10.683       17.19       20.38       200 mm         4583       p1951       n2840       6.65       n2842       7.55       32       2.778       7.77       8.67       200 mm											
4810         p2139         n3120         7.3         n3119         7         30         0.984         8.42         8.12         200 mm           3710         p1206         n1758         8.97         n1757         7.56         36         3.934         10.09         8.68         200 mm           3078         p668         n994         4.61         n996         5.61         47         2.152         5.72         6.73         200 mm           4297         p1705         n2477         4.03         n2478         4.45         20         2.105         5.15         5.57         200 mm           5189         CO-134         n2830         7.98         n2832         8.62         32         1.989         9.09         9.77         200 mm           2660         p183         n310         16.07         n311         19.26         30         10.683         17.19         20.38         200 mm           4583         p1951         n2840         6.65         n2842         7.55         32         2.778         7.77         8.67         200 mm		•									
3710         p1206         n1758         8.97         n1757         7.56         36         3.934         10.09         8.68         200 mm           3078         p668         n994         4.61         n996         5.61         47         2.152         5.72         6.73         200 mm           4297         p1705         n2477         4.03         n2478         4.45         20         2.105         5.15         5.57         200 mm           5189         CO-134         n2830         7.98         n2832         8.62         32         1.989         9.09         9.77         200 mm           2660         p183         n310         16.07         n311         19.26         30         10.683         17.19         20.38         200 mm           4583         p1951         n2840         6.65         n2842         7.55         32         2.778         7.77         8.67         200 mm											
3078 p668       n994       4.61 n996       5.61       47       2.152       5.72       6.73 200 mm         4297 p1705       n2477       4.03 n2478       4.45       20 2.105       5.15       5.57 200 mm         5189 CO-134       n2830       7.98 n2832       8.62       32 1.989       9.09       9.77 200 mm         2660 p183       n310       16.07 n311       19.26       30 10.683       17.19       20.38 200 mm         4583 p1951       n2840       6.65 n2842       7.55       32 2.778       7.77       8.67 200 mm		-									
4297 p1705         n2477         4.03 n2478         4.45         20 2.105         5.15         5.57 200 mm           5189 CO-134         n2830         7.98 n2832         8.62         32 1.989         9.09         9.77 200 mm           2660 p183         n310         16.07 n311         19.26         30 10.683         17.19         20.38 200 mm           4583 p1951         n2840         6.65 n2842         7.55         32 2.778         7.77         8.67 200 mm		•									
5189 CO-134     n2830     7.98 n2832     8.62     32 1.989     9.09     9.77 200 mm       2660 p183     n310     16.07 n311     19.26     30 10.683     17.19     20.38 200 mm       4583 p1951     n2840     6.65 n2842     7.55     32 2.778     7.77     8.67 200 mm		•			l	-					
2660 p183     n310     16.07 n311     19.26     30 10.683     17.19     20.38 200 mm       4583 p1951     n2840     6.65 n2842     7.55     32 2.778     7.77     8.67 200 mm		•									
4583 p1951 n2840 6.65 n2842 7.55 32 2.778 7.77 8.67 200 mm			n2830	7.98	n2832	8.62	32	1.989	9.09		
		•	n310	16.07	n311	19.26	30	10.683	17.19	20.38	200 mm
5102 CO-274 MH-813 15.16 MH-811 15.36 10 1.924 16.28 16.48 200 mm	4583	p1951	n2840	6.65	n2842	7.55	32	2.778	7.77	8.67	200 mm
	5102	CO-274	MH-813	15.16	MH-811	15.36	10	1.924	16.28	16.48	200 mm

2225	-1122/1	-1174	4 20	NALL 20C	C C1	ام	27	0.15	0.61	200
$\overline{}$	` ` ′	n1174		MH-306	6.61	9	27	8.15		200 mm
		MH-588		n671	4.45	8	6.481	6.1		200 mm
	p2266	n3288		n3289	6.1	37	0.852	6.9		200 mm
	CO-110	n310	16.07		11.16	43	11.502	17.19		200 mm
	p618	n919		n920	5.49	40	1.804	5.89		200 mm
	p2168	n3157		n3158	5.66	32	3.204	5.75		200 mm
	p1112(1)	n1617		MH-250	11.31	24	8.414	10.4		200 mm
	p861	n1264		n1265	7.45	28	0.448	9.54		200 mm
3162	p742(1)	n1099	5.23	MH-828	5.25	4	0.446	6.75	6.75	200 mm
4215	p1638(2)(2	MH-216	39.39	n2381	41.34	15	12.737	40.51	42.46	200 mm
3110	p695(1)	n1032	8.03	MH-677	7.25	25	3.122	9.23	8.37	200 mm
2570	p421	n647	7.5	n175	8.49	32	3.117	8.62	9.61	200 mm
4572	p1941	n2829	7.23	n2830	7.98	34	2.226	8.35	9.09	200 mm
3428	p977	n1422	5.44	n1423	5.32	30	0.415	6.91	6.66	200 mm
3305	p866(2)	MH-815	9.56	n1270	8.32	23	5.487	10.68	9.44	200 mm
2826	p444	n679	18.21	n680	18.26	11	0.415	19.89	19.38	200 mm
4341	p1741	n2526	1.49	n2527	1.36	30	0.415	3.23	3.28	200 mm
	p1736	n2508	1.67	n2521	1.8	30	0.415	3.24	3.18	200 mm
	p948	n1384	6.24	n1386	6.37	30	0.414	7.56	7.59	200 mm
	p1846	n2684		n2685	5.79	30	0.414	7.34		200 mm
	p1618	n2352		n2350	2.96	30	0.414	4.29		200 mm
	p1850	n2690		n2691	6.27	30	0.414	7.77		200 mm
-	·	n2792		n2794	5.04	30	0.414	6.41		200 mm
	CO-310	MH-131		MH-133	4.86	23	0.414	6		200 mm
		MH-176		n3134	4.77	22	0.414	6.48		200 mm
	CO-508	MH-766		n1891	3.77	42	0.414	5.53		200 mm
	CO-416	n3205		MH-355	3.64	35	0.414	5.46		200 mm
		MH-163		MH-166	3.11	22	0.414	4.54		200 mm
	CO-438	n3285		MH-345	4.11	10	0.414	5.74		200 mm
	CO-414 CO-600	n923		MH-23	6.98	16	0.414	8.61		200 mm
		n931		MH-465	10.59	8	0.414	11.74		200 mm
	p1271				3.9	30	0.414	5.36		
-		n1848		n1849	<del> </del>	-				200 mm
	p690	n1024		n1026	8.41	32	0.414	9.66		200 mm
	CO-646	n1354		MH-784	4.62	36	0.486	6.09		200 mm
	p793	n1175		n1176	4.47	30	0.414	6.33		200 mm
2565		n170		n171	7.23	30	0.414	8.23		200 mm
	p778	n1153		n1154	5.01	30	0.414	6.41		200 mm
	CO-584	n2379		MH-216	39.39	14	13.203	38.67		200 mm
_	CO-242	n496		n499	2.45	44	7.413	6.99		200 mm
	p913(2)(2)			n1337	6.07	16	0.697	7.08		200 mm
	p1639	n2381		n2382	44.19	30	9.544	42.46		200 mm
		n2744		MH-49	4.56	19	2.768	6.22		200 mm
	p1346	n1951		n1952	5.03	30	0.671	5.95		200 mm
3131	p734	n1064	2.88	n1090	4.48	27	6.016	6.66	6.59	200 mm
5227	CO-206	MH-197	5.38	MH-199	4.81	14	4.153	6.5	5.93	200 mm
1 2275										
33/5	p929(2)	MH-784	4.62	n1357	4.45	26	0.662	5.76	5.57	200 mm

	l	I	· · · · ·				1	[		
		MH-55	<b></b>	n2962	4.69	48	0.614	5.52		200 mm
	p1713(2)(2			n2490	11.6	16	0.345	12.89		200 mm
	. ,	MH-495	3.91	n894	3.98	11	0.611	7.39	6.7	200 mm
	p679	n1010	4.79	n1012	4.39	30	1.352	5.91	5.51	200 mm
3114	p698	n1038	6.28	n1040	5.31	18	5.388	7.4	6.43	200 mm
5351	CO-444	n1559	0.73	n2542	3.9	30	10.716	4.22	5.02	200 mm
2995	p598	n894	3.98	n896	4.1	37	0.333	6.7	5.9	200 mm
4368	p1762	n2553	20.77	n2555	21.65	30	2.948	21.89	22.77	200 mm
5352	CO-446	n2553	20.77	MH-751	19.53	34	3.615	21.89	20.65	200 mm
3323	p880	n1291	6.81	n1289	7.88	30	3.557	7.93	9	200 mm
4211	p1636	n2376	30.61	n2378	34.43	30	12.845	31.73	35.55	200 mm
3673	p1171	n1714	6.61	n1715	8.38	30	5.931	7.73	9.5	200 mm
4072	p1522	n2212	4.15	n2210	4.4	30	0.855	5.26	5.52	200 mm
5501	p1888(2)	MH-49	4.56	n2745	4.29	10	2.767	5.68	5.4	200 mm
		MH-189		n2257	19.61	10	0.545	20.7	20.72	200 mm
	p1205	n1757	7.56	n1756	6.74	30	2.744	8.68	7.86	200 mm
	p954	n1393		n1394	7.17	32	0.534	8.12		200 mm
	p1558	n2265		n2264	8.25	30	4.017	8.17		200 mm
	p1513(2)	MH-131		n2196	4.63	25	0.531	6		200 mm
	p617	n918		n919	4.77	30	1.604	5.41		200 mm
	p939	n1269		n1126	5.29	30	6.316	8.3		200 mm
	p1523(2)	MH-137		n2212	4.15	22	1.169	5.01		200 mm
	p1637	n2378		n2379	37.55	30	10.452	35.55		200 mm
	p866(1)	n1271		MH-815	9.56	10	3.1	11		200 mm
	p1204	n1756		n1748	6.23	16	3.114	7.86		200 mm
	p1111	n1615		n1617	9.28	30	5.973	8.61		200 mm
	p2265	n1146		n3288	5.78	24	0.757	6.87		200 mm
	p685	n1018		n610	3.18	10	5.868	5.64		200 mm
	p1635	n2374		n2376	30.61	30	11.771	28.22		200 mm
	p1033	n1341		n518	0.89	21	18.023	6.46		200 mm
	CO-76	n2965		MH-55	4.4	40	0.715	5.23		200 mm
				n1628	33.32	19	0.713	35.47		200 mm
	· · ·	MH-255		n1273	14.87					
	p869(2)(2)			MH-810	5.96	21 5	1.356	16.28 7.04		200 mm 200 mm
	p913(2)(1)				_		0.701			
	p1608	n2338		n1542	2.23	25	1.76	4.58		200 mm
	p1758	n2548		n2549	11.39	30	4.551	11.16		200 mm
	CO-520	n694		n692	5.73	29	2.18	6.22		200 mm
	p967	n1410		n1411	5.59	23	3.233	7.5		200 mm
	p953	n1391		n1393	7	28	0.651	7.94		200 mm
	` ` ′	MH-166		n2341	3.02	21	0.404	4.43		200 mm
	p1510(1)	n2193		MH-128	4.12	22	1.236	5.61		200 mm
	p1845	n2682		n2684	5.67	30	0.401	7.06		200 mm
	p1619	n2354		n2352	2.83	30	0.401	4.37		200 mm
	p792	n1174		n1175	4.34	17	0.401	8.15		200 mm
	p1915	n2790		n2792	4.92	30	0.401	6.52		200 mm
	p978	n1423		n1425	5.2	30	0.401	6.66		200 mm
4006	p1469	n2130	6.4	n2128	6.52	30	0.4	7.66	7.64	200 mm

2025	442	670	40.00	670	1001	201	0.4	10.50	10.00	200
	p443	n678	18.09		18.21	30	0.4	19.53		200 mm
	p1311	n1900		n1902	9.61	30	0.4	11.26		200 mm
	p2264(1)	n3287		MH-345	4.11	17	0.4	5.89		200 mm
		n1627		MH-255	33.27	18	0.4	34.39	35.47	200 mm
3421	p970	n1414	5.74	n1415	5.86	30	0.4	7.25	6.98	200 mm
3207	p779	n1154	5.01	n1155	4.89	30	0.4	6.31	6.22	200 mm
3104	p691	n1026	8.41	n1027	8.29	30	0.4	11.22	12.68	200 mm
3409	p960	n1400	7.17	n1401	7.05	30	0.4	8.29	8.25	200 mm
3392	p947	n1383	6.12	n1384	6.24	30	0.4	7.43	7.56	200 mm
3785	p1270	n1846	3.66	n1848	3.78	30	0.4	5.39	5.36	200 mm
3816	p1301	n1891	3.77	n1892	3.65	30	0.4	4.97	5.49	200 mm
4342	p1742	n2527	1.36	n2528	1.24	30	0.4	3.28	3.27	200 mm
4209	p1634	n2373	23.87	n2374	27.1	30	10.829	24.99	28.22	200 mm
	p1743	n2528	1.24	n2529	1.12	20	0.605	3.27	3.09	200 mm
2562	•	n167		n168	6.98	13	0.59	8.54		200 mm
	p1172(2)(2			n1716	10.24	15	2.847	10.94		200 mm
	p1310	n1898		n1900	9.49	21	0.577	11.12		200 mm
	p860	n1103		n1264	7.32	33	0.367	9.59		200 mm
	p865	n1270		n1268	7.39	30	3.109	9.44		200 mm
	p744	n1103		n1104	7.36	29	0.541	9.59		200 mm
	CO-632	n1643		n1644	5.97	27	0.401	7.2		200 mm
	p881	n1293		n1291	6.81	30	2.58	7.16		200 mm
	p741	n1097		n1099	5.23	35	0.34	6.68		200 mm
	p1633	n2372		n2373	23.87	30	10.1	21.98		200 mm
_					<del>                                     </del>					
	p930(1)(1)(			MH-783	4.39	12	0.519	5.57		200 mm 200 mm
2564	·	n168		n170	7.1	36	0.332	8.21		
	p1886(1)	n2740		MH-47	6.29	25	0.721	7.74		200 mm
		MH-185		n2265	7.05	20	2.831	7.6		200 mm
	. ,	MH-174		n3134	4.77	15	0.308	6.76		200 mm
		MH-105		n2829	7.23	34	1.201	7.94		200 mm
	CO-490	n1472		n1610	5.52	30	6.899	7.22		200 mm
	. , ,	MH-214		n2384	45.11	15	3.075	45.76		200 mm
	CO-670	n1044		n1040	5.31	35	3.641	5.16		200 mm
	p177	n300		n302	8.4	30	6.394	7.6		200 mm
	CO-536	n211		n214	3.43	30	10.508	7.68		200 mm
	p1471	n2134		n2132	6.29	30	0.649	7.21		200 mm
	p745	n1104		n1106	7.48	43	0.279	9.55		200 mm
	p154	n260	3.71	n262	3.79	19	0.4	5.96		200 mm
	p1756	n2544	5.09	n2546	6.72	43	3.809	6.21	7.83	200 mm
4124	p1559(1)	n2267	6.37	MH-185	6.49	4	2.831	7.49	7.6	200 mm
4295	p1704	n2476	3.7	n2477	4.03	41	0.816	4.81	5.15	200 mm
4116	p1553(1)	n2258	19.49	MH-189	19.55	16	0.406	20.67	20.7	200 mm
3672	p1170	n1712	5.66	n1714	6.61	30	3.166	6.78	7.73	200 mm
3430	p979	n1425	5.2	n1426	5.08	30	0.402	6.75	6.55	200 mm
4216	p1640(1)	n2382	44.19	MH-214	44.64	15	3.066	45.31	45.76	200 mm
3411	p961	n1401	7.05	n1402	6.93	30	0.401	8.25	8.13	200 mm
4457	p1844	n2680	5.43	n2682	5.55	30	0.401	7.19	7.06	200 mm
	·									

4056	p1512	n2196		n2195	4.51	30	0.4	5.75	6.15	200 mm
3105	p692	n1027	8.29	n1029	8.27	6	0.4	12.68	12.99	200 mm
4497	p1885	n2739	6.59	n2740	6.47	30	0.4	7.71	7.74	200 mm
3817	p1302	n1892	3.65	n1893	3.53	30	0.4	5.49	5.71	200 mm
3208	p780	n1155	4.89	n1157	4.77	30	0.4	6.22	6.17	200 mm
2994	CO-166	n893	3.88	MH-495	3.91	7	0.4	7.87	7.39	200 mm
3160	CO-250	n1096	5.01	n1097	5.11	26	0.4	7.36	6.68	200 mm
5171	CO-108	MH-75	4.66	n2790	4.8	34	0.4	6.67	6.52	200 mm
5220	CO-192	n1414	5.74	n1411	5.59	37	0.4	7.25	7.31	200 mm
	CO-302	n2130		n2132	6.29	29	0.4	7.66	7.46	200 mm
	p2138	n3119		n3117	6.88	30	0.4	8.12	8.71	200 mm
	p1611	n2341		n2340	2.9	30	0.4	4.47		200 mm
2824		n676	17.97		18.09	30	0.4	19.31		200 mm
	p1345	n1949		n1951	4.83	30	0.4	5.83		200 mm
	•	MH-344		n3287	4.05	25	0.4	6.65		200 mm
2656		n302		n304	9.88	30	4.972	9.51		200 mm
3390	•	n1380		n1382	6	21	0.57	7.38		200 mm
	p1755	n2542		n2544	5.09	30	3.959	5.02		200 mm
	p1733 p1632	n2370		n2372	20.86	34	8.087	19.23		200 mm
		MH-217		n2372	18.11	17	8.698	17.72		200 mm
	CO-214	MH-783		n1359		14		5.51		200 mm
					4.32		0.526			
	p1628	n2364		n2366	14.12	30	10.667	12.07		200 mm
2657	•	n304		n305	11.09	30	4.038	11		200 mm
	CO-602	MH-639	17.77		17.67	11	0.918	19.11		200 mm
3182		n1124		n1126	5.29	7	11.247	8.44		200 mm
2584	•	n198	15.62		14.86	24	3.216	16.74		200 mm
3108	•	n1031		n1032	8.03	17	0.696	12.01		200 mm
	p1335	n1936		n1938	3.63	20	3.12	6.37		200 mm
		MH-218		n2364	10.95	13	10.873	10.61		200 mm
	. ,	n3132		MH-174	4.72	21	0.342	6.92		200 mm
	p111	n196	16.01		15.62	14	2.651	17.13		200 mm
	p1620	n2355		n2354	2.71	36	0.337	4.41		200 mm
	CO-236	MH-612		n491	6.2	33	1.085	7.68		200 mm
	p2148	n3130		n3132	4.65	25	0.482	6.94		200 mm
2798	•	n648		n647	7.5	34	1.077	8.25		200 mm
3354	•	n1329		n1328	7.5	32	0.917	8.91		200 mm
2591	•	n208	10.38		8.47	30	6.371	11.49		200 mm
	p1889	n2745		n2746	3.89	30	1.313	5.4		200 mm
	p1198	n1748		n1749	5.57	12	5.462	7.35		200 mm
	CO-232	n485		n167	6.91	18	0.471	7.94		200 mm
	p2031	n2965		n2967	3.97	30	0.467	5.23		200 mm
4194	p1621	n2356	2.47	n2355	2.59	26	0.458	4.64	4.41	200 mm
3391	p946	n1382	6	n1383	6.12	39	0.308	7.3	7.43	200 mm
4203	p1629	n2366	14.12	n2368	16.06	23	8.361	15.24	17.17	200 mm
				654	6 50	2.4	2.002	6.99	7.7	200 mm
	CO-208	MH-575	5.87	n651	6.58	34	2.083	0.99	7.7	200 111111
2802	CO-208 CO-208	MH-575 n2752		n651 n2755	2.47	45	2.381	4.71		200 mm

2500	440	206	44.07	l 200	1 40 00	201	F 200	12.00	11 10	200
2590		n206	11.97		10.38	30	5.309	13.08		200 mm
	CO-562	n3157	4.64		4.37	28	0.969	5.75		200 mm
	p1109	n1611		n1613	7.38	30	3.038	7.59		200 mm
	p701	n1044		n1045	3.54	22	2.304	5.16		200 mm
2630	p153	n258	3.59	n260	3.71	30	0.4	5.78	5.96	200 mm
3075	p666	n990	3.89	n992	4.19	41	0.741	5.01	5.31	200 mm
2669	p312	n485	6.82	n487	6.63	34	0.564	7.94	7.75	200 mm
3344	p895(2)	MH-295	1.63	n1314	3.2	14	10.961	2.75	5.31	200 mm
5382	CO-506	n1169	3.86	n1167	1.57	19	11.758	6.11	5.86	200 mm
3399	p952	n1390	6.7	n1391	6.82	30	0.401	7.89	7.94	200 mm
4456	p1843	n2678	5.31	n2680	5.43	30	0.4	7.23	7.19	200 mm
	p2154	n3139	4.77	n3140	4.67	25	0.4	5.89	5.92	200 mm
3209	·	n1157		n1158	4.65	30	0.4	6.17	6.24	200 mm
	p1344	n1948		n1949	4.71	30	0.4	5.79		200 mm
	p2263(1)	n1922		MH-344	3.94	5	0.4	6.79		200 mm
	p962	n1402		n1403	6.81	30	0.4	8.13		200 mm
	CO-194	MH-240		n1426	5.08	40	0.4	7.09		200 mm
	CO-308	n2193		n2195	4.51	31	0.4	5.61		200 mm
	CO-570	n1029		n1031	8.15	29	0.4	12.99		200 mm
	CO-272	MH-807		MH-809	5.92	19	0.4	7.04		200 mm
	p1610	n2340		n2339	2.78	30	0.4	4.6		200 mm
	p1010 p1108(2)	MH-249		n1611	6.47	14	3.202	7.15		200 mm
	p1108(2) p176	n298		n300	6.48		4.288	6.31		200 mm
						30				
	CO-74	MH-400		n1755	3.91	19	6.549	6.49		200 mm
	p424(1)	n651		MH-571	7.01	27	1.569	7.7		200 mm
	p1913(1)(2		<b></b>	MH-75	4.66	9	0.39	6.59		200 mm
	p168	n285		n287	3.08	33	7.248	4.31		200 mm
	p1627(1)	n2362		MH-218	9.49	16	8.995	9.15		200 mm
	p680	n1012		n1013	4.27	23	0.517	5.51		200 mm
	CO-432	MH-199		n2239	4.52	23	1.24	5.93		200 mm
		MH-285		n1293	6.04	23	1.448	6.83		200 mm
	p1108(1)	n1610		MH-249	6.03	16	3.199	6.64		200 mm
	p739(2)	MH-826		n1096	5.01	26	0.35	6.97		200 mm
	CO-546	n910	4.19		3.99	15	1.378	5.36		200 mm
4886	p2207(2)(2	MH-354	3.43	n3205	3.5	17	0.382	5.44	5.46	200 mm
	CO-668	n676		MH-638	17.83	37	0.4	19.31	19.46	200 mm
4130	p1565	n2275	5.09	n2274	5.68	17	3.404	6.21	6.89	200 mm
	p113	n199	14.86	n200	14.15	30	2.367	15.98	15.27	200 mm
2841	p455(1)(1)	n694	5.1	MH-588	4.98	13	0.919	6.22	6.1	200 mm
5452	CO-610	MH-286	5.5	n1296	5.08	24	1.8	6.62	6.19	200 mm
5013	CO-36	MH-286	5.5	MH-285	5.71	13	1.55	6.62	6.83	200 mm
4314	p1720	n2499	3.26	n2500	2.8	35	1.32	4.38	3.92	200 mm
5066	p440(1)(2)	MH-639	17.77	MH-638	17.83	12	0.438	19.11	19.46	200 mm
4195	p1623	n2358	2.35	n2356	2.47	28	0.434	4.79	4.64	200 mm
	p117	n205	13.01	n206	11.97	30	3.495	14.13	13.08	200 mm
	CO-572	n1036		MH-678	6.78	34	0.858	7.61		200 mm
	CO-636	n1454		n2359	6.05	30	10.945	6.56		200 mm
								3.00	, ,	

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2629	p152	n257	3.47	n258	3.59	30	0.4	5.54	5.78	200 mm
2992	p596	n891	3.76	n893	3.88	40	0.303	8.34	7.87	200 mm
4455	p1842	n2677	5.19	n2678	5.31	29	0.411	7.42	7.23	200 mm
3434	p981(2)	MH-240	4.92	n1429	4.84	20	0.404	7.09	7.16	200 mm
2653		n296		n298	5.2	30	2.922	5.44		200 mm
	p1609	n2339		n2338	2.66	30	0.4	4.49		200 mm
_	p944	n1379		n1380	5.88	30	0.4	8.06		200 mm
	p1343			n1948		30		5.68		200 mm
-		n1946			4.59		0.4			
	CO-248	n1094		MH-826	4.92	19	0.4	6.66		200 mm
	CO-70	n2968		n2967	3.97	30	0.4	5.12		200 mm
		n2575		n3130	4.53	29	0.4	7.3		200 mm
5302	CO-350	MH-729	1.04	n2530	0.99	14	0.4	3.12	3.14	200 mm
5259	CO-264	n2787	4.56	MH-76	4.62	16	0.4	6.44	6.59	200 mm
5287	CO-320	MH-140	3.77	MH-137	3.89	31	0.4	4.9	5.01	200 mm
3197	CO-270	n1142	5.77	MH-807	5.85	19	0.4	7.07	7.04	200 mm
3413	p963	n1403	6.81	n1405	6.69	30	0.4	7.99	7.81	200 mm
	p2155	n3140		n3141	4.55	29	0.4	5.92		200 mm
_	p782	n1158		n1160	4.53	30	0.4	6.24		200 mm
	p931	n1359		n1360	4.18	34	0.397	5.43		200 mm
$\overline{}$	-					8				
	p595(2)(2)			n891	3.76		0.396	8.53		200 mm
	p1744(1)(1			MH-729	1.04	28	0.288	3.09		200 mm
	p1125	n1635		n1636	9.93	21	0.567	11.07		200 mm
	CO-382	MH-354		n3204	3.37	14	0.4	5.44	5.43	200 mm
2599	p127	n222	2.85	n223	0.46	37	6.392	4.16	4.06	200 mm
4078	p1526(2)	MH-141	3.49	n2216	3.63	24	0.601	4.6	4.92	200 mm
4347	p1746	n2531	0.83	n2532	0.71	20	0.592	3.26	3.27	200 mm
4311	p1718(1)	n2496	3.56	MH-332	3.52	8	0.448	4.68	4.64	200 mm
2711	p938	n1371	3.47	n534	2.98	28	1.741	5.82	5.86	200 mm
	p906	n1328	7.5	n1326	7.32	30	0.591	8.62	8.44	200 mm
$\overline{}$	p2206(2)	MH-350		n3204	3.37	11	0.427	6.61		200 mm
		n255		n257	3.47	41	0.4	5.51		200 mm
	p982(1)(1)			MH-239	4.78	14	0.413	7.16		200 mm
_		MH-329			3.7	25	0.413	4.78		
	. , ,			n2476						200 mm
	CO-254	MH-48		n2969	3.76	29	0.509	4.73		200 mm
	p943	n1377		n1379	5.76	30	0.401	7.5		200 mm
$\overline{}$	p932	n1360		n1362	4.06	30	0.4	5.3		200 mm
	p1342	n1945		n1946	4.47	30	0.4	5.54		200 mm
	CO-164	MH-493	3.69	MH-492	3.72	9	0.4	8.75	8.53	200 mm
5255	CO-256	n2969	3.76	n2968	3.85	23	0.4	4.96	5.12	200 mm
5280	CO-306	MH-127	4.03	MH-128	4.12	22	0.4	5.31	5.24	200 mm
5258	CO-262	n2785	4.45	n2787	4.56	29	0.4	6.41	6.44	200 mm
5288	CO-322	MH-140	3.77	n2216	3.63	35	0.4	4.9	4.92	200 mm
	CO-424	n1720		MH-392	10.47	45	0.4	11.77		200 mm
	p964	n1405		n1407	6.57	30	0.4	7.81		200 mm
	p1841	n2675		n2677	5.19	20	0.4	7.65		200 mm
	p2156	n3141		n3143	4.43	31	0.4	5.78		200 mm
	•									
4313	p1719(1)	n2497	3.44	MH-333	3.41	6	0.615	4.56	4.53	200 mm

3667	p1166	n1706	4.3	n1708	4.89	30	1.977	5.42	6.01	200 mm
3076	CO-122	MH-682	3.84	n990	3.89	9	0.487	4.96	5.01	200 mm
3093	p681	n1013	4.27	n1014	4.15	32	0.381	5.53	5.67	200 mm
5289	CO-324	MH-141	3.49	MH-145	3.37	21	0.575	4.6	4.48	200 mm
5438	p659(1)	n981	2.91	MH-26	3.13	12	1.818	4.52	4.66	200 mm
4312	p1718(2)	MH-332	3.52	n2497	3.44	18	0.448	4.64	4.56	200 mm
5567	CO-630	n910	4.19	n918	4.29	24	0.4	5.36	5.41	200 mm
5574	CO-644	n2530	0.99	n2531	0.83	40	0.4	3.14	3.26	200 mm
3670	p1169	n1711	5.31	n1712	5.66	30	1.176	6.43	6.78	200 mm
3415	•	n1407	6.57	n1408	6.45	30	0.421	7.7	7.56	200 mm
	•	n3202	3.26	MH-350	3.33	15	0.422	8.19		200 mm
	p313(1)(1)			MH-612	6.56	21	0.325	7.75		200 mm
		n2826		MH-105	6.83	25	0.4	7.87		200 mm
	p595(2)(1)(			MH-493	3.69	6	0.407	8.88		200 mm
	CO-68	n2971		MH-48	3.61	34	0.496	4.56		200 mm
		MH-80		n2785	4.45	19	0.401	6.29		200 mm
	. ,	MH-333		n2499	3.26	24	0.598	4.53		200 mm
	-	n3143		n3145	4.31	29	0.338	5.64		200 mm
	p1703(1)	n2474		MH-329	3.59	5	0.4	4.77		200 mm
		MH-307		n1897	6.85	18	0.4	9.32		200 mm
	p1308(2)	n1943		n1945	4.35	30	0.4	5.49		200 mm
						27				
	CO-346	n1717		MH-392	10.47		0.4	12.07		200 mm 200 mm
		n1093		MH-825	4.75	6	0.4	6.6		
	CO-304	n2187		MH-127	4.03	43	0.4	5.59		200 mm
3386	•	n1376		n1377	5.65	30	0.4	7.51		200 mm
	p982(1)(2)			MH-238	4.75	8	0.397	6.97		200 mm
2586		n200	14.15		13.73	30	1.399	15.27		200 mm
	CO-534	n672	16.15		16.01	30	0.476	17.27		200 mm
2588	•	n203	13.52		13.01	30	1.685	14.64		200 mm
		MH-219		n2360	6.79	14	4.475	8.56		200 mm
3113	•	n1036		n1038	6.28	37	0.559	7.61		200 mm
	p665(1)(1)			MH-682	3.84	18	0.461	4.88		200 mm
	p1173	n1716		n1717	10.36	26	0.46	12.29		200 mm
3379	•	n1362		n1364	3.94	32	0.372	5.47		200 mm
	. ,	MH-219		n2362	8.03	14	4.117	8.56		200 mm
	CO-642	n1300		MH-290	4.37	10	2.133	5.28		200 mm
2652		n295		n296	4.32	30	1.775	4.91		200 mm
3155		n1092		n1093	4.72	27	0.443	6.58		200 mm
	p934(1)	n1364		MH-778	3.9	9	0.431	5.46		200 mm
3351		n1326		n1325	7.2	27	0.444	8.44		200 mm
	CO-352	n2506		n2508	1.67	40	1.492	3.45		200 mm
3381	•	n1366	3.83	n1368	3.71	17	0.696	5.38	5.38	200 mm
	p1566	n2276	4.45	n2275	5.09	39	1.635	5.57	6.21	200 mm
1560	-1020	n2825	6 61	n2826	6.73	30	0.4	7.94	7.87	200 mm
4308	p1938		0.01							
	p1938 p982(2)	MH-238		n1431	4.72	8	0.404	6.87	6.76	200 mm
	p982(2)		4.75		4.72 7.18	8 30	0.404 0.672	6.87 8.5		200 mm 200 mm

2991   p595(1)   n889   3.64   MH-490   3.67   6   0.4   9.02   8.88   200 mm   3416   p966					I		1				
3416   p966			n1633			6.78	12	0.4	10.18		
4831   p2158   n3145	2991	p595(1)	n889	3.64	MH-490	3.67	6	0.4	9.02	8.88	200 mm
4049   1507   12187   3.86   12186   3.74   30   0.4   5.59   5.81   200 mm   3858   1340   11942   4.11   11943   4.23   30   0.4   5.52   5.49   200 mm   3167   CO-284   MIH-851   4.21   12   4.37   41   0.4   5.54   5.49   200 mm   3167   CO-284   1103   7.2   11262   7.09   29   0.4   5.59   9.96   200 mm   3167   CO-210   MIH-81   4.31   MIH-80   4.37   15   0.4   6.2   6.29   200 mm   2799   CO-212   1650   7.04   1648   7.13   23   0.4   8.61   8.25   200 mm   3439   p1747   12532   0.71   12534   0.59   30   0.4   3.27   3.29   200 mm   3439   p1747   12532   0.71   12534   0.59   30   0.4   3.27   3.29   200 mm   3387   p981(1)(1)   MIH-899   4.12   MIH-688   4.1   5   0.399   5.66   5.65   200 mm   3387   p941(2)(2)   MIH-825   5.48   11376   5.53   11   0.392   7.57   7.51   200 mm   3387   p941(2)(2)   MIH-825   5.48   11376   5.53   11   0.392   7.57   7.51   200 mm   3387   p941(2)(2)   MIH-825   4.75   11094   4.84   39   0.248   6.61   6.66   200 mm   3388   p884(2)   MIH-288   5.03   11296   5.08   6   0.773   6.15   6.19   200 mm   3328   p884(2)   MIH-288   5.03   11296   5.08   6   0.773   6.15   6.19   200 mm   3330   p884(1)   11297   4.84   MIH-288   5.03   21   0.857   5.96   6.15   200 mm   3073   p664   p987   3.64   p988   3.76   30   0.401   4.77   4.88   200 mm   3073   p664   p987   3.64   p988   3.76   30   0.401   4.77   4.88   200 mm   3439   p983   11431   4.72   11432   4.6   30   0.401   4.77   4.88   200 mm   3439   p983   11431   4.72   11432   4.6   30   0.401   4.77   4.88   200 mm   3439   p983   11431   4.72   11432   4.6   30   0.401   4.77   4.88   200 mm   3439   p983   11431   4.72   11444   5.77   118   0.4   0.4   5.59   5.96   6.15   200 mm   3435   p983   11431   4.72   11432   4.6   30   0.401   4.77   4.88   200 mm   3435   p983   11431   4.72   11432   4.6   30   0.401   4.77   4.88   200 mm   3439   p983   11431   4.72   11444   5.77   118   0.4   0.4   5.62   5.65   200 mm   3435   p983   11431   4.72   11432   4.6   30   0.40   4.61   4.75   200 mm   343	3416	p966	n1408	6.45	n1410	6.33	30	0.4	7.56	7.5	200 mm
3858   1340   n1942	4831	p2158	n3145	4.31	n3146	4.21	26	0.4	5.67	5.68	200 mm
3858   1340   n1942	4049	p1507	n2187	3.86	n2186	3.74	30	0.4	5.59	5.81	200 mm
Section   Sect				4.11	n1943	4.23	30	0.4	5.62	5.49	200 mm
3167   CO-284   n1103   7.2   n1262   7.09   29   0.4   9.59   9.96   200 mm					l						
5172         CO-110         MH-81         4.31         MH-80         4.37         15         0.4         6.2         6.29         200 mm           2672         CO-232         n491         6.2         n492         6.04         41         0.4         7.32         7.17         200 mm           4349         p1747         n2532         0.71         n2534         0.59         30         0.4         3.27         3.29         200 mm           5079         p682(1)(1)         MH-689         4.12         MH-688         4.1         5         0.3999         5.66         5.65         200 mm           3837         p941(2)(2)         MH-825         5.48         n1376         5.53         11         0.92         7.57         7.51         200 mm           3157         p737(2)(2)         MH-825         4.75         n1094         4.84         39         0.248         6.61         6.66         200 mm           3157         p737(2)(2)         MH-825         4.75         n1094         4.84         39         0.248         6.61         6.61         6.00         mm           328         p884(2)         MH-288         5.03         n1296         5.08 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
2672   CO-238   n491   6.2   n492   6.04   41   0.4   7.32   7.17   200 mm     2799   CO-212   n650   7.04   n648   7.13   23   0.4   8.61   8.25   200 mm     4349   p1747   n2532   0.71   n2534   0.59   30   0.4   3.27   3.29   200 mm     4880   p2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm     4880   p2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm     4880   p2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm     4880   p2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm     4885   p2238   n2980   2.77   n3253   3.78   30   3.371   5.41   5.53   200 mm     4885   p2238   n2980   2.77   n3253   3.78   30   3.371   5.41   5.53   200 mm     4906   p2229   n3238   5.23   n3240   4.97   30   0.885   6.66   6.09   200 mm     4906   p2229   n328   5.23   n3240   4.97   30   0.885   6.66   6.09   200 mm     4908   p2229   n328   5.23   n3240   4.97   30   0.885   6.66   6.09   200 mm     3330   p884(1)   n1297   4.84   MH-288   5.03   21   0.857   5.96   6.15   200 mm     3301   p884(1)   n1297   4.84   MH-288   5.03   21   0.857   5.96   6.15   200 mm     5105   p1(1)(1)(2)   MH-852   4.08   MH-851   4.21   31   0.402   5.24   5.34   200 mm     3073   p664   n987   3.64   n988   3.76   30   0.401   4.77   4.88   200 mm     4520   p1890   n2746   3.89   n2748   3.77   30   0.401   5.71   4.92   200 mm     4529   p1910(1)   n2782   4.21   MH-81   4.31   26   0.4   6.1   6.2   200 mm     4529   p1910(1)   n2782   4.21   MH-81   4.31   26   0.4   6.1   6.2   200 mm     3435   p771   n1142   5.77   n1144   5.7   18   0.4   7.07   6.98   200 mm     3906   CO-210   MH-571   7.01   n650   7.04   9   0.4   8.36   8.61   200 mm     408   p1506   n2186   3.74   n2184   3.62   3.0   0.40   5.43   5.41   200 mm     5906   CO-260   M1-755   3.75   M1-146   3.29   20   0.4   4.48   4.46   200 mm     408   p1506   n2186   3.74   n2184   3.62   3.0   0.4   5.62   5.65   200 mm     5920   CO-326   MH-145   3.37   MH-146   3.29   20   0.4   4.48   4.46											
2799   CO-212   n650   7.04   n648   7.13   23   0.4   8.61   8.25   200 mm   4349   p1747   n2532   0.71   n2534   0.59   30   0.4   3.27   3.29   200 mm   4880   p2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm   3387   p941(2)(2)   MH-822   5.48   n1376   5.53   11   0.392   7.57   7.51   200 mm   3157   p737(2)(2)   MH-825   4.75   n1094   4.84   39   0.248   6.61   6.66   200 mm   4685   p2238   n2980   2.77   n3253   3.78   30   3.371   5.41   5.53   200 mm   4906   p2229   n3238   5.23   n3240   4.97   30   0.885   6.66   6.09   200 mm   4567   p1937   n2823   6.49   n2825   6.61   30   0.4   7.93   7.94   200 mm   4567   p1937   n2823   6.49   n2825   6.61   30   0.4   7.93   7.94   200 mm   3330   p884(1)   n1297   4.84   MH-288   5.03   21   0.857   5.96   6.15   200 mm   4806   p229   n3238   5.36   n348   MH-851   4.21   31   0.402   5.24   5.34   200 mm   4502   p1890   n2746   3.89   n2748   3.77   30   0.401   4.77   4.88   200 mm   4502   p1890   n2746   3.89   n2748   3.77   30   0.401   4.77   4.88   200 mm   4529   p1901   n2782   4.21   MH-81   4.31   2.6   0.4   6.1   6.2   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.40   3.29   3.43   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.40   3.29   3.43   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.40   3.29   3.43   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.40   3.29   3.43   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.4   4.61   4.75   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.4   3.29   3.43   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.4   4.61   4.75   0.00 mm   4.86   0.70   0.96   200 mm   4.86   0.96   0.96   0.96   0.96   0.96   0.96   0.96   0.96   0.96   0.96						_					
4349   p1747   p2532   0.71   p2534   0.59   30   0.4   3.27   3.29   200 mm   200 p682(1)(1)   MH-689   4.12   MH-688   4.1   5   0.399   5.66   5.65   200 mm   200 mm   20205   p3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm   2											
5079   682(1)(1)   MH-689   4.12   MH-688   4.1   5   0.399   5.66   5.65   200 mm   4880   2205   n3200   3.21   n3202   3.26   14   0.4   5.97   8.19   200 mm   3387   p941(2)(2)   MH-822   5.48   n1376   5.53   11   0.392   7.57   7.51   200 mm   4685   p2238   n2980   2.77   n3253   3.78   30   3.371   5.41   5.65   200 mm   4685   p2238   n2980   2.77   n3253   3.78   30   3.371   5.41   5.65   200 mm   4906   p2229   n3238   5.23   n3240   4.97   30   0.885   6.66   6.09   200 mm   4567   p1937   n2823   6.49   n2825   6.61   30   0.4   7.93   7.94   200 mm   4567   p1937   n2823   6.49   n2825   6.61   30   0.4   7.93   7.94   200 mm   4507   p1937   n2823   6.49   n2825   6.61   30   0.40   7.93   7.94   200 mm   4502   p1901   n246   3.89   n2748   3.76   30   0.401   4.77   4.88   200 mm   4502   p1890   n2746   3.89   n2748   3.77   30   0.401   4.77   4.88   200 mm   4292   p1701   n2472   3.34   n2473   3.46   30   0.401   6.76   7.27   200 mm   4292   p1910(1)   n2782   4.21   MH-81   4.31   2.6   0.4   6.1   6.2   200 mm   4350   p1748   n2534   0.59   n2535   0.47   30   0.4   3.29   3.43   200 mm   4360   0.744   n329   3.43   200 mm   4390   n2746   3.39   n1441   4.72   n1432   4.6   30   0.40   6.1   6.2   200 mm   4350   n748   n2534   0.59   n2535   0.47   30   0.4   3.29   3.43   200 mm   4360   n748   n2534   0.59   n2535   0.47   30   0.4   3.29   3.43   200 mm   4360   n748   n2534   0.59   n2535   0.47   30   0.4   3.29   3.43   200 mm   4360   n748   n354   n354   n354   n354   n354   n356   n3											
4880         p2205         n3200         3.21         n3202         3.26         14         0.4         5.97         8.19         200 mm           3387         p941(2)(2)         MH-822         5.48         n1376         5.53         11         0.392         7.57         7.51         200 mm           4685         p238         n2980         2.77         n3253         3.78         30         0.348         6.61         6.66         200 mm           4906         p2239         n3238         5.23         n3240         4.97         30         0.885         6.66         6.09         200 mm           4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           3330         p884(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           3330         p84(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           3330         p84(1)         h1297         4.84         MH-288         3.76         30         0.401											
3387         p941(2)(2)         MH-822         5.48         n1376         5.53         11         0.392         7.57         7.51         200 mm           3157         p737(2)(2)         MH-825         4.75         n1094         4.84         39         0.248         6.61         6.66         200 mm           4685         p2238         n2980         2.77         n3253         3.78         30         3.371         5.41         5.53         200 mm           4906         p2229         n3238         5.23         n3240         4.97         30         0.885         6.66         6.09         200 mm           4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           3330         p884(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30			MH-689	4.12	MH-688			0.399	5.66		
3157 p737(2)(2) MH-825	4880	p2205	n3200	3.21	n3202	3.26	14		5.97	8.19	200 mm
4685         p2238         n2980         2.77         n3253         3.78         30         3.371         5.41         5.53         200 mm           3328         p884(2)         MH-288         5.03         n1296         5.08         6         0.773         6.15         6.19         200 mm           4906         p2229         n3238         5.23         n3240         4.97         30         0.885         6.66         6.09         200 mm           4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           3450         p1701         n2472         3.34         n2473         3.46         30         0.401 <td>3387</td> <td>p941(2)(2)</td> <td>MH-822</td> <td>5.48</td> <td>n1376</td> <td>5.53</td> <td>11</td> <td>0.392</td> <td>7.57</td> <td>7.51</td> <td>200 mm</td>	3387	p941(2)(2)	MH-822	5.48	n1376	5.53	11	0.392	7.57	7.51	200 mm
4685         p2238         n2980         2.77         n3253         3.78         30         3.371         5.41         5.53         200 mm           3328         p884(2)         MH-288         5.03         n1296         5.08         6         0.773         6.15         6.19         200 mm           4906         p229         n3238         5.23         n3240         4.97         30         0.885         6.66         6.09         200 mm           4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           4529         p1701         n2472         3.34         n2473         3.46         30         0.41	3157	p737(2)(2)	MH-825	4.75	n1094	4.84	39	0.248	6.61	6.66	200 mm
3328 p884(2)         MH-288         5.03 n1296         5.08         6         0.773         6.15         6.19 200 mm           4906 p2229         n3238         5.23 n3240         4.97         30         0.885         6.66         6.09 200 mm           4567 p1937         n2823         6.49 n2825         6.61         30         0.4         7.93         7.94 200 mm           3330 p884(1)         n1297         4.84 MH-288         5.03         21 0.857         5.96         6.15 200 mm           3105 p1(1)(1)(2)         MH-852         4.08 MH-851         4.21         31 0.402         5.24         5.34 200 mm           3073 p664         n987         3.64 n988         3.76         30 0.401         4.77         4.88 200 mm           4502 p1890         n2746         3.89 n2748         3.77         30 0.401         5.01         4.92 200 mm           4329 p1701         n2472         3.34 n2473         3.46         30 0.401         6.76         7.27 200 mm           4529 p1910(1)         n2782         4.21 MH-81         4.31         26 0.4         6.1         6.2 200 mm           4529 p1910(1)         n2782         4.21 MH-81         4.31         26 0.4         6.1         6.2         200 mm				2.77	n3253	3.78	30	3.371	5.41	5.53	200 mm
4906         p2229         n3238         5.23         n3240         4.97         30         0.885         6.66         6.09         200 mm           4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           3330         p884(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.76         7.27         200 mm           4502         p1893         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4292         p1701         n2472         3.34         n2473         3.46         30         0.4	3328	p884(2)	MH-288	5.03	n1296	5.08	6	0.773	6.15	6.19	200 mm
4567         p1937         n2823         6.49         n2825         6.61         30         0.4         7.93         7.94         200 mm           3330         p884(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           3435         p983         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4529         p1701         n2472         3.34         22473         3.46         30         0.4         4.61         4.75         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4		· · ·					30				
3330         p884(1)         n1297         4.84         MH-288         5.03         21         0.857         5.96         6.15         200 mm           5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           4292         p1701         n2472         3.34         n2473         3.46         30         0.401         6.76         7.27         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4<											
5105         p1(1)(1)(2)         MH-852         4.08         MH-851         4.21         31         0.402         5.24         5.34         200 mm           3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           3435         p983         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4					l	_					
3073         p664         n987         3.64         n988         3.76         30         0.401         4.77         4.88         200 mm           4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           3435         p983         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4292         p1701         n2472         3.34         n2473         3.46         30         0.4         4.61         4.75         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4350         p1748         n2534         0.59         n2535         0.47         30         0.4         3.29         3.43         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           3096         C0-96         n1015         4.01         MH-688         4.1         23         0.4         5.62 </td <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					-						
4502         p1890         n2746         3.89         n2748         3.77         30         0.401         5.01         4.92         200 mm           3435         p983         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4292         p1701         n2472         3.34         n2473         3.46         30         0.4         4.61         4.75         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4350         p1748         n2534         0.59         n2535         0.47         30         0.4         3.29         3.43         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62											
3435         p983         n1431         4.72         n1432         4.6         30         0.401         6.76         7.27         200 mm           4292         p1701         n2472         3.34         n2473         3.46         30         0.4         4.61         4.75         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4350         p1748         n2534         0.59         n2535         0.47         30         0.4         3.29         3.43         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           2800         CO-210         MH-571         7.01         n650         7.04         9         0.4         8.36         8.61         200 mm           3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62         5.65         200 mm           2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17											
4292         p1701         n2472         3.34         n2473         3.46         30         0.4         4.61         4.75         200 mm           4529         p1910(1)         n2782         4.21         MH-81         4.31         26         0.4         6.1         6.2         200 mm           4350         p1748         n2534         0.59         n2535         0.47         30         0.4         3.29         3.43         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           2800         CO-210         MH-571         7.01         n650         7.04         9         0.4         8.36         8.61         200 mm           3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62         5.65         200 mm           2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17         7.17         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66 <td></td>											
4529 p1910(1)         n2782         4.21 MH-81         4.31 26         0.4         6.1         6.2 200 mm           4350 p1748         n2534         0.59 n2535         0.47 30         0.4         3.29 3.43 200 mm           3196 p771         n1142         5.77 n1144         5.7 18 0.4         7.07 6.98 200 mm           2800 CO-210 MH-571         7.01 n650         7.04 9 0.4 8.36 8.61 200 mm           3096 CO-96 n1015         4.01 MH-688 4.1 23 0.4 5.62 5.65 200 mm           2673 CO-240 n492         6.04 n495 5.8 59 0.4 7.17 7.17 200 mm           5290 CO-326 MH-145 3.37 MH-146 3.29 20 0.4 4.48 4.46 200 mm           3385 CO-262 n1374 5.41 MH-822 5.48 18 0.4 7.66 7.57 200 mm           5096 CO-216 MH-778 3.9 MH-780 3.88 6 0.4 5.43 5.41 200 mm           4675 p2036 n2971 3.44 n2972 3.32 30 0.4 4.56 4.63 200 mm           4048 p1506 n2186 3.74 n2184 3.62 30 0.4 5.81 6.11 200 mm           3857 p1339 n1941 3.99 n1942 4.11 30 0.4 5.69 5.62 200 mm           3857 p735 n1090 4.48 n1092 4.6 30 0.4 5.69 5.62 200 mm           5632 CO-700 n1835 3.65 MH-75 -0.01 14 25.463 5.59 5.38 200 mm           5427 CO-594 n2952 5.77 n2955 5.59 45 0.4 7.23 7.09 200 mm           4879 p2204 n3199 3.14 n3200 3.21 16 0.4 5.93 5.97 200 mm           3095 p683(1) n1015 4.01 MH-690 3.94 17 0.435 5.62 5.37 200 mm		-									
4350         p1748         n2534         0.59         n2535         0.47         30         0.4         3.29         3.43         200 mm           3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           2800         CO-210         MH-571         7.01         n650         7.04         9         0.4         8.36         8.61         200 mm           3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62         5.65         200 mm           2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17         7.17         200 mm           5290         CO-326         MH-145         3.37         MH-146         3.29         20         0.4         4.48         4.46         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56<											
3196         p771         n1142         5.77         n1144         5.7         18         0.4         7.07         6.98         200 mm           2800         CO-210         MH-571         7.01         n650         7.04         9         0.4         8.36         8.61         200 mm           3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62         5.65         200 mm           2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17         7.17         200 mm           5290         CO-326         MH-145         3.37         MH-146         3.29         20         0.4         4.48         4.46         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56						_					
2800 CO-210         MH-571         7.01 n650         7.04         9         0.4         8.36         8.61 200 mm           3096 CO-96         n1015         4.01 MH-688         4.1         23         0.4         5.62         5.65 200 mm           2673 CO-240         n492         6.04 n495         5.8         59         0.4         7.17         7.17 200 mm           5290 CO-326         MH-145         3.37 MH-146         3.29         20         0.4         4.48         4.46 200 mm           3385 CO-262         n1374         5.41 MH-822         5.48         18         0.4         7.66         7.57 200 mm           5096 CO-216         MH-778         3.9 MH-780         3.88         6         0.4         5.43         5.41 200 mm           4675 p2036         n2971         3.44 n2972         3.32         30         0.4         4.56         4.63 200 mm           4048 p1506         n2186         3.74 n2184         3.62         30         0.4         5.81         6.11 200 mm           3299 p858         n1261         6.97 n1262         7.09         30         0.4         5.69         5.62 200 mm           3154 p735         n1090         4.48 n1092         4.6         30		<u>'</u>			-						
3096         CO-96         n1015         4.01         MH-688         4.1         23         0.4         5.62         5.65         200 mm           2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17         7.17         200 mm           5290         CO-326         MH-145         3.37         MH-146         3.29         20         0.4         4.48         4.46         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         5.6		·				_					
2673         CO-240         n492         6.04         n495         5.8         59         0.4         7.17         7.17         200 mm           5290         CO-326         MH-145         3.37         MH-146         3.29         20         0.4         4.48         4.46         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59<						7.04		0.4			
5290         CO-326         MH-145         3.37         MH-146         3.29         20         0.4         4.48         4.46         200 mm           3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         10.06         9.96         200 mm           3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.	3096	CO-96	n1015	4.01	MH-688	4.1	23	0.4	5.62	5.65	200 mm
3385         CO-262         n1374         5.41         MH-822         5.48         18         0.4         7.66         7.57         200 mm           5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         10.06         9.96         200 mm           3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463	2673	CO-240	n492	6.04	n495	5.8	59	0.4	7.17	7.17	200 mm
5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         10.06         9.96         200 mm           3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463         5.59         5.38         200 mm           5427         CO-594         n2952         5.77         n2955         5.59         45         0.4         7	5290	CO-326	MH-145	3.37	MH-146	3.29	20	0.4	4.48	4.46	200 mm
5096         CO-216         MH-778         3.9         MH-780         3.88         6         0.4         5.43         5.41         200 mm           4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         10.06         9.96         200 mm           3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463         5.59         5.38         200 mm           5427         CO-594         n2952         5.77         n2955         5.59         45         0.4         7	3385	CO-262	n1374	5.41	MH-822	5.48	18	0.4	7.66	7.57	200 mm
4675         p2036         n2971         3.44         n2972         3.32         30         0.4         4.56         4.63         200 mm           4048         p1506         n2186         3.74         n2184         3.62         30         0.4         5.81         6.11         200 mm           3299         p858         n1261         6.97         n1262         7.09         30         0.4         10.06         9.96         200 mm           3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463         5.59         5.38         200 mm           5427         CO-594         n2952         5.77         n2955         5.59         45         0.4         7.23         7.09         200 mm           4879         p2204         n3199         3.14         n3200         3.21         16         0.4         5.			MH-778	3.9	MH-780	3.88	6	0.4			
4048 p1506         n2186         3.74 n2184         3.62         30         0.4         5.81         6.11 200 mm           3299 p858         n1261         6.97 n1262         7.09         30         0.4         10.06         9.96 200 mm           3857 p1339         n1941         3.99 n1942         4.11         30         0.4         5.69         5.62 200 mm           3154 p735         n1090         4.48 n1092         4.6         30         0.4         6.59         6.58 200 mm           5632 CO-700         n1835         3.65 MH-75         -0.01         14 25.463         5.59         5.38 200 mm           5427 CO-594         n2952         5.77 n2955         5.59         45         0.4         7.23         7.09 200 mm           4879 p2204         n3199         3.14 n3200         3.21         16         0.4         5.93         5.97 200 mm           2806 CO-206         n656         5.64 MH-576         5.73         11         0.798         6.76         6.89 200 mm           3095 p683(1)         n1015         4.01 MH-690         3.94         17         0.435         5.62         5.37 200 mm						_					
3299 p858         n1261         6.97 n1262         7.09         30         0.4         10.06         9.96 200 mm           3857 p1339         n1941         3.99 n1942         4.11         30         0.4         5.69         5.62 200 mm           3154 p735         n1090         4.48 n1092         4.6         30         0.4         6.59         6.58 200 mm           5632 CO-700         n1835         3.65 MH-75         -0.01         14 25.463         5.59         5.38 200 mm           5427 CO-594         n2952         5.77 n2955         5.59         45 0.4         7.23         7.09 200 mm           4879 p2204         n3199         3.14 n3200         3.21 16 0.4         5.93         5.97 200 mm           2806 CO-206         n656         5.64 MH-576         5.73 11 0.798 6.76 6.89 200 mm         6.89 200 mm           3095 p683(1)         n1015         4.01 MH-690         3.94 17 0.435 5.62 5.37 200 mm		·									
3857         p1339         n1941         3.99         n1942         4.11         30         0.4         5.69         5.62         200 mm           3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463         5.59         5.38         200 mm           5427         CO-594         n2952         5.77         n2955         5.59         45         0.4         7.23         7.09         200 mm           4879         p2204         n3199         3.14         n3200         3.21         16         0.4         5.93         5.97         200 mm           2806         CO-206         n656         5.64         MH-576         5.73         11         0.798         6.76         6.89         200 mm           3095         p683(1)         n1015         4.01         MH-690         3.94         17         0.435         5.62         5.37         200 mm		·									
3154         p735         n1090         4.48         n1092         4.6         30         0.4         6.59         6.58         200 mm           5632         CO-700         n1835         3.65         MH-75         -0.01         14         25.463         5.59         5.38         200 mm           5427         CO-594         n2952         5.77         n2955         5.59         45         0.4         7.23         7.09         200 mm           4879         p2204         n3199         3.14         n3200         3.21         16         0.4         5.93         5.97         200 mm           2806         CO-206         n656         5.64         MH-576         5.73         11         0.798         6.76         6.89         200 mm           3095         p683(1)         n1015         4.01         MH-690         3.94         17         0.435         5.62         5.37         200 mm		·				_					
5632       CO-700       n1835       3.65       MH-75       -0.01       14       25.463       5.59       5.38       200 mm         5427       CO-594       n2952       5.77       n2955       5.59       45       0.4       7.23       7.09       200 mm         4879       p2204       n3199       3.14       n3200       3.21       16       0.4       5.93       5.97       200 mm         2806       CO-206       n656       5.64       MH-576       5.73       11       0.798       6.76       6.89       200 mm         3095       p683(1)       n1015       4.01       MH-690       3.94       17       0.435       5.62       5.37       200 mm					-						
5427 CO-594       n2952       5.77 n2955       5.59       45       0.4       7.23       7.09 200 mm         4879 p2204       n3199       3.14 n3200       3.21       16       0.4       5.93       5.97 200 mm         2806 CO-206       n656       5.64 MH-576       5.73       11       0.798       6.76       6.89 200 mm         3095 p683(1)       n1015       4.01 MH-690       3.94       17       0.435       5.62       5.37 200 mm		·				<del>                                     </del>					
4879     p2204     n3199     3.14     n3200     3.21     16     0.4     5.93     5.97     200 mm       2806     CO-206     n656     5.64     MH-576     5.73     11     0.798     6.76     6.89     200 mm       3095     p683(1)     n1015     4.01     MH-690     3.94     17     0.435     5.62     5.37     200 mm											
2806 CO-206     n656     5.64 MH-576     5.73     11     0.798     6.76     6.89 200 mm       3095 p683(1)     n1015     4.01 MH-690     3.94     17     0.435     5.62     5.37 200 mm					l						
3095 p683(1) n1015 4.01 MH-690 3.94 17 0.435 5.62 5.37 200 mm		•				_					
						_					
3669 CO-64  n1708   4.89 MH-387   5.21  38  0.851  6.01  6.49 200 mm		· · ·	n1015	4.01	MH-690	3.94		0.435	5.62		
22 22 23 3332 3332 3332	3669	CO-64	n1708	4.89	MH-387	5.21	38	0.851	6.01	6.49	200 mm
3329 p885 n1298 4.57 n1297 4.84 32 0.85 5.69 5.96 200 mm	3329	p885	n1298	4.57	n1297	4.84	32	0.85	5.69	5.96	200 mm

4316	p1721(1)	n2500	2.8	MH-334	2.78	5	0.485	3.92	3.9	200 mm
4658	p2226	n2955	5.59	n3234	5.47	29	0.411	7.09	6.73	200 mm
4566	p1936	n2821	6.37	n2823	6.49	30	0.4	7.94	7.93	200 mm
4833	p2159(1)	n3146	4.21	MH-450	4.13	15	0.549	5.68	5.58	200 mm
	p1(1)(1)(1)	n1	3.99	MH-852	4.08	23	0.402	5.15	5.24	200 mm
	p663	n986	3.52	n987	3.64	30	0.401	4.78	4.77	200 mm
	p984	n1432		n1434	4.48	30	0.401	7.27		200 mm
	p2037	n2972		n2973	3.2	30	0.4	4.63		200 mm
2674	-	n495		n496	5.68	30	0.4	7.17		200 mm
	p1909	n2780		n2782	4.21	30	0.4	5.8		200 mm
	p1338	n1940		n1941	3.99	30	0.4	5.95		200 mm
	p1505	n2184		n2182	3.5	30	0.4	6.11		200 mm
	p1700	n2471		n2472	3.34	30	0.4	4.7		200 mm
3298	•	n1260		n1261	6.97	30	0.4	10.15		200 mm
	CO-180	n2535		MH-730	0.37	42	0.4	3.43		200 mm
	CO-180 CO-328	n2220		MH-146	3.29	23	0.4	4.52		200 mm
	CO-328 CO-266	n1126		n1374	5.41	30	0.4	8.44		200 mm
	CO-266 CO-162	MH-489		n888	3.52	6	0.4	8.44		200 mm
					+ +					
	p1891	n2748		n2750	3.65	30	0.4	4.92		200 mm
3198	•	n1144		n1146	5.6	25	0.4	6.98		200 mm
	p2203	n3197		n3199	3.14	30	0.4	5.97		200 mm
3349	•	n1323		n1321	6.96	25	0.485	8.55		200 mm
2989	-	n888		n889	3.64	38	0.317	8.93		200 mm
	. ,,,,			MH-689	4.12	11	0.209	5.67		200 mm
	. ,	n2271		MH-184	6.11	21	0.654	7.09		200 mm
	p904(2)	MH-276		n1323	7.08	21	0.382	8.49		200 mm
3383	-	n1368		n1370	3.59	25	0.489	5.38		200 mm
	p904(1)	n1325		MH-276	7.16	13	0.312	8.46		200 mm
	p1723(2)(2			n2504	2.39	18	0.702	3.64		200 mm
	p1625	n2359		n2360	6.79	30	2.482	7.17		200 mm
	p1935	n2820		n2821	6.37	30	0.401	7.4		200 mm
	p1699	n2469		n2471	3.22	30	0.401	4.83		200 mm
	p1337	n1939		n1940	3.87	30	0.4	6.19		200 mm
	p856	n1258		n1260	6.85	30	0.4	10.03		200 mm
	p1908	n2778		n2780	4.09	30	0.4	5.67		200 mm
	p1892	n2750		n2752	3.54	27	0.4	4.8		200 mm
	CO-300	n2181	3.38	n2182	3.5	30	0.4	6.75	6.35	200 mm
5147	CO-62	n2974	3.08	n2973	3.2	31	0.4	4.58	4.78	200 mm
5213	CO-178	MH-730	0.3	MH-732	0.21	23	0.4	3.4	3.37	200 mm
5423	CO-586	MH-236	4.41	n1434	4.48	17	0.4	7.05	7.18	200 mm
3097	CO-94	n1018	3.78	MH-690	3.94	38	0.4	5.64	5.37	200 mm
2988	p593(1)(1)	n887	3.44	MH-489	3.5	14	0.4	7.38	8.13	200 mm
4452	p1840	n2674	5.07	n2675	5.11	10	0.4	7.68	7.65	200 mm
3071	p662	n985	3.4	n986	3.52	30	0.4	4.82	4.78	200 mm
5159	CO-84	MH-58	5.39	n3234	5.47	21	0.4	6.64	6.73	200 mm
4877	p2202	n3195	2.9	n3197	3.02	30	0.4	5.86	5.97	200 mm
5257	CO-260	MH-61	4.85	n3240	4.97	18	0.659	5.97	6.09	200 mm

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	p1529	n2221		n2220	3.19	32	0.379	4.49		200 mm
	p115	n201	13.73		13.52	30	0.707	14.85		200 mm
	. ,	MH-334		n2502	2.68	23	0.416	3.9		200 mm
3440	p985(2)	MH-236	4.41	n1435	4.36	12	0.406	7.05	6.96	200 mm
4451	p1839	n2673	4.95	n2674	5.07	30	0.401	7.82	7.68	200 mm
2803	p426(1)	n654	5.79	MH-575	5.87	20	0.4	7.06	6.99	200 mm
3070	p661	n984	3.28	n985	3.4	30	0.4	4.76	4.82	200 mm
3296	p855	n1256	6.61	n1258	6.73	30	0.4	8.67	10.03	200 mm
5212	CO-176	MH-732	0.21	MH-735	0.13	21	0.4	3.37	3.3	200 mm
5318	CO-378	n2222	2.97	n2221	3.07	26	0.4	4.31	4.49	200 mm
5146	CO-60	n2974	3.08	n2977	2.97	28	0.4	4.58	5.01	200 mm
4013	p1503	n2181	3.38	n2135	3.3	21	0.4	6.75	7.12	200 mm
4526	p1907	n2776	3.85	n2778	3.97	30	0.4	5.53	5.67	200 mm
	p1336	n1938		n1939	3.75	30	0.4	6.31		200 mm
	CO-86	MH-59		MH-58	5.39	12	0.4	6.6		200 mm
		n3193		n3195	2.9	30	0.4	5.91		200 mm
	p1722(1)	n2502		MH-335	2.59	21	0.452	3.82		200 mm
	p592	n886		n887	3.44	32	0.38	6.59		200 mm
	CO-202	MH-217		n2368	16.06	45	1.21	17.72		200 mm
	p706	n1052		n1053	2.94	18	0.682	4.57		200 mm
2985		n885		n886	3.32	29	0.082	6.04		200 mm
	p1563	n2272		n2271	5.97	32	0.523	6.92		200 mm
	·	MH-27		n984	3.28	24	0.323	4.74		200 mm
				n2469	3.20	21	0.401	4.74		200 mm
	p1698(2)(2									
		n2977		n2978	2.85	30	0.401	5.01		200 mm
	p1110	n1613		n1615	7.49	30	0.4	9.62		200 mm
	p1838	n2671		n2673	4.95	30	0.4	7.77		200 mm
		MH-450		n3148	4.09	9	0.4	5.58		200 mm
	CO-198	n1435		MH-235	4.22	35	0.4	6.96		200 mm
		MH-151		n2222	2.97	40	0.4	4.6		200 mm
		MH-735		MH-738	0.06	15	0.4	3.3		200 mm
	p854	n1254		n1256	6.61	30	0.4	9.65		200 mm
	p1906	n2775		n2776	3.85	30	0.4	5.44		200 mm
	p173	n294		n295	3.79	30	0.764	4.68		200 mm
	· · ·	MH-59		n3238	5.23	27	0.398	6.6		200 mm
	p427(2)	MH-576		n654	5.79	16	0.394	6.89		200 mm
	p704	n1048		n1050	3.18	24	0.505	4.59		200 mm
	p902	n1321		n1320	6.84	34	0.357	8.53		200 mm
	p1137	n1653		n1655	2.25	17	0.702	6.37		200 mm
	` ` `	MH-387		n1711	5.31	21	0.439	6.49		200 mm
	CO-282	n1116		n1320	6.84	8	0.4	9.05		200 mm
	p1560	n2269		n2267	6.37	36	0.333	7.47		200 mm
	p2200	n3192		n3193	2.78	31	0.384	6.02		200 mm
2658	p180	n305	11.09	n307	11.16	16	0.417	14.22	12.28	200 mm
5304	CO-354	MH-335	2.59	MH-337	2.52	16	0.422	3.73	3.64	200 mm
5401	CO-544	n911	3.79	n255	3.31	40	1.198	5.16	5.51	200 mm
F 4 4 4	p660(1)	n983	3.16	MH-27	3.18	6	0.402	4.73	4.74	200 mm

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	p1934	n2818		n2820	6.25	30	0.402	7.44		200 mm
4287	p1697	n2466	2.86	n2468	2.98	27	0.452	4.68		200 mm
3294	p853	n1253	6.37	n1254	6.49	30	0.4	9.7	9.65	200 mm
4683	p2042	n2978	2.85	n2980	2.77	19	0.4	5.25	5.41	200 mm
5222	CO-196	n1438	4.12	MH-235	4.22	24	0.4	6.99	6.86	200 mm
5300	CO-346	MH-738	0.06	n2539	-0.04	25	0.4	3.29	3.28	200 mm
5310	CO-364	MH-82	3.55	n2775	3.73	45	0.4	5.4	5.44	200 mm
2986	CO-160	MH-487	3.16	n885	3.2	8	0.4	6.06	6.04	200 mm
	p1532(1)	n2225		MH-151	2.81	20	0.4	4.71		200 mm
	p1837	n2669		n2671	4.83	30	0.4	7.76		200 mm
	p1698(2)(1			MH-328	3.02	6	0.351	4.82		200 mm
	p428	n657		n656	5.64	27	0.448	6.79		200 mm
	p2174	n3155		n3166	3.25	15	0.745	5.08		200 mm
	CO-658	n2269		MH-184	6.11	36	0.743	7.47		200 mm
	p937	n1370		n1371	3.47	35	0.339	5.55		200 mm
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	p934(2)(2)(			n1366	3.83	25	0.209	5.41		200 mm
	p381	n588		n590	1.82	23	5.588	5.46		200 mm
	CO-304	n1644		MH-714	6.13	13	1.197	7.09		200 mm
	p1904(1)	n2771		MH-82	3.55	15	0.405	5.4		200 mm
	p702	n1045		n1047	3.42	38	0.315	4.66		200 mm
	p988(1)	n1438		MH-232	4.07	13	0.4	6.99		200 mm
	p2161	n3149		n3150	3.84	30	0.4	5.44		200 mm
	p1836	n2667	4.59	n2669	4.71	30	0.4	7.78		200 mm
5367	CO-476	n1411	5.59	n1501	5.47	29	0.4	7.31	7.29	200 mm
5208	CO-168	n2539	-0.04	n1981	-0.11	17	0.4	3.28	2.91	200 mm
4090	p1533	n2226	2.61	n2225	2.73	30	0.4	4.94	4.71	200 mm
3293	p852	n1252	6.25	n1253	6.37	30	0.4	9.6	9.7	200 mm
5175	CO-116	n2817	6.01	n2818	6.13	29	0.4	7.14	7.44	200 mm
5439	p659(2)	MH-26	3.13	n983	3.16	6	0.398	4.66	4.73	200 mm
3638	CO-48	n3191	2.54	n1659	2.45	24	0.4	6.03	6.05	200 mm
4288	p1698(1)	n2468	2.98	MH-327	3	7	0.35	4.82	4.82	200 mm
4874	p2199	n3191	2.54	n3192	2.66	34	0.351	6.03		200 mm
	p752	n1116		n1117	6.69	30	0.401	9.05		200 mm
	p703	n1047		n1048	3.3	36	0.331	4.57		200 mm
	p1693	n2459		n2461	2.5	21	0.563	7.46		200 mm
	p590(1)(1)			MH-487	3.16	24	0.365	6.11		200 mm
	p1325	n1920		n1922	3.93	32	3.261	6.83		200 mm
	p1523	n2228		n2226	2.61	30	0.4	5.04		200 mm
	p851	n1251		n1252	6.25	30	0.4	9.41		200 mm
	p1835	n2666		n2667	4.59	30	0.4	7.72		200 mm
						29		5.39		200 mm
	p2162	n3150		n3151	3.73		0.4			
	p1028	n1501		n1503	5.35	30	0.4	7.29		200 mm
	CO-362	n2769		n2771	3.49	30	0.4	5.6		200 mm
	CO-158	MH-485		n884	3.08	8	0.4	6		200 mm
	p886	n1299		n1298	4.57	30	0.4	6.62		200 mm
	p1724	n2504		n2506	2.27	30	0.4	3.51		200 mm
5264	CO-274	n2815	5.89	n2817	6.01	30	0.4	7.48	7.14	200 mm

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3445	p988(2)	MH-232	4.07	n1440	4	17	0.398	6.92	6.84	200 mm
4834	p2160	n3148	4.09	n3149	3.96	41	0.314	5.58	5.44	200 mm
5161	CO-88	MH-62	4.66	MH-61	4.85	49	0.4	5.86	5.97	200 mm
3636	p1139	n1657	2.37	n1659	2.45	19	0.4	6.18	6.05	200 mm
5636	CO-704	n573	8.61	MH-74	6.01	28	9.198	9.72	7.13	200 mm
4285	p1695	n2463	2.62	n2464	2.74	28	0.427	4.68	4.64	200 mm
	p1018	n1485		n1483	7.49	16	7.531	8		200 mm
	p1157	n1690		n1692	3.34	13	0.901	5.28		200 mm
2807		n659		n657	5.52	33	0.362	6.7		200 mm
	p1696	n2464		n2466	2.86	33	0.36	4.64		200 mm
	p922	n1149		n1348	5.36	30	0.4	6.76		200 mm
	CO-204	MH-579		n659	5.4	19	0.4	6.76		200 mm
	CO-56	n2767		n2769	3.37	28	0.4	5.43		200 mm
	CO-474	n1503		MH-243	5.2	40	0.4	7.43		200 mm
	CO-474 CO-588	MH-230		n1440	4	18	0.4	6.87		200 mm
	CO-388			n1706	4.3	39	0.4	5.35		200 mm
		MH-386								
	p850	n1250		n1251	6.13	30	0.4	9.22		200 mm
	p1834	n2665		n2666	4.47	30	0.4	7.71		200 mm
$\overline{}$	p2163	n3151		n3153	3.6	31	0.4	5.34		200 mm
	p589(2)(1)			MH-485	3.04	8	0.4	5.92		200 mm
	p1931	n2813		n2815	5.89	30	0.4	7.43		200 mm
$\overline{}$	p887(2)	MH-290		n1299	4.45	19	0.398	5.75		200 mm
	CO-90	n3245		MH-62	4.66	21	0.4	5.83		200 mm
4129	p1564	n2274	5.68	n2272	5.8	34	0.353	6.89	6.92	200 mm
4093	p1535	n2229	2.37	n2228	2.49	24	0.499	5.28		200 mm
5588	CO-672	n1149	5.48	n1146	5.6	29	0.4	6.76	6.87	200 mm
3291	p849(2)	MH-272	5.91	n1250	6.01	24	0.417	9.13	9.22	200 mm
3486	p1017	n1483	7.49	n1481	9.43	30	6.481	8.61	10.55	200 mm
3705	p1199	n1749	5.57	n1751	5.46	25	0.472	6.69	9.13	200 mm
2597	p125	n218	3.19	n220	2.97	30	0.732	4.4	4.09	200 mm
4445	p1833	n2663	4.23	n2665	4.35	30	0.4	8.07	7.71	200 mm
3368	p923	n1348	5.36	n1346	5.24	30	0.4	6.61	6.6	200 mm
2982	CO-156	n882	2.98	MH-482	3.01	8	0.4	5.85	5.92	200 mm
3666	CO-62	n1703	4.06	MH-386	4.14	21	0.4	5.45	5.35	200 mm
4839	p2164	n3153	3.6	n3154	3.48	30	0.4	5.33	5.21	200 mm
	p1901	n2765		n2767	3.26	28	0.4	5.85		200 mm
	p707	n1053		n981	2.91	7	0.4	4.53		200 mm
	p1930	n2812		n2813	5.77	30	0.4	7.44		200 mm
	CO-94	MH-64		n3245	4.57	37	0.4	5.75		200 mm
	p430(1)(1)			MH-579	5.32	10	0.39	6.79		200 mm
	p2186	n3177		n3178	1.8	9	1.573	4.93		200 mm
	p1136	n1652		n1653	2.13	28	0.426	6.27		200 mm
	p587	n878		n880	2.86	26	0.420	5.71		200 mm
	p989(1)(2)			MH-229	3.89	10	0.403	6.87		200 mm
	-	MH-32		n2663	4.23		0.363	8.01		200 mm
	p1832(2) p431(2)			n660		28				200 mm
		MH-580			5.28		0.401	6.67		
336/	p921	n1346	5.24	n1345	5.12	30	0.4	6.6	6.54	200 mm

365   1163   11701   3.94   11703   4.06   30   0.4   5.48   5.45   200 mm   3334   CO-40   11300   4.16   MH-293   4.08   22   0.4   5.28   5.21   200 mm   3500   MH-228   3.87   MH-229   3.89   5   0.4   6.88   6.89   200 mm   5365   CO-472   11505   5.11   MH-244   5   28   0.4   9.79   9.35   200 mm   5365   CO-472   11505   5.11   MH-244   5   28   0.4   9.79   9.35   200 mm   5365   CO-472   11505   5.11   MH-244   5   28   0.4   9.79   9.35   200 mm   5365   CO-472   11505   5.11   MH-241   5.87   9   0.4   9.13   9.09   200 mm   5406   19129   12811   5.53   12812   5.65   30   0.4   7.32   7.44   200 mm   5163   CO-92   13249   4.34   MH-64   4.42   22   0.4   5.86   5.75   200 mm   5102   0.912   1911   3.79   1912   3.91   20   0.601   5.16   5.15   200 mm   5120   p.705   1050   3.18   1052   3.06   42   0.283   4.47   4.57   200 mm   5466   p.1321(1)   0.2661   4.11   MH-32   4.21   24   0.422   7.69   8.01   200 mm   3337   p.990   1.1305   3.8   1303   3.92   22   0.542   5.28   5.26   200 mm   3337   p.990   1.1305   3.8   1303   3.92   22   0.542   5.28   5.26   200 mm   3335   p.888(1)(1)   MH-269   3.79   MH-271   5.87   19   0.415   8.97   9.09   200 mm   3335   p.888(1)(1)   1.1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3349   p.990   0.1305   3.8   1303   3.76   27   0.412   6.88   6.72   200 mm   3364   p.1126   1.199   3.82   1.701   3.94   3.0   0.4   4.75   4.68   200 mm   4.33   p.1568   0.2278   4.21   0.2277   4.33   30   0.4   6.51   6.63   200 mm   4.133   p.1568   0.2278   4.21   0.2277   4.33   30   0.4   6.54   6.63   0.00 mm   4.014   0.00 mm   4.0		1	1								
3334   CO-40   n1300		·	n2277			4.45	30	0.4	6.63		
S224   CO-200   MH-228   3.87   MH-229   3.89   5   0.4   6.88   6.89   200 mm   5365   CO-472   n1505   5.11   MH-244   5   28   0.4   9.79   9.35   200 mm   200   CO-268   MH-272   5.91   MH-271   5.87   9   0.4   9.13   9.09   200 mm   2981   p588   n880   2.86   n882   2.98   30   0.4   5.74   5.85   200 mm   2505   2019   2811   5.53   n2812   5.65   30   0.4   7.32   7.44   200 mm   2505   2019   2811   3.79   n912   3.91   20   0.601   5.16   5.15   200 mm   3012   p612   n911   3.79   n912   3.91   20   0.601   5.16   5.15   200 mm   3122   p705   n1050   3.18   n1052   3.06   42   0.283   4.47   4.57   200 mm   3122   p705   n1050   3.18   n1052   3.06   42   0.283   4.47   4.57   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3335   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3358   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3359   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3644   p1162   n1699   3.82   n1701   3.94   3.0   0.4   4.75   4.68   200 mm   3646   p1162   n1699   3.82   n1701   3.94   3.0   0.4   6.75   5.48   200 mm   3646   p1162   n1699   3.82   n1701   3.94   3.0   0.4   6.75   6.65   6.67   200 mm   3650   p147   n2148   3.17   n2135   3.3   3.3   0.4   6.65   6.67   200 mm   3620   p1479   n2148   3.17   n2135   3.3   3.3   0.4   6.65   6.67   200 mm   3620   p1479   n2148   3.17   n2135   3.3   3.3   0.4   6.65   6.67   200 mm   3620   p1479   n2148   3.17   n2135   3.3   3.3   0.4   7.08   7.12   200 mm   3632   p135   n1651   1.89   n1652   2.01   3.0   0.4   6.65   6.67   200 mm   3632   p135   n1651   1.89   n1650   5.79   6   0.424   8.93   8.97   200 mm   3632   p135   n1651   1.89   n1650   5.79	3665	p1163	n1701	3.94	n1703	4.06	30	0.4	5.48	5.45	200 mm
5365   CO-472   CO-286   MH-272   S.11   MH-244   S.   28   O.4   9.79   9.35   200 mm	3334	CO-40	n1300	4.16	MH-293	4.08	22	0.4	5.28	5.21	200 mm
Solition   Co-286   MH-272   S.91   MH-271   S.87   9   0.4   9.13   9.09   200 mm   2981   p588   n880   2.86   n882   2.98   30   0.4   5.74   5.85   200 mm   2015	5224	CO-200	MH-228	3.87	MH-229	3.89	5	0.4	6.88	6.89	200 mm
2981   p588   n880	5365	CO-472	n1505	5.11	MH-244	5	28	0.4	9.79	9.35	200 mm
2981   p588   n880	5010	CO-286	MH-272	5.91	MH-271	5.87	9	0.4	9.13	9.09	200 mm
4556   p1929   n2811   5.53   n2812   5.65   30   0.4   7.32   7.44   200 mm	<b>——</b>					_					
5163   CO-92   n3249											
3012   p612   n911   3.79   n912   3.91   20   0.601   5.16   5.15   200 mm   3122   p705   n1050   3.18   n1052   3.06   42   0.283   4.47   4.57   200 mm   3614   p1122(2)   MH-306   6.61   n1632   6.7   21   0.399   8.61   9.73   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3337   p890   m1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3449   p990(2)   MH-228   3.87   n1443   3.76   27   0.412   6.88   6.72   200 mm   3335   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3335   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   3350   p1692   n2458   2.26   n2459   2.38   2.9   0.405   4.97   7.46   200 mm   4282   p1692   n2458   2.26   n2459   2.38   2.9   0.405   4.97   7.46   200 mm   4338   p1568   n2278   4.21   n2277   4.33   30   0.4   6.57   6.63   200 mm   4012   p1479   n2148   3.17   n2135   3.3   33   0.4   0.4   6.54   6.63   200 mm   4012   p1479   n2148   3.17   n2135   3.3   33   0.4   0.4   6.54   6.43   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.404   6.54   6.65   6.67   200 mm   4.64   p.13   p.13   p.1651   p.18   p.1652   p.10   p.18   p.1652   p.10   p.18   p.1652   p.10   p.1652   p.10   p.1652   p.10   p.1652   p.10   p.1652   p.17		<u> </u>									
3122   p705											
See											
3614   p1122(2)   MH-306   6.61   n1632   6.7   21   0.399   8.61   9.73   200 mm   3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm   3449   p990(2)   MH-228   3.87   n1443   3.76   27   0.412   6.88   6.72   200 mm   3449   p990(2)   MH-228   3.87   n1443   3.76   27   0.412   6.88   6.72   200 mm   3335   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm   2650   p172   n293   3.44   n294   3.56   30   0.4   4.75   4.68   200 mm   4282   p1692   n2458   2.26   n2459   2.38   29   0.405   4.97   7.46   200 mm   4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.71   6.63   200 mm   4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.71   6.63   200 mm   4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.57   6.65   6.67   200 mm   4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.54   6.54   200 mm   4012   p1479   n2148   3.17   n2135   3.3   33   0.4   7.08   7.12   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.40   6.54   6.65   6.67   200 mm   4915   p2235   n3249   4.34   n3250   4.22   30   0.40   6.54   6.66   6.27   200 mm   4915   p2217   n3168   3   n3169   5.54   n3177   5.53   16   0.4   7.32   7.32   200 mm   4915   p2217   n3168   3   n3169   5.59   5.79   6   0.424   8.93   8.97   200 mm   4850   p2177   n3168   3   n3169   5.89   5.99   23   0.446   5.52   5.14   200 mm   3505   p1030(2)   MH-244   5   n1500   4.91   5.30   4.91   5.30   6		·									
3337   p890   n1305   3.8   n1303   3.92   22   0.542   5.28   5.26   200 mm     5009   p848(2)(1)   MH-269   5.79   MH-271   5.87   19   0.415   8.97   9.09   200 mm     3449   p990(2)   MH-228   3.87   n1443   3.76   27   0.412   6.88   6.72   200 mm     3335   p888(1)(1)   n1301   4.04   MH-293   4.08   8   0.406   5.18   5.21   200 mm     2650   p172   n293   3.44   n294   3.56   30   0.4   4.75   4.68   200 mm     4282   p1692   n2458   2.26   n2459   2.38   29   0.405   4.97   7.46   200 mm     4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.71   6.63   200 mm     4133   p1568   n2278   4.21   n2277   4.33   30   0.4   6.71   6.65   6.67   200 mm     3366   p920   n1345   5.15   MH-580   5.17   5   0.4   6.65   6.67   200 mm     3366   p920   n1345   5.12   n1344   5   30   0.4   6.54   6.43   200 mm     4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm     4915   p2235   n3249   4.34   n3250   4.22   30   0.402   5.86   5.82   200 mm     3176   CO-364   MH-819   6.63   n1117   6.69   13   0.4   8.4   8.6   200 mm     3283   p135   n1651   1.89   n1652   2.01   30   0.4   6.4   6.27   200 mm     3283   p848(1)   n1248   5.77   MH-269   5.79   6   0.424   8.93   8.97   200 mm     3369   p1200   n1751   5.66   n1752   5.34   30   0.40   6.4   6.27   200 mm     3505   p1030(2)   MH-243   5.2   n1505   5.11   26   0.317   8.24   9.79   200 mm     3505   p1030(2)   MH-243   5.2   n1505   5.11   26   0.317   8.24   9.79   200 mm     3505   p1030(2)   MH-244   5   n1509   4.91   24   0.368   9.35   6.95   200 mm     3506   p1032   MH-244   5   n1509   4.91   24   0.368   9.35   6.95   200 mm     3507   p1033   n1509   4.91   n1510   4.79   30   0.40   6.65   6.77   200 mm     3508   p1032(2)   MH-244   5   n1509   4.91   24   0.368   9.35   6.95   200 mm     3508   p1032(2)   MH-244   5   n1509   4.91   24   0.368   9.35   6.95   200 mm     3508   p1032(2)   MH-244   5   n1509   4.91   24   0.368   9.35   6.95   200 mm     3336   p889(1)   n1443   3.76   MH-227   3.69   1											
5009 p848(2)(1)         MH-269         5.79 MH-271         5.87         19         0.415         8.97         9.09 20 mm           3449 p99(2)         MH-228         3.87 n1443         3.76         27         0.412         6.88         6.72 200 mm           3335 p888(1)(1)         n1301         4.04 MH-293         4.08         8         0.406         5.18         5.21 200 mm           42650 p172         n293         3.44 n294         3.56         30         0.4         4.75         4.68 200 mm           4282 p1692         n2458         2.26 n2459         2.38         29         0.405         4.97         7.46 200 mm           3664 p1162         n1699         3.82 n1701         3.94         30         0.4         6.71         6.63 200 mm           4133 p1568         n2278         4.21 n2277         4.33         30         0.4         6.65         6.67 200 mm           5062 CO-202 MH-581         5.12 n1344         5         30         0.4         6.65         6.67 200 mm           4012 p1479         n2148         3.17 n2135         3.3         30         0.4         6.54         6.43 200 mm           4915 p2235         n3249         4.34 n3250         4.22         30			MH-306	6.61	n1632	6.7	21	0.399	8.61		
3449         p990(2)         MH-228         3.87         n1443         3.76         27         0.412         6.88         6.72         200 mm           3335         p888(1)(1)         n1301         4.04         MH-293         4.08         8         0.406         5.18         5.21         200 mm           2650         p172         n293         3.44         n294         3.56         30         0.4         4.75         4.68         200 mm           3664         p1162         n1699         3.82         n1701         3.94         30         0.4         5.57         5.48         200 mm           4133         p1568         n2278         4.21         n2277         4.33         30         0.4         6.71         6.63         200 mm           3366         p920         n1345         5.12         n1844         5         30         0.4         6.54         6.63         200 mm           3366         p920         n1345         5.12         n1344         5         30         0.4         6.54         6.63         200 mm           4915         p1479         n2148         3.17         n2135         3.3         30         0.4         6.54 </td <td>3337</td> <td>p890</td> <td>n1305</td> <td>3.8</td> <td>n1303</td> <td>3.92</td> <td>22</td> <td>0.542</td> <td>5.28</td> <td>5.26</td> <td>200 mm</td>	3337	p890	n1305	3.8	n1303	3.92	22	0.542	5.28	5.26	200 mm
3335   p888(1)(1)   n1301	5009	p848(2)(1)	MH-269	5.79	MH-271	5.87	19	0.415	8.97	9.09	200 mm
2650         p172         n293         3.44         n294         3.56         30         0.4         4.75         4.68         200 mm           4282         p1692         n2458         2.26         n2459         2.38         29         0.405         4.97         7.46         200 mm           3664         p1162         n1699         3.82         n1701         3.94         30         0.4         5.57         5.48         200 mm           4133         p1568         n2278         4.21         n2277         4.33         30         0.4         6.65         6.67         200 mm           3666         p20         n1345         5.12         n1344         5         30         0.4         6.65         6.67         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           3176         CO-364         MH-819         5.47         n2811         5.53         16         0.4         7.32 </td <td>3449</td> <td>p990(2)</td> <td>MH-228</td> <td>3.87</td> <td>n1443</td> <td>3.76</td> <td>27</td> <td>0.412</td> <td>6.88</td> <td>6.72</td> <td>200 mm</td>	3449	p990(2)	MH-228	3.87	n1443	3.76	27	0.412	6.88	6.72	200 mm
4282 p1692         n2458         2.26 n2459         2.38         29 0.405         4.97         7.46 200 mm           3664 p1162         n1699         3.82 n1701         3.94         30 0.4         5.57         5.48 200 mm           4133 p1568         n2278         4.21 n2277         4.33         30 0.4         6.71         6.63 200 mm           5062 CO-202         MH-581         5.15 MH-580         5.17         5 0.4         6.65         6.67 200 mm           4012 p1479         n1345         5.12 n1344         5 30 0.4         6.54         6.43 200 mm           4915 p2235         n3249         4.34 n3250         4.22 30 0.402         5.86         5.82 200 mm           5263 CO-272         MH-98         5.47 n2811         5.53 16 0.4         7.32 7.32 200 mm           3176 CO-364         MH-819         6.63 n1117         6.69 13 0.4         8.4         8.6 200 mm           3632 p1135         n1651         1.89 n1652         2.01 30 0.4         6.4         6.27 200 mm           3638 p848(1)         n1248         5.77 MH-269         5.79 6 0.4224         8.93 8.97 200 mm           3706 p1200         n1751         5.46 p1752         5.34 30 0.4         6.4         6.72 200 mm           3505 p1030(2)	3335	p888(1)(1)	n1301	4.04	MH-293	4.08	8	0.406	5.18	5.21	200 mm
4282 p1692         n2458         2.26 n2459         2.38         29 0.405         4.97         7.46 200 mm           3664 p1162         n1699         3.82 n1701         3.94         30 0.4         5.57         5.48 200 mm           4133 p1568         n2278         4.21 n2277         4.33         30 0.4         6.71         6.63 200 mm           5062 CO-202         MH-581         5.15 MH-580         5.17         5 0.4         6.65         6.67 200 mm           4012 p1479         n1345         5.12 n1344         5 30 0.4         6.54         6.43 200 mm           4915 p2235         n3249         4.34 n3250         4.22 30 0.402         5.86         5.82 200 mm           5263 CO-272         MH-98         5.47 n2811         5.53 16 0.4         7.32 7.32 200 mm           3176 CO-364         MH-819         6.63 n1117         6.69 13 0.4         8.4         8.6 200 mm           3632 p1135         n1651         1.89 n1652         2.01 30 0.4         6.4         6.27 200 mm           3638 p848(1)         n1248         5.77 MH-269         5.79 6 0.4224         8.93 8.97 200 mm           3706 p1200         n1751         5.46 p1752         5.34 30 0.4         6.4         6.72 200 mm           3505 p1030(2)	2650	p172	n293	3.44	n294	3.56	30	0.4	4.75	4.68	200 mm
3664         p1162         n1699         3.82         n1701         3.94         30         0.4         5.57         5.48         200 mm           4133         p1568         n2278         4.21         n2277         4.33         30         0.4         6.71         6.63         200 mm           5062         CO-202         MH-581         5.15         MH-580         5.17         5         0.4         6.65         6.67         200 mm           3366         p920         n1345         5.12         n1344         5         30         0.4         6.54         6.43         200 mm           4012         p1479         n2148         3.17         n2135         3.3         33         0.4         7.08         7.12         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         6.4         6.27         200 mm           3632         p135         n1651         1.89         n1652         2.01         30         0.4         6.4 <td></td> <td>·</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		·									
4133         p1568         n2278         4.21         n2277         4.33         30         0.4         6.71         6.63         200 mm           5062         CO-202         MH-581         5.15         MH-580         5.17         5         0.4         6.65         6.67         200 mm           3366         p920         n1345         5.12         n1344         5         30         0.4         6.54         6.43         200 mm           4012         p1479         n2148         3.17         n2135         3.3         33         0.4         7.08         7.12         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           5263         CO-272         MH-98         5.47         n2811         5.53         16         0.4         7.32         7.32         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4 <td></td> <td><u> </u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		<u> </u>									
5062         CO-202         MH-581         5.15         MH-580         5.17         5         0.4         6.65         6.67         200 mm           3366         p920         n1345         5.12         n1344         5         30         0.4         6.54         6.43         200 mm           4012         p1479         n2148         3.17         n2135         3.3         33         0.4         7.08         7.12         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           5263         CO-272         MH-98         5.47         n2811         5.53         16         0.4         7.32         7.32         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           3632         p135         n163         1.67         n240         2.03         20         1.838         4.05											
3366         p920         n1345         5.12         n1344         5         30         0.4         6.54         6.43         200 mm           4012         p1479         n2148         3.17         n2135         3.3         33         0.4         7.08         7.12         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           5263         CO-272         MH-98         5.47         n2811         5.53         16         0.4         7.32         7.32         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3288         p848(1)         n1248         5.77         MH-269         5.79         6         0.424         8.93 </td <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		-									
4012         p1479         n2148         3.1         n2135         3.3         33         0.4         7.08         7.12         200 mm           4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           5263         CO-272         MH-98         5.47         n2811         5.53         16         0.4         7.32         7.32         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.											
4915         p2235         n3249         4.34         n3250         4.22         30         0.402         5.86         5.82         200 mm           5263         CO-272         MH-98         5.47         n2811         5.53         16         0.4         7.32         7.32         200 mm           3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3288         p848(1)         n1248         5.77         MH-269         5.79         6         0.424         8.93         8.97         200 mm           3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317		·									
5263 CO-272         MH-98         5.47 n2811         5.53         16         0.4         7.32         7.32 200 mm           3176 CO-364         MH-819         6.63 n1117         6.69         13         0.4         8.4         8.6 200 mm           3632 p1135         n1651         1.89 n1652         2.01         30         0.4         6.4         6.27 200 mm           2613 p139         n238         1.67 n240         2.03         20         1.838         4.05         4.07 200 mm           3288 p848(1)         n1248         5.77 MH-269         5.79         6         0.424         8.93         8.97 200 mm           3706 p1200         n1751         5.46 n1752         5.34         30         0.4         9.13         6.91 200 mm           3505 p1030(2)         MH-243         5.2 n1505         5.11         26         0.317         8.24         9.79 200 mm           4850 p2177         n3168         3 n3169         2.89         23         0.486         5.2         5.14 200 mm           2649 p171         n291         3.32 n293         3.44         30         0.4         4.63         4.75 200 mm           3507 p1033         n1509         4.91 n1510         4.79         30											
3176         CO-364         MH-819         6.63         n1117         6.69         13         0.4         8.4         8.6         200 mm           3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3288         p848(1)         n1248         5.77         MH-269         5.79         6         0.424         8.93         8.97         200 mm           3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.24         9.79         200 mm           4850         p2177         n3168         3         n3169         2.89         23         0.486         5.2         5.14         200 mm           2649         p171         n291         3.32         n293         3.44         30         0.4         4.63											
3632         p1135         n1651         1.89         n1652         2.01         30         0.4         6.4         6.27         200 mm           2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3288         p848(1)         n1248         5.77         MH-269         5.79         6         0.424         8.93         8.97         200 mm           3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.24         9.79         200 mm           4850         p2177         n3168         3         n3169         2.89         23         0.486         5.2         5.14         200 mm           2649         p171         n291         3.32         n293         3.44         30         0.4         4.63         4.75         200 mm           3507         p1033         n1509         4.91         n150         4.79         30         0.404         6.9											
2613         p139         n238         1.67         n240         2.03         20         1.838         4.05         4.07         200 mm           3288         p848(1)         n1248         5.77         MH-269         5.79         6         0.424         8.93         8.97         200 mm           3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.24         9.79         200 mm           4850         p2177         n3168         3         n3169         2.89         23         0.486         5.2         5.14         200 mm           2649         p171         n291         3.32         n293         3.44         30         0.4         4.63         4.75         200 mm           3507         p1033         n1509         4.91         n1510         4.79         30         0.404         6.95         6.76         200 mm           5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439											
3288 p848(1)         n1248         5.77 MH-269         5.79 6         0.424         8.93         8.97 200 mm           3706 p1200         n1751         5.46 n1752         5.34         30 0.4         9.13 6.91 200 mm           3505 p1030(2)         MH-243         5.2 n1505         5.11 26 0.317 8.24         9.79 200 mm           4850 p2177 n3168         3 n3169 2.89 23 0.486 5.2         5.14 200 mm           2649 p171 n291 3.32 n293 3.44 30 0.4 4.63 4.75 200 mm           3507 p1033 n1509 4.91 n1510 4.79 30 0.404 6.95 6.76 200 mm           5545 p1927(1) n2809 5.28 MH-65 5.39 24 0.439 7.29 7.31 200 mm           3508 p1032(2) MH-244 5 n1509 4.91 24 0.368 9.35 6.95 200 mm           3448 p991(1) n1443 3.76 MH-227 3.69 17 0.402 6.72 6.71 200 mm           3336 p889(2) MH-294 4.02 n1301 4.04 7 0.402 6.72 6.71 200 mm           3663 p1161 n1697 3.7 n1699 3.82 30 0.4 5.66 5.57 200 mm           4443 p1831 n2659 3.99 n2661 4.11 30 0.4 5.66 5.57 200 mm           4280 p1691 n2456 2.14 n2458 2.26 30 0.4 5.3 4.97 200 mm           5317 CO-376 n2151 2.95 n2148 3.17 55 0.4 7.37 7.08 200 mm           4134 p1569 n2280 4.09 n2278 4.21 30 0.4 6.66 6.71 200 mm           3365 p919 n1344 5 n1342 4.88 30 0.4 6.43 6.44 200 mm											
3706         p1200         n1751         5.46         n1752         5.34         30         0.4         9.13         6.91         200 mm           3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.24         9.79         200 mm           4850         p2177         n3168         3         n3169         2.89         23         0.486         5.2         5.14         200 mm           2649         p171         n291         3.32         n293         3.44         30         0.4         4.63         4.75         200 mm           3507         p1033         n1509         4.91         n1510         4.79         30         0.404         6.95         6.76         200 mm           5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439         7.29         7.31         200 mm           3508         p1032(2)         MH-244         5         n1509         4.91         24         0.368         9.35         6.95         200 mm           3448         p991(1)         n1443         3.76         MH-227         3.69         17         0.402		·									
3505         p1030(2)         MH-243         5.2         n1505         5.11         26         0.317         8.24         9.79         200 mm           4850         p2177         n3168         3         n3169         2.89         23         0.486         5.2         5.14         200 mm           2649         p171         n291         3.32         n293         3.44         30         0.4         4.63         4.75         200 mm           3507         p1033         n1509         4.91         n1510         4.79         30         0.404         6.95         6.76         200 mm           5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439         7.29         7.31         200 mm           3508         p1032(2)         MH-244         5         n1509         4.91         24         0.368         9.35         6.95         200 mm           3448         p991(1)         n1443         3.76         MH-227         3.69         17         0.402         5.2         5.18         200 mm           3366         p161         n1697         3.7         n1699         3.82         30         0.4			n1248				6	0.424			
4850 p2177         n3168         3 n3169         2.89         23 0.486         5.2         5.14 200 mm           2649 p171         n291         3.32 n293         3.44 30 0.4         4.63 4.75 200 mm           3507 p1033         n1509         4.91 n1510 4.79 30 0.404 6.95 6.76 200 mm           5545 p1927(1) n2809         5.28 MH-65 5.39 24 0.439 7.29 7.31 200 mm           3508 p1032(2) MH-244 5 n1509 4.91 24 0.368 9.35 6.95 200 mm           3448 p991(1) n1443 3.76 MH-227 3.69 17 0.402 6.72 6.71 200 mm           3336 p889(2) MH-294 4.02 n1301 4.04 7 0.402 5.2 5.18 200 mm           3663 p1161 n1697 3.7 n1699 3.82 30 0.4 5.66 5.57 200 mm           4325 p1727 n2508 1.67 n2509 1.59 19 0.4 3.24 3.28 200 mm           4443 p1831 n2659 3.99 n2661 4.11 30 0.4 7.63 7.69 200 mm           4280 p1691 n2456 2.14 n2458 2.26 30 0.4 5.3 4.97 200 mm           5317 CO-376 n2151 2.95 n2148 3.17 55 0.4 7.37 7.08 200 mm           4134 p1569 n2280 4.09 n2278 4.21 30 0.4 6.66 6.71 200 mm           3365 p919 n1344 5 n1342 4.88 30 0.4 6.43 6.44 200 mm	3706	p1200	n1751	5.46	n1752	5.34	30	0.4	9.13	6.91	200 mm
2649 p171         n291         3.32 n293         3.44         30         0.4         4.63         4.75 200 mm           3507 p1033         n1509         4.91 n1510         4.79         30         0.404         6.95         6.76 200 mm           5545 p1927(1)         n2809         5.28 MH-65         5.39         24         0.439         7.29         7.31 200 mm           3508 p1032(2)         MH-244         5 n1509         4.91         24         0.368         9.35         6.95 200 mm           3448 p991(1)         n1443         3.76 MH-227         3.69         17         0.402         6.72         6.71 200 mm           3336 p889(2)         MH-294         4.02 n1301         4.04         7         0.402         5.2         5.18 200 mm           3663 p1161         n1697         3.7 n1699         3.82         30         0.4         5.66         5.57 200 mm           4325 p1727         n2508         1.67 n2509         1.59         19         0.4         3.24         3.28 200 mm           4443 p1831         n2659         3.99 n2661         4.11         30         0.4         7.63         7.69 200 mm           5317 CO-376         n2151         2.95 n2148         3.17 <td< td=""><td>3505</td><td>p1030(2)</td><td>MH-243</td><td>5.2</td><td>n1505</td><td>5.11</td><td>26</td><td>0.317</td><td>8.24</td><td>9.79</td><td>200 mm</td></td<>	3505	p1030(2)	MH-243	5.2	n1505	5.11	26	0.317	8.24	9.79	200 mm
3507         p1033         n1509         4.91         n1510         4.79         30         0.404         6.95         6.76         200 mm           5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439         7.29         7.31         200 mm           3508         p1032(2)         MH-244         5         n1509         4.91         24         0.368         9.35         6.95         200 mm           3448         p991(1)         n1443         3.76         MH-227         3.69         17         0.402         6.72         6.71         200 mm           3336         p889(2)         MH-294         4.02         n1301         4.04         7         0.402         5.2         5.18         200 mm           3663         p1161         n1697         3.7         n1699         3.82         30         0.4         5.66         5.57         200 mm           4325         p1727         n2508         1.67         n2509         1.59         19         0.4         3.24         3.28         200 mm           4443         p1831         n2659         3.99         n2661         4.11         30         0.4	4850	p2177	n3168	3	n3169	2.89	23	0.486	5.2	5.14	200 mm
5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439         7.29         7.31         200 mm           3508         p1032(2)         MH-244         5         n1509         4.91         24         0.368         9.35         6.95         200 mm           3448         p991(1)         n1443         3.76         MH-227         3.69         17         0.402         6.72         6.71         200 mm           3336         p889(2)         MH-294         4.02         n1301         4.04         7         0.402         5.2         5.18         200 mm           3663         p1161         n1697         3.7         n1699         3.82         30         0.4         5.66         5.57         200 mm           4325         p1727         n2508         1.67         n2509         1.59         19         0.4         3.24         3.28         200 mm           4443         p1831         n2659         3.99         n2661         4.11         30         0.4         7.63         7.69         200 mm           4280         p1691         n2456         2.14         n2458         2.26         30         0.4	2649	p171	n291	3.32	n293	3.44	30	0.4	4.63	4.75	200 mm
5545         p1927(1)         n2809         5.28         MH-65         5.39         24         0.439         7.29         7.31         200 mm           3508         p1032(2)         MH-244         5         n1509         4.91         24         0.368         9.35         6.95         200 mm           3448         p991(1)         n1443         3.76         MH-227         3.69         17         0.402         6.72         6.71         200 mm           3336         p889(2)         MH-294         4.02         n1301         4.04         7         0.402         5.2         5.18         200 mm           3663         p1161         n1697         3.7         n1699         3.82         30         0.4         5.66         5.57         200 mm           4325         p1727         n2508         1.67         n2509         1.59         19         0.4         3.24         3.28         200 mm           4443         p1831         n2659         3.99         n2661         4.11         30         0.4         7.63         7.69         200 mm           4280         p1691         n2456         2.14         n2458         2.26         30         0.4							30	0.404	6.95		
3508 p1032(2)         MH-244         5 n1509         4.91         24 0.368         9.35         6.95 200 mm           3448 p991(1)         n1443         3.76 MH-227         3.69         17 0.402         6.72         6.71 200 mm           3336 p889(2)         MH-294         4.02 n1301         4.04         7 0.402         5.2         5.18 200 mm           3663 p1161         n1697         3.7 n1699         3.82         30 0.4         5.66         5.57 200 mm           4325 p1727         n2508         1.67 n2509         1.59 19 0.4         3.24         3.28 200 mm           4443 p1831         n2659         3.99 n2661         4.11 30 0.4         7.63         7.69 200 mm           4280 p1691         n2456         2.14 n2458         2.26 30 0.4         5.3 4.97 200 mm           5317 CO-376         n2151         2.95 n2148         3.17 55 0.4         7.37 7.08 200 mm           4134 p1569         n2280         4.09 n2278         4.21 30 0.4 6.66 6.71 200 mm           3365 p919         n1344         5 n1342         4.88 30 0.4 6.43 6.44 200 mm		·									
3448 p991(1)       n1443       3.76 MH-227       3.69       17 0.402       6.72 6.71 200 mm         3336 p889(2)       MH-294       4.02 n1301       4.04 7 0.402       5.2 5.18 200 mm         3663 p1161       n1697       3.7 n1699       3.82 30 0.4 5.66 5.57 200 mm         4325 p1727       n2508       1.67 n2509       1.59 19 0.4 3.24 3.28 200 mm         4443 p1831       n2659       3.99 n2661 4.11 30 0.4 7.63 7.69 200 mm         4280 p1691       n2456       2.14 n2458 2.26 30 0.4 5.3 4.97 200 mm         5317 CO-376 n2151       2.95 n2148 3.17 55 0.4 7.37 7.08 200 mm         4134 p1569 n2280       4.09 n2278 4.21 30 0.4 6.66 6.71 200 mm         3365 p919 n1344       5 n1342 4.88 30 0.4 6.43 6.44 200 mm											
3336       p889(2)       MH-294       4.02       n1301       4.04       7       0.402       5.2       5.18       200 mm         3663       p1161       n1697       3.7       n1699       3.82       30       0.4       5.66       5.57       200 mm         4325       p1727       n2508       1.67       n2509       1.59       19       0.4       3.24       3.28       200 mm         4443       p1831       n2659       3.99       n2661       4.11       30       0.4       7.63       7.69       200 mm         4280       p1691       n2456       2.14       n2458       2.26       30       0.4       5.3       4.97       200 mm         5317       CO-376       n2151       2.95       n2148       3.17       55       0.4       7.37       7.08       200 mm         4134       p1569       n2280       4.09       n2278       4.21       30       0.4       6.66       6.71       200 mm         3365       p919       n1344       5       n1342       4.88       30       0.4       6.43       6.44       200 mm											
3663       p1161       n1697       3.7       n1699       3.82       30       0.4       5.66       5.57       200 mm         4325       p1727       n2508       1.67       n2509       1.59       19       0.4       3.24       3.28       200 mm         4443       p1831       n2659       3.99       n2661       4.11       30       0.4       7.63       7.69       200 mm         4280       p1691       n2456       2.14       n2458       2.26       30       0.4       5.3       4.97       200 mm         5317       CO-376       n2151       2.95       n2148       3.17       55       0.4       7.37       7.08       200 mm         4134       p1569       n2280       4.09       n2278       4.21       30       0.4       6.66       6.71       200 mm         3365       p919       n1344       5       n1342       4.88       30       0.4       6.43       6.44       200 mm						-					
4325       p1727       n2508       1.67       n2509       1.59       19       0.4       3.24       3.28       200 mm         4443       p1831       n2659       3.99       n2661       4.11       30       0.4       7.63       7.69       200 mm         4280       p1691       n2456       2.14       n2458       2.26       30       0.4       5.3       4.97       200 mm         5317       CO-376       n2151       2.95       n2148       3.17       55       0.4       7.37       7.08       200 mm         4134       p1569       n2280       4.09       n2278       4.21       30       0.4       6.66       6.71       200 mm         3365       p919       n1344       5       n1342       4.88       30       0.4       6.43       6.44       200 mm											
4443       p1831       n2659       3.99       n2661       4.11       30       0.4       7.63       7.69       200 mm         4280       p1691       n2456       2.14       n2458       2.26       30       0.4       5.3       4.97       200 mm         5317       CO-376       n2151       2.95       n2148       3.17       55       0.4       7.37       7.08       200 mm         4134       p1569       n2280       4.09       n2278       4.21       30       0.4       6.66       6.71       200 mm         3365       p919       n1344       5       n1342       4.88       30       0.4       6.43       6.44       200 mm											
4280 p1691       n2456       2.14 n2458       2.26       30       0.4       5.3       4.97 200 mm         5317 CO-376       n2151       2.95 n2148       3.17       55       0.4       7.37       7.08 200 mm         4134 p1569       n2280       4.09 n2278       4.21       30       0.4       6.66       6.71 200 mm         3365 p919       n1344       5 n1342       4.88       30       0.4       6.43       6.44 200 mm		·				_					
5317 CO-376     n2151     2.95 n2148     3.17     55     0.4     7.37     7.08 200 mm       4134 p1569     n2280     4.09 n2278     4.21     30     0.4     6.66     6.71 200 mm       3365 p919     n1344     5 n1342     4.88     30     0.4     6.43     6.44 200 mm		·				_					
4134     p1569     n2280     4.09     n2278     4.21     30     0.4     6.66     6.71     200 mm       3365     p919     n1344     5     n1342     4.88     30     0.4     6.43     6.44     200 mm											
3365 p919 n1344 5 n1342 4.88 30 0.4 6.43 6.44 200 mm											
			n2280	4.09	n2278	4.21	30	0.4	6.66		
	3365	p919	n1344	5	n1342	4.88	30	0.4	6.43	6.44	200 mm
5063 p432(1)(2) MH-582 5.1 MH-581 5.15 13 0.399 6.59 6.65 200 mm	5063	p432(1)(2)	MH-582	5.1	MH-581	5.15	13	0.399	6.59	6.65	200 mm

3630   p1134   n1650   1.77   n1651   1.89   30   0.4   6.45   6.4   200 mm   4284   p1694   n2461   2.5   n2463   2.62   40   0.3   4.73   4.68   200 mm   3767   p1653   n1827   4.51   MH-74   6.01   26   5.73   5.63   7.13   200 mm   3768   p1253   n1827   4.51   MH-74   6.01   26   5.73   5.63   7.13   200 mm   3707   CO-350   n1752   5.34   MH-400   5.18   38   0.4   6.91   6.49   200 mm   4.095   p1537   n2233   2.13   n2231   2.25   30   0.4   5.57   5.23   200 mm   4.095   p1537   n2233   2.13   n2231   2.25   30   0.4   5.57   5.23   200 mm   4.095   p1537   n2233   4.02   n2280   4.09   17   0.466   6.66   6.66   C.600   0.00		1									
4284   p1694   n2461   2.5   n2463   2.62   40   0.3   4.73   4.68   200 mm   3178   p753(2)(2)   MH-819   6.65   n1119   6.57   16   0.397   8.4   8.18   200 mm   3707   670530   n1827   4.51   MH-400   5.18   38   0.4   6.91   6.49   200 mm   3707   670530   n1752   5.34   MH-400   5.18   38   0.4   6.91   6.49   200 mm   3707   670530   n1752   5.34   MH-400   5.18   38   0.4   6.91   6.49   200 mm   3635   p1138   n1655   2.25   n1657   2.37   45   0.265   6.3   6.18   200 mm   4.848   p2175   n3166   3.25   n3167   3.13   32   0.377   5.2   5.19   200 mm   4.848   p175   n3166   3.25   n3167   3.13   32   0.377   5.2   5.19   200 mm   4.848   p1570(2)   MH-183   4.02   n2280   4.09   17   0.406   6.56   6.66   200 mm   4.815   p1570(2)   MH-183   4.02   n2280   4.09   17   0.406   6.56   6.66   200 mm   3613   p1123   n1632   6.7   n1633   6.73   8   0.4   9.73   10.18   200 mm   3431   p991(2)   MH-227   3.69   n1444   4.28   10   0.524   7.5   8.15   200 mm   3451   p991(2)   MH-227   3.69   n1444   3.64   13   0.401   6.71   6.77   0.789   3.59   n1444   3.64   13   0.401   6.71   6.77   0.780   0.78   3.59   n159   0.511   4.76   30   0.4   6.44   6.46   200 mm   3602   p11034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.66   200 mm   3602   p1100   n1695   3.58   n1697   3.7   3.7   3.0   0.4   5.56   5.66   200 mm   3602   p1100   n1695   3.58   n1697   3.7   3.7   3.0   0.4   5.56   5.66   200 mm   3602   p1130   n1595   3.58   n1697   3.7   3.7   3.0   0.4   5.56   5.66   200 mm   3602   p1130   n1595   3.58   n1697   3.7   3.0   0.4   5.56   5.66   200 mm   3602   p1130   n1595   3.58   n1697   3.7   3.0   0.4   5.56   5.56   200 mm   3602   p1130   n1595   3.58   n1697   3.7   3.0   0.4   5.56   5.56   200 mm   3602   p1130   n1595   3.58   n1697   3.7   3.0   0.4   5.56   5.56   200 mm   3602   p11330   n1510   n1595   3.58   n1697   3.7   3.0   0.4   5.56   5.56   5.66   200 mm   3602   p1330   n1510   n1595   n159			n3252	4.07	n3250	4.22	37	0.4	5.51	5.82	200 mm
3776   p753(2)(2)   MH-819   6.63   n1119   6.57   16   0.397   8.4   8.18   200 mm   3766   p1253   n1827   4.51   MH-74   6.01   26   5.73   5.63   7.13   200 mm   3707   CO-350   n1752   5.34   MH-400   5.18   38   0.4   6.91   6.49   200 mm   3635   p1138   n1655   2.25   n1657   2.37   45   0.265   6.3   6.18   200 mm   3635   p1138   n1655   2.25   n1657   2.37   45   0.265   6.3   6.18   200 mm   3635   p1537   n2233   2.13   n2231   2.25   30   0.4   5.57   5.23   200 mm   3636   p1570   n3166   3.25   n3167   3.13   32   0.377   5.2   5.19   200 mm   3135   p1570(2)   MH-183   4.02   n2280   4.09   17   0.406   6.56   6.66   200 mm   4135   p1570(2)   MH-183   4.02   n2280   4.09   17   0.406   6.56   6.66   200 mm   3631   p1123   n1632   6.77   n1633   6.73   8   0.4   9.73   10.18   200 mm   3223   p791   n1172   4.22   n1174   4.28   10   0.524   7.5   8.15   200 mm   3364   p918   n1342   4.88   n1341   4.76   30   0.4   6.74   6.76   6.6   200 mm   3509   p1034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.6   200 mm   3509   p1034   n1510   4.79   n1511   4.67   30   0.4   3.28   3.43   200 mm   3437   p1728   n2509   1.59   n2511   1.47   30   0.4   3.28   3.43   200 mm   3406   0.754   n160   n1695   3.58   n1697   3.7   30   0.4   5.61   5.33   200 mm   3406   0.754   n160   n1695   3.58   n1697   3.7   30   0.4   5.61   5.33   200 mm   3406   0.754   n119   6.57   n1121   6.45   30   0.4   6.65   6.59   200 mm   3177   p754   n1119   6.57   n1121   6.45   30   0.4   8.18   8.12   200 mm   3289   p847(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-527   5.76   3.87   3.88   6.60   3.37   3.88   6.60   3.37   3.89   3.00	3630	p1134	n1650	1.77	n1651	1.89	30	0.4	6.45	6.4	200 mm
3766   1253   1827	4284	p1694	n2461	2.5	n2463	2.62	40	0.3	4.73	4.68	200 mm
3707   CO-350   n1752   S.34   MH-400   S.18   38   0.4   6.91   6.49   200 mm   3635   p1138   n1655   2.25   n1657   2.37   45   0.265   6.3   6.18   200 mm   4848   p2175   n3166   3.25   n3167   3.13   32   0.377   S.2   S.19   200 mm   4848   p2175   n3166   3.25   n3167   3.13   32   0.377   S.2   S.19   200 mm   4135   p1570(2)   MH-183   4.02   n2280   4.09   17   0.406   6.56   6.66   200 mm   2648   p170   n289   3.2   n291   3.32   30   0.4   4.32   4.63   200 mm   3613   p1123   n1632   6.7   n1633   6.73   8   0.4   9.73   10.18   200 mm   3223   p791   n1172   4.22   n1174   4.28   10   0.524   7.5   8.15   200 mm   3336   p918   n1342   4.88   n1341   4.76   30   0.4   6.76   6.66   200 mm   3509   p1034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.66   200 mm   3509   p1034   n1510   4.79   n1511   4.67   30   0.4   3.28   3.43   200 mm   3437   p1728   n2509   1.59   n2511   1.47   30   0.4   3.28   3.43   200 mm   3406   c0-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   5406   CO-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   5406   CO-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   5406   CO-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   3177   p754   n1119   6.67   n1121   6.45   30   0.4   6.76   6.62   200 mm   3177   p754   n1119   6.67   n1121   6.45   30   0.4   6.76   6.62   200 mm   3177   p754   n1119   6.67   n1248   5.77   18   0.385   8.81   8.91   200 mm   3289   p847(2)   MH-707   1.72   n1650   1.77   13   0.4   6.42   6.45   200 mm   3289   p847(2)   MH-707   5.7   n1248   5.77   18   0.385   8.81   8.91   200 mm   3289   p847(2)   MH-707   5.7   n1248   5.77   18   0.385   8.81   8.93   200 mm   3299   p856   n877   2.62   n878   2.74   3.39   0.4   4.55   4.4   4.28   200 mm   3299   p856   n877   2.62   n878   2.74   3.39   0.4   4.55   5.65   200 mm   3299   p856   n877   2.62   n878   2.74   3.39   0.4   4.55   5.51   200 mm   3299   300   0.4   4.78   5.51   200 mm   3299   300   0.4	3178	p753(2)(2)	MH-819	6.63	n1119	6.57	16	0.397	8.4	8.18	200 mm
3635   1138   11655   2.25   11657   2.37   45   0.265   6.3   6.18   200 mm	3766	p1253	n1827	4.51	MH-74	6.01	26	5.73	5.63	7.13	200 mm
4095   p1537   n2233   2.13   n2231   2.25   30   0.4   5.57   5.23   200 mm     4848   p2175   n3166   3.25   n3167   3.13   32   0.377   5.2   5.19   200 mm     4848   p170   n289   3.2   n291   3.32   30   0.4   4.32   4.63   200 mm     4848   p170   n289   3.2   n291   3.32   30   0.4   4.32   4.63   200 mm     3613   p1123   n1632   6.7   n1633   6.73   8   0.4   9.73   10.18   200 mm     3223   p791   n1172   4.22   n1174   4.28   10   0.524   7.5   8.15   200 mm     33451   p991(2)   MH-227   3.69   n1444   3.64   13   0.401   6.71   6.77   200 mm     3364   p918   n1342   4.88   n1341   4.76   30   0.4   6.44   6.46   200 mm     3369   p1034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.6   200 mm     3620   p1034   n1510   4.79   n1511   4.67   30   0.4   5.56   5.66   200 mm     3620   p1034   n1510   4.79   n1511   4.67   30   0.4   5.56   5.66   200 mm     3620   p1034   n1590   3.58   n1697   3.7   30   0.4   5.56   5.66   200 mm     3630   0.554   n877   2.62   n875   2.5   2.8   0.4   5.61   5.33   200 mm     3400   CO-554   n877   2.62   n875   2.55   2.8   0.4   5.61   5.33   200 mm     4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm     4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm     4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm     4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm     3289   p847(2)   MH-707   1.72   n1650   1.77   13   0.4   6.42   6.44   200 mm     3289   p847(2)   MH-707   5.77   n1248   5.77   18   0.385   8.81   8.93   200 mm     3297   p1586   n877   2.62   n878   2.74   3.4   0.35   5.61   5.71   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.3   5.61   5.71   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.71   5.57   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.71   5.57   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.65   6.64   0.0 mm     3299   p1690(11)	3707	CO-350	n1752	5.34	MH-400	5.18	38	0.4	6.91	6.49	200 mm
4095   p1537   n2233   2.13   n2231   2.25   30   0.4   5.57   5.23   200 mm     4848   p2175   n3166   3.25   n3167   3.13   32   0.377   5.2   5.19   200 mm     4848   p170   n289   3.2   n291   3.32   30   0.4   4.32   4.63   200 mm     4848   p170   n289   3.2   n291   3.32   30   0.4   4.32   4.63   200 mm     3613   p1123   n1632   6.7   n1633   6.73   8   0.4   9.73   10.18   200 mm     3223   p791   n1172   4.22   n1174   4.28   10   0.524   7.5   8.15   200 mm     33451   p991(2)   MH-227   3.69   n1444   3.64   13   0.401   6.71   6.77   200 mm     3364   p918   n1342   4.88   n1341   4.76   30   0.4   6.44   6.46   200 mm     3369   p1034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.6   200 mm     3620   p1034   n1510   4.79   n1511   4.67   30   0.4   5.56   5.66   200 mm     3620   p1034   n1510   4.79   n1511   4.67   30   0.4   5.56   5.66   200 mm     3620   p1034   n1590   3.58   n1697   3.7   30   0.4   5.56   5.66   200 mm     3630   0.554   n877   2.62   n875   2.5   2.8   0.4   5.61   5.33   200 mm     3400   CO-554   n877   2.62   n875   2.55   2.8   0.4   5.61   5.33   200 mm     4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm     4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm     4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm     4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm     3289   p847(2)   MH-707   1.72   n1650   1.77   13   0.4   6.42   6.44   200 mm     3289   p847(2)   MH-707   5.77   n1248   5.77   18   0.385   8.81   8.93   200 mm     3297   p1586   n877   2.62   n878   2.74   3.4   0.35   5.61   5.71   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.3   5.61   5.71   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.71   5.57   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.71   5.57   200 mm     3298   p869   n877   2.62   n878   2.74   3.9   0.4   5.65   6.64   0.0 mm     3299   p1690(11)	3635	p1138	n1655	2.25	n1657	2.37	45	0.265	6.3	6.18	200 mm
4848 p2175         n3166         3.25 n3167         3.13         32 0.377         5.2         5.19 200 mm           4135 p1570(2)         MH-183         4.02 n2280         4.09 17 0.406         6.56 6.66 200 mm           2648 p170         n289         3.2 n291         3.32 30 0.44 4.32 4.63 200 mm           3613 p1123         n1632         6.7 n1633         6.73 8 0.4 9.73 10.18 200 mm           3223 p791         n1172         4.22 n1174 4.28 10 0.524 7.5 8.15 200 mm           3451 p991(2)         MH-227 3.69 n1444 3.64 13 0.401 6.71 6.7 200 mm           3509 p1034 n1510 4.79 n1511 4.67 30 0.4 6.46 6.46 200 mm           4327 p1728 n2509 1.59 n2511 1.47 30 0.4 6.76 6.66 200 mm           3602 p1600 n1695 3.58 n1697 3.7 30 0.4 5.56 5.66 200 mm           5316 C0-374 n2154 2.74 n2151 2.95 51 0.4 7.35 7.37 200 mm           5316 C0-374 n2154 2.74 n2151 2.95 51 0.4 7.35 7.37 200 mm           3817 p754 n1119 6.57 n1121 6.45 30 0.4 7.72 7.63 200 mm           3621 p1800 1663 5.05 MH-582 5.1 12 0.4 6.52 6.59 200 mm           3631 p133(2) MH-707 1.72 n1650 1.77 13 0.4 6.42 6.42 6.45 200 mm           3631 p133(2) MH-707 1.72 n1650 1.77 13 0.4 6.42 6.42 6.45 200 mm           3632 p180(2) MH-326 2.09 n2456 2.14 12 0.39 5.82 5.3 200 mm           2838 p847(2) MH-270 5.7 n1248 5.77 1124 6.43 30 0.4 5.24 4.94 200 mm           2838 p887(2) MH-270 5.7 n1248 5.77 13 0.45 6.44 6.42 6.45 200 mm	4095	p1537	n2233	2.13	n2231	2.25	30	0.4	5.57	5.23	200 mm
4135         p1570(2)         MH-183         4.02         n2280         4.09         17         0.406         6.56         6.66         200 mm           2648         p170         n289         3.2         n291         3.32         30         0.4         4.32         4.63         200 mm           3613         p123         n1632         6.7         n1633         6.73         8         0.4         9.73         10.18         200 mm           3223         p791         n1172         4.22         n1174         4.28         10         0.524         7.5         8.15         200 mm           3451         p991(2)         MH-227         3.69         n1444         3.64         13         0.401         6.71         6.7         200 mm           3509         p1034         n1510         4.79         p1511         4.67         30         0.4         6.76         6.62         200 mm           4327         p1728         n2509         1.59         n2511         1.47         30         0.4         3.28         3.43         200 mm           4327         p1736         n160         n1695         3.58         n1697         3.7         30         0.			n3166	3.25	n3167		32	0.377	5.2	5.19	200 mm
2648         p170         n289         3.2         n291         3.32         30         0.4         4.32         4.63         200 mm           3613         p1123         n1632         6.7         n1633         6.73         8         0.4         9.73         10.18         200 mm           3451         p991(2)         MH-227         3.69         n1444         3.64         13         0.401         6.71         6.7         200 mm           3509         p198         n1342         4.88         n1341         4.76         30         0.4         6.44         6.66         200 mm           3509         p1034         n1510         4.79         n15511         4.67         30         0.4         6.76         6.6         200 mm           4327         p1728         n2509         1.59         n2511         1.47         30         0.4         5.56         5.66         200 mm           43662         p1160         n1695         3.58         n1697         3.7         30         0.4         5.56         5.66         200 mm           5316         CO-307         n663         5.05         MH-582         2.5         2.8         0.4         5.61 <td></td> <td>•</td> <td>MH-183</td> <td>4.02</td> <td>n2280</td> <td>4.09</td> <td>17</td> <td>0.406</td> <td>6.56</td> <td>6.66</td> <td>200 mm</td>		•	MH-183	4.02	n2280	4.09	17	0.406	6.56	6.66	200 mm
3613 p1123							30				
3223 p791		·					-				
3451 p991(2) MH-227											
3364   p918   n1342   4.88   n1341   4.76   30   0.4   6.44   6.46   200 mm   3509   p1034   n1510   4.79   n1511   4.67   30   0.4   6.76   6.6   200 mm   4327   p1728   n2509   1.59   n2511   1.47   30   0.4   3.28   3.43   200 mm   3662   p1160   n1695   3.58   n1697   3.7   30   0.4   5.56   5.66   200 mm   5406   CO-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   5316   CO-374   n2154   2.74   n2151   2.95   51   0.4   7.35   7.37   200 mm   2812   CO-200   n663   5.05   MH-582   5.1   12   0.4   6.52   6.59   200 mm   4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm   3177   p754   n1119   6.57   n1121   6.45   30   0.4   8.18   8.12   200 mm   4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   4281   p1690(2)   MH-270   5.7   n1248   5.77   18   0.385   8.81   8.93   200 mm   2893   p847(2)   MH-270   5.7   n1248   5.77   18   0.385   8.81   8.93   200 mm   2978   p586   n877   2.62   n878   2.74   34   0.35   5.61   5.71   200 mm   4034   p1536   n2231   2.25   n2229   2.37   36   0.43   5.24   4.94   200 mm   4034   p1536   n2231   2.25   n2229   2.37   36   0.33   5.23   5.76   200 mm   4074   p1536   n2231   2.25   n2229   2.37   36   0.33   5.23   5.28   200 mm   4279   p1690(1)   n287   3.38   n289   3.2   30   0.4   4.55   4.97   200 mm   4279   p1690(1)   n287   3.38   n289   3.2   30   0.4   4.55   4.97   200 mm   4279   p1690(1)   n2454   2.02   MH-326   2.09   18   0.4   6.66   6.37   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.4   4.55   4.97   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.4   6.66   6.37   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.4   6.66   6.67   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.4   6.66   6.67   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.4   6.66   6.67   200 mm   4441   p1829   n2655   3.75   n2657   3.87   30   0.		•									
3509   p1034   n1510											
4327   p1728   n2509   1.59   n2511   1.47   30   0.4   3.28   3.43   200 mm   3662   p1160   n1695   3.58   n1697   3.7   30   0.4   5.56   5.66   200 mm   5406   CO-554   n877   2.62   n875   2.5   28   0.4   5.61   5.33   200 mm   5316   CO-374   n2154   2.74   n2151   2.95   51   0.4   7.35   7.37   200 mm   4442   p1830   n2657   3.87   n2659   3.99   30   0.4   7.72   7.63   200 mm   3177   p754   n1119   6.57   n1121   6.45   30   0.4   8.18   8.12   200 mm   3631   p1133(2)   MH-707   1.72   n1650   1.77   13   0.4   6.42   6.45   200 mm   4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   3289   p847(2)   MH-707   5.77   n1248   5.77   18   0.385   8.81   8.93   200 mm   3289   p847(2)   MH-152   1.96   n2233   2.13   42   0.4   5.71   5.57   200 mm   4337   p1570(1)   n2281   3.97   M1+183   4.02   1.3   0.4   5.71   5.57   200 mm   437   p1570(1)   n2281   3.97   M1+183   4.02   1.3   0.4   5.71   5.57   200 mm   4094   p1536   n2231   2.25   n2229   2.37   36   0.33   5.23   5.28   200 mm   4094   p1536   n2231   2.25   n2229   2.37   36   0.33   5.23   5.28   200 mm   4479   p1690(1)   n2454   3.49   3.91   n1   3.99   20   0.4   5.15   5.15   200 mm   4479   p1690(1)   n2454   2.02   MH-326   2.09   n1894   3.34   n216   3.31   30   0.4   4.28   4.32   200 mm   4479   p1690(1)   n2454   2.02   MH-326   2.09   18   0.4   6.65   5.82   200 mm   4479   p1690(1)   n2454   2.02   MH-326   2.09   18   0.4   6.65   5.82   200 mm   4444   p1829   n2655   3.75   n2657   3.87   3.87   3.00   0.4   4.28   4.32   200 mm   4441   p1829   n2655   3.75   n2657   3.87   3.87   3.00   0.4   4.28   4.32   200 mm   4441   p1829   n2655   3.75   n2657   3.87   3.87   3.00   0.4   4.55   5.15   200 mm   4441   p1829   n2655   3.75   n2657   3.87   3.87   3.00   0.4   4.55   5.15   200 mm   4441   p1829   n2655   3.75   n2657   3.87   3.00   0.4   4.66   6.67   6.7   200 mm   4441   p1829   n2655   3.75   n2657   3.87   3.00   0.4   6.66   6.37   200 mm   4.550   p1926   n2808   5.16											
3662         p1160         n1695         3.58         n1697         3.7         30         0.4         5.56         5.66         200 mm           5406         CO-554         n877         2.62         n875         2.5         28         0.4         5.61         5.33         200 mm           2812         CO-200         n663         5.05         MH-582         5.1         12         0.4         6.52         6.59         200 mm           3177         p754         n1119         6.57         n1121         6.45         30         0.4         7.72         7.63         200 mm           3631         p1133(2)         MH-707         1.72         n1650         1.77         13         0.4         6.42         6.45         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.24 </td <td></td>											
5406         CO-554         n877         2.62         n875         2.5         28         0.4         5.61         5.33         200 mm           5316         CO-374         n2154         2.74         n2151         2.95         51         0.4         7.35         7.37         200 mm           2812         CO-200         n663         5.05         MH-582         5.1         12         0.4         6.52         6.59         200 mm           4442         p1830         n2657         3.87         n2659         3.99         30         0.4         7.72         7.63         200 mm           3631         p1133(2)         MH-707         1.72         n1650         1.77         13         0.4         6.42         6.45         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.2		•									
S316         CO-374         n2154         2.74         n2151         2.95         51         0.4         7.35         7.37         200 mm           2812         CO-200         n663         5.05         MH-582         5.1         12         0.4         6.52         6.59         200 mm           4442         p1830         n2657         3.87         n2659         3.99         30         0.4         7.72         7.63         200 mm           3177         p754         n1119         6.57         n1121         6.45         30         0.4         8.18         8.12         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           3289         p847(2)         MH-270         5.7         n1248         5.77         18         0.385         8.81         8.93         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.24         6.41         200 mm           5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         <		<u>'</u>									
2812         CO-200         n663         5.05         MH-582         5.1         12         0.4         6.52         6.59         200 mm           4442         p1830         n2657         3.87         n2659         3.99         30         0.4         7.72         7.63         200 mm           3177         p754         n1119         6.57         n1121         6.45         30         0.4         8.18         8.12         200 mm           3631         p1133(2)         MH-707         1.72         n1650         1.77         13         0.4         6.42         6.45         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.74         4.94         200 mm           2813         p847(2)         MH-270         5.7         n1248         5.77         18         0.38         8.											
4442         p1830         n2657         3.87         n2659         3.99         30         0.4         7.72         7.63         200 mm           3177         p754         n1119         6.57         n1121         6.45         30         0.4         8.18         8.12         200 mm           3631         p1133(2)         MH-707         1.72         n1650         1.77         13         0.4         6.42         6.45         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           3289         p847(2)         MH-270         5.7         n1248         5.77         18         0.385         8.81         8.93         200 mm           2813         p434         n666         4.81         n664         4.93         2.7         0.452         6.24         6.41         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35											
3177         p754         n1119         6.57         n1121         6.45         30         0.4         8.18         8.12         200 mm           3631         p1133(2)         MH-707         1.72         n1650         1.77         13         0.4         6.42         6.45         200 mm           4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           3289         p847(2)         MH-270         5.7         n1248         5.77         18         0.385         8.81         8.93         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.24         6.41         200 mm           5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         5.71         5.57         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
3631   p1133(2)   MH-707   1.72   n1650   1.77   13   0.4   6.42   6.45   200 mm   4281   p1690(2)   MH-326   2.09   n2456   2.14   12   0.39   5.82   5.3   200 mm   2776   p400   n618   3.74   n620   3.82   20   0.4   5.24   4.94   200 mm   3289   p847(2)   MH-270   5.7   n1248   5.77   18   0.385   8.81   8.93   200 mm   2813   p434   n666   4.81   n664   4.93   27   0.452   6.24   6.41   200 mm   2978   p586   n877   2.62   n878   2.74   34   0.35   5.61   5.71   200 mm   2729   p1304   n1894   3.38   n560   1.37   31   6.409   5.39   5.76   200 mm   4137   p1570(1)   n2281   3.97   MH-183   4.02   12   0.407   6.5   6.56   200 mm   4094   p1536   n2231   2.25   n2229   2.37   36   0.33   5.23   5.28   200 mm   2548   p613   n912   3.91   n1   3.99   20   0.4   4.28   4.32   200 mm   2595   p123   n214   3.43   n216   3.31   30   0.4   4.55   4.97   200 mm   3498   p1035   n1511   4.67   n1498   4.58   22   0.4   6.65   5.82   200 mm   4379   p755   n1121   6.45   n122   6.33   30   0.4   8.12   8.26   200 mm   3199   p755   n1121   6.45   n1122   6.33   30   0.4   0.46   6.42   200 mm   4849   p2176   n3167   3.13   n3168   3   36   0.363   5.19   5.2   200 mm   4849   p2176   n3167   3.13   n3168   3   36   0.363   5.19   5.2   200 mm   4849   p2176   n3167   3.13   n3168   3   36   0.363   5.19   5.2   200 mm   4849   p2176   n3167   3.13   n3168   3   36   0.363   5.19   5.20   200 mm   200   0.40		•									
4281         p1690(2)         MH-326         2.09         n2456         2.14         12         0.39         5.82         5.3         200 mm           2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           3289         p847(2)         MH-270         5.7         n1248         5.77         18         0.385         8.81         8.93         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.24         6.41         200 mm           5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         5.71         5.57         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35         5.61         5.71         200 mm           2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407		·									
2776         p400         n618         3.74         n620         3.82         20         0.4         5.24         4.94         200 mm           3289         p847(2)         MH-270         5.7         n1248         5.77         18         0.385         8.81         8.93         200 mm           2813         p434         n666         4.81         n664         4.93         27         0.452         6.24         6.41         200 mm           5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         5.71         5.57         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35         5.61         5.71         200 mm           2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
3289 p847(2)         MH-270         5.7 n1248         5.77         18 0.385         8.81         8.93 200 mm           2813 p434 n666         4.81 n664         4.93 27 0.452         6.24 6.41 200 mm           5326 CO-394 MH-152         1.96 n2233         2.13 42 0.4 5.71 5.57 200 mm           2978 p586 n877 2.62 n878 2.74 34 0.35 5.61 5.71 200 mm           2729 p1304 n1894 3.38 n560 1.37 31 6.409 5.39 5.76 200 mm           4137 p1570(1) n2281 3.97 MH-183 4.02 12 0.407 6.5 6.56 200 mm           4094 p1536 n2231 2.25 n2229 2.37 36 0.33 5.23 5.28 200 mm           2647 p169 n287 3.08 n289 3.2 30 0.4 4.28 4.32 200 mm           5572 CO-640 MH-65 5.39 MH-98 5.47 19 0.4 7.31 7.32 200 mm           2548 p613 n912 3.91 n1 3.99 20 0.4 5.15 5.15 200 mm           2595 p123 n214 3.43 n216 3.31 30 0.4 4.55 4.97 200 mm           4279 p1690(1) n2454 2.02 MH-326 2.09 18 0.4 6.65 5.82 200 mm           3498 p1035 n1511 4.67 n1498 4.58 22 0.4 6.6 6.37 200 mm           4441 p1829 n2655 3.75 n2657 3.87 30 0.4 7.68 7.72 200 mm           3450 p992(1)(1) n1444 3.64 MH-226 3.59 13 0.4 6.7 6.7 6.7 200 mm           4552 p1926 n2808 5.16 n2809 5.28 30 0.4 7.05 7.29 200 mm           3179 p755 n1121 6.45 n1122 6.33 30 0.4 8.12 8.26 200 mm           5081 CO-310 MH-709 1.69 MH-707 1.72 9 0.4 6.4 6.4 6.42 200 mm           4849 p2176 n3167 3.13 n3168 3.31 n3620 3.82 22 0.403 5.03 4.94 200 mm           2778 CO-80 n1755 3.91 n620 3.91 n620 3.82		• • •									
2813         p434         n666         4.81         n664         4.93         27         0.452         6.24         6.41         200 mm           5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         5.71         5.57         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35         5.61         5.71         200 mm           2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.3		•									
5326         CO-394         MH-152         1.96         n2233         2.13         42         0.4         5.71         5.57         200 mm           2978         p586         n877         2.62         n878         2.74         34         0.35         5.61         5.71         200 mm           2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15 <td></td>											
2978         p586         n877         2.62         n878         2.74         34         0.35         5.61         5.71         200 mm           2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55		•									
2729         p1304         n1894         3.38         n560         1.37         31         6.409         5.39         5.76         200 mm           4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65 </td <td></td>											
4137         p1570(1)         n2281         3.97         MH-183         4.02         12         0.407         6.5         6.56         200 mm           4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6 <td></td>											
4094         p1536         n2231         2.25         n2229         2.37         36         0.33         5.23         5.28         200 mm           2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68											
2647         p169         n287         3.08         n289         3.2         30         0.4         4.28         4.32         200 mm           5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68         7.72         200 mm           3450         p992(1)(1)         n1444         3.64         MH-226         3.59         13         0.4         6.7											
5572         CO-640         MH-65         5.39         MH-98         5.47         19         0.4         7.31         7.32         200 mm           2548         p613         n912         3.91         n1         3.99         20         0.4         5.15         5.15         200 mm           2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68         7.72         200 mm           3450         p992(1)(1)         n1444         3.64         MH-226         3.59         13         0.4         6.7         6.7         200 mm           4552         p1926         n2808         5.16         n2809         5.28         30         0.4         7.05 </td <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		•									
2548 p613         n912         3.91 n1         3.99         20         0.4         5.15         5.15 200 mm           2595 p123         n214         3.43 n216         3.31         30         0.4         4.55         4.97 200 mm           4279 p1690(1)         n2454         2.02 MH-326         2.09         18         0.4         6.65         5.82 200 mm           3498 p1035         n1511         4.67 n1498         4.58         22         0.4         6.6         6.37 200 mm           4441 p1829         n2655         3.75 n2657         3.87 30         0.4         7.68         7.72 200 mm           3450 p992(1)(1) n1444         3.64 MH-226         3.59 13         0.4         6.7         6.7 200 mm           4552 p1926         n2808         5.16 n2809         5.28 30         0.4         7.05         7.29 200 mm           3179 p755         n1121         6.45 n1122         6.33 30         0.4         8.12         8.26 200 mm           5081 CO-310 MH-709         1.69 MH-707         1.72         9 0.4         6.4         6.42 200 mm           4849 p2176         n3167         3.13 n3168         3 36 0.363         5.19 5.2 200 mm           2778 CO-80 n1755         3.91 n620         3.82 22 0.403 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.4</td> <td></td> <td></td> <td></td>								0.4			
2595         p123         n214         3.43         n216         3.31         30         0.4         4.55         4.97         200 mm           4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68         7.72         200 mm           3450         p992(1)(1)         n1444         3.64         MH-226         3.59         13         0.4         6.7         6.7         200 mm           4552         p1926         n2808         5.16         n2809         5.28         30         0.4         7.05         7.29         200 mm           3179         p755         n1121         6.45         n1122         6.33         30         0.4         8.12         8.26         200 mm           5081         CO-310         MH-709         1.69         MH-707         1.72         9         0.4         6	5572	CO-640	MH-65	5.39	MH-98	5.47	19	0.4	7.31	7.32	200 mm
4279         p1690(1)         n2454         2.02         MH-326         2.09         18         0.4         6.65         5.82         200 mm           3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68         7.72         200 mm           3450         p992(1)(1)         n1444         3.64         MH-226         3.59         13         0.4         6.7         6.7         200 mm           4552         p1926         n2808         5.16         n2809         5.28         30         0.4         7.05         7.29         200 mm           3179         p755         n1121         6.45         n1122         6.33         30         0.4         8.12         8.26         200 mm           5081         CO-310         MH-709         1.69         MH-707         1.72         9         0.4         6.4         6.42         200 mm           4849         p2176         n3167         3.13         n3168         3         36         0.363		•	n912	3.91	n1	3.99	20	0.4		5.15	200 mm
3498         p1035         n1511         4.67         n1498         4.58         22         0.4         6.6         6.37         200 mm           4441         p1829         n2655         3.75         n2657         3.87         30         0.4         7.68         7.72         200 mm           3450         p992(1)(1)         n1444         3.64         MH-226         3.59         13         0.4         6.7         6.7         200 mm           4552         p1926         n2808         5.16         n2809         5.28         30         0.4         7.05         7.29         200 mm           3179         p755         n1121         6.45         n1122         6.33         30         0.4         8.12         8.26         200 mm           5081         CO-310         MH-709         1.69         MH-707         1.72         9         0.4         6.4         6.42         200 mm           4849         p2176         n3167         3.13         n3168         3         36         0.363         5.19         5.2         200 mm           2778         CO-80         n1755         3.91         n620         3.82         22         0.403         5.03		·	n214			3.31	30	0.4	4.55	4.97	200 mm
4441       p1829       n2655       3.75       n2657       3.87       30       0.4       7.68       7.72       200 mm         3450       p992(1)(1)       n1444       3.64       MH-226       3.59       13       0.4       6.7       6.7       200 mm         4552       p1926       n2808       5.16       n2809       5.28       30       0.4       7.05       7.29       200 mm         3179       p755       n1121       6.45       n1122       6.33       30       0.4       8.12       8.26       200 mm         5081       CO-310       MH-709       1.69       MH-707       1.72       9       0.4       6.4       6.42       200 mm         4849       p2176       n3167       3.13       n3168       3       36       0.363       5.19       5.2       200 mm         2778       CO-80       n1755       3.91       n620       3.82       22       0.403       5.03       4.94       200 mm	4279	p1690(1)	n2454	2.02	MH-326	2.09	18	0.4	6.65	5.82	200 mm
3450       p992(1)(1)       n1444       3.64       MH-226       3.59       13       0.4       6.7       6.7       200 mm         4552       p1926       n2808       5.16       n2809       5.28       30       0.4       7.05       7.29       200 mm         3179       p755       n1121       6.45       n1122       6.33       30       0.4       8.12       8.26       200 mm         5081       CO-310       MH-709       1.69       MH-707       1.72       9       0.4       6.4       6.42       200 mm         4849       p2176       n3167       3.13       n3168       3       36       0.363       5.19       5.2       200 mm         2778       CO-80       n1755       3.91       n620       3.82       22       0.403       5.03       4.94       200 mm	3498	p1035	n1511	4.67	n1498	4.58	22	0.4	6.6	6.37	200 mm
4552         p1926         n2808         5.16         n2809         5.28         30         0.4         7.05         7.29         200 mm           3179         p755         n1121         6.45         n1122         6.33         30         0.4         8.12         8.26         200 mm           5081         CO-310         MH-709         1.69         MH-707         1.72         9         0.4         6.4         6.42         200 mm           4849         p2176         n3167         3.13         n3168         3         36         0.363         5.19         5.2         200 mm           2778         CO-80         n1755         3.91         n620         3.82         22         0.403         5.03         4.94         200 mm	4441	p1829	n2655	3.75	n2657	3.87	30	0.4	7.68	7.72	200 mm
3179     p755     n1121     6.45     n1122     6.33     30     0.4     8.12     8.26     200 mm       5081     CO-310     MH-709     1.69     MH-707     1.72     9     0.4     6.4     6.42     200 mm       4849     p2176     n3167     3.13     n3168     3     36     0.363     5.19     5.2     200 mm       2778     CO-80     n1755     3.91     n620     3.82     22     0.403     5.03     4.94     200 mm	3450	p992(1)(1)	n1444	3.64	MH-226	3.59	13	0.4	6.7	6.7	200 mm
5081         CO-310         MH-709         1.69         MH-707         1.72         9         0.4         6.4         6.42         200 mm           4849         p2176         n3167         3.13         n3168         3         36         0.363         5.19         5.2         200 mm           2778         CO-80         n1755         3.91         n620         3.82         22         0.403         5.03         4.94         200 mm	4552	p1926	n2808	5.16	n2809	5.28	30	0.4	7.05	7.29	200 mm
4849 p2176     n3167     3.13 n3168     3     36     0.363     5.19     5.2 200 mm       2778 CO-80     n1755     3.91 n620     3.82     22     0.403     5.03     4.94 200 mm	3179	p755	n1121	6.45	n1122	6.33	30	0.4	8.12	8.26	200 mm
2778 CO-80 n1755 3.91 n620 3.82 22 0.403 5.03 4.94 200 mm	5081	CO-310	MH-709	1.69	MH-707	1.72	9	0.4	6.4	6.42	200 mm
2778 CO-80 n1755 3.91 n620 3.82 22 0.403 5.03 4.94 200 mm	4849	p2176	n3167	3.13	n3168	3	36	0.363	5.19	5.2	200 mm
	2778	CO-80		3.91	n620	3.82	22	0.403	5.03	4.94	200 mm
			n3154			3.37	43	0.275	5.21		

22.42	004	1212	2.22	1011		22	0.504		F F4	200
	p894	n1313		n1311	3.44	23	0.521	5.31		200 mm
	p1729(1)	n2511		MH-338	1.44	10	0.387	3.43		200 mm
	p847(1)	n1247		MH-270	5.7	13	0.386	8.72		200 mm
2775	·	n617		n618	3.74	30	0.4	5.48		200 mm
5325	CO-392	n2067	1.77	MH-152	1.96	47	0.4	5.51	5.71	200 mm
4267	p1682	n2442	6.41	n2443	6.53	17	0.704	8.2	7.65	200 mm
5001	p992(1)(2)	MH-226	3.59	MH-225	3.56	7	0.41	6.7	6.7	200 mm
3485	p1016	n1481	9.43	n1480	10.52	30	3.646	10.55	11.64	200 mm
5026	p1729(2)(1	MH-338	1.44	MH-339	1.38	14	0.403	3.46	3.51	200 mm
2811	p433	n664	4.93	n663	5.05	32	0.372	6.41	6.52	200 mm
3286	p846	n1246	5.53	n1247	5.65	30	0.401	8.59	8.72	200 mm
	p1689	n2452	1.9	n2454	2.02	30	0.401	5.93	6.65	200 mm
	p1828	n2653		n2655	3.75	30	0.4	7.6	7.68	200 mm
	p124	n216		n218	3.19	30	0.4	4.97		200 mm
	p891	n1307		n1305	3.8	30	0.4	5.35		200 mm
	CO-552	n873		MH-479	2.43	12	0.4	5.16		200 mm
	CO-322	MH-383		n1694	3.46	12	0.4	5.38		200 mm
		MH-95		n2808	5.16	26	0.4	6.96		200 mm
	CO-358	n3001		n2765	3.15	29	3.703	5.63		200 mm
2974		n872		n873	2.38	28	0.43	4.96		200 mm
	p756	n1122		n1123	6.21	30	0.43	8.26		200 mm
	•									
	p1571(2)(2			n2281	3.97	10	0.397	6.39		200 mm
	. ,	LS7		MH-711	1.62	17	0.459	6.29		200 mm
	p398	n616		n617	3.62	30	0.4	5.47		200 mm
	p1365	n1975		n1976	0.63	21	2.807	3.29		200 mm
	p584(2)(2)			n875	2.5	21	0.349	5.22		200 mm
	. , ,	MH-268		n1242	5.29	11	0.462	8.3		200 mm
	p1827	n2651		n2653	3.63	30	0.401	7.58		200 mm
	p845	n1244		n1246	5.53	30	0.4	8.43		200 mm
	CO-184	MH-340		MH-339	1.38	32	0.4	3.44		200 mm
		n667		n666	4.81	32	0.4	6.18		200 mm
	p892	n1309		n1307	3.68	30	0.4	5.49	5.35	200 mm
4989	p1571(2)(1	MH-181	3.92	MH-182	3.94	5	0.399	6.33	6.39	200 mm
5262	CO-270	MH-88	4.98	MH-95	5.06	19	0.4	7.01	6.96	200 mm
4278	p1688(2)	MH-325	1.88	n2452	1.9	5	0.399	5.96	5.93	200 mm
3181	p757	n1123	6.21	n1124	6.09	30	0.4	8.49	8.44	200 mm
5165	CO-96	MH-67	3.98	n3252	4.07	21	0.4	5.67	5.51	200 mm
3629	CO-308	MH-711	1.62	n1648	1.66	9	0.4	6.35	6.39	200 mm
3660	p1159	n1694	3.46	n1695	3.58	36	0.334	5.42	5.56	200 mm
2772	CO-88	n614	3.36	n616	3.5	36	0.4	5.78	5.47	200 mm
3282	p843(1)	n1241		MH-268	5.24	14	0.464	8.26	8.3	200 mm
		n2282		MH-181	3.92	15	0.402	6.16		200 mm
	p1688(1)	n2450		MH-325	1.88	25	0.4	6.08		200 mm
	p1826	n2649		n2651	3.51	60	0.4	7.63		200 mm
	p582	n870		n872	2.26	30	0.4	5.15		200 mm
	p126	n220		n222	2.85	30	0.4	4.09		200 mm
	p844	n1242		n1244	5.41	30	0.4	8.34		200 mm
5203	PO- <del>1</del>		3.23	111477	J.41	30	0.4	0.54	0.43	200 111111

4549 pl924(1) n2804		·		ī	ı						1
4922   p2240(1)   n3255   3.9   MH-67   3.98   22   0.4   5.68   5.67   200 mm			n2804	4.93	MH-88	4.98	14	0.4	7.07	7.01	200 mm
Section   Sect	4332	p1730(2)	MH-340	1.25	n2514	1.23	4	0.398	3.44	3.43	200 mm
3338   p889(1)   n1303   3.92   MH-294   4.02   31   0.291   5.26   5.2   200 mm   1805   p366   6669   4.56   6667   4.68   31   0.388   6.11   6.18   200 mm   1805   200 mm   200 m   614   3.36   MH-692   3.22   33   0.4   5.78   5.94   200 mm   200 m	4922	p2240(1)	n3255	3.9	MH-67	3.98	22	0.4	5.68	5.67	200 mm
2815 p436	5463	p993(1)(2)	MH-31	3.46	MH-223	3.45	5	0.396	6.87	6.93	200 mm
2773   CO-90   n614   3.36   MH-692   3.22   33   0.4   5.78   5.94   200 mm   4138 p1572   n2283   3.73   n2282   3.85   30   0.405   5.99   6.16   200 mm   4331 p1731   n2514   1.23   n2516   1.11   30   0.402   3.43   3.25   200 mm   5603   CO-690   n2106   1.98   n2102   1.45   24   2.222   5.65   5.55   200 mm   5675   p1156   n1688   3.1   n1690   3.22   30   0.4   5.31   5.28   200 mm   5519   CO-624   MH-54   3.1   n2649   3.27   43   0.4   4.94   5.15   200 mm   5519   CO-624   MH-54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   5519   CO-624   MH-54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   5519   CO-624   MH-54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   5518   CO-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   55218   CO-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   55216   CO-268   n2800   4.74   n2804   4.93   46   0.4   6.72   7.07   200 mm   5261   CO-268   n2800   4.74   n2804   4.93   46   0.4   6.72   7.07   200 mm   5261   CO-664   MH-223   3.56   MH-31   3.46   24   0.4   6.7   6.87   200 mm   2070   p580(1)(1)   n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm   3220   p789   n1170   3.98   n1171   4.1   30   0.4   6.11   6.38   200 mm   3454   p994   n1447   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.40   5.34   5.31   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.1   n10   0.4   5.34   5.31   200 mm   3454   p395   n1314   3.2   n1313   3.32   3.0   0.4   5.57   5.99   200 mm   3454   p395   n1344   3.2   n1313   3.33   3.0   0.4   5.57   5.99   200 mm   3454   p395   n1344   3.2   n1313   3.33   3.0   0.4   5.57   5.99   200 mm   3454   p395   n1344   3.2   n1313   3.32   3.0   0.4   5.34   5.31   200 mm   3454   p395   n13170   2.77   n3171   2.65   28   0.429   5.08   5.04   200 mm   3454   p395   n13170   2.77   n3171   2.65   28   0.429	3338	p889(1)	n1303	3.92	MH-294	4.02	31	0.291	5.26	5.2	200 mm
4138   p1572   n2283   3.73   n2282   3.85   30   0.405   5.99   6.16   200 mm   4331   p1731   n2514   1.23   n2516   1.11   30   0.402   3.43   3.25   200 mm   5603   0-690   n2106   1.98   n2102   1.45   24   2.222   5.65   5.55   200 mm   3657   p1156   n1688   3.1   n1690   3.22   30   0.4   5.31   5.28   200 mm   5519   0-624   mR58   2.02   n870   2.14   30   0.4   4.94   5.15   200 mm   5519   0-624   mR54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   2816   0-188   n2450   1.78   mH-324   1.62   41   0.4   6.08   7.41   200 mm   2816   0-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   3455   p993(2)   MH-223   3.45   n1447   3.4   11   0.4   6.93   7.07   200 mm   4921   p2239   n3253   3.78   n3255   3.9   30   0.4   5.53   5.68   200 mm   4921   p2239   n3253   3.78   n3255   3.9   30   0.4   5.53   5.68   200 mm   4921   p2239   n3253   3.56   MH-311   3.46   24   0.4   6.7   6.87   200 mm   2970   p580(1)(1)   n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm   2771   p395(1)   n610   3.18   MH-692   3.22   11   0.402   6   5.94   200 mm   2771   p395(1)   n610   3.18   MH-692   3.22   11   0.402   6   5.94   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.53   5.39   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.57   5.99   200 mm   3454   p994   n147   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.57   5.99   200 mm   3454   p994   n147   3.94   n1448   3.28   30   0.403   7.07   6.73   200 mm   4273   p1686(1)   n2488   3.02   n1688   3.1   17   0.4   5.34   5.31   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.1   17   0.4   5.34   5.31   5.31   200 mm   3456   p070   n1171   4.1   n1172   4.22   34   0.3	2815	p436	n669	4.56	n667	4.68	31	0.388	6.11	6.18	200 mm
4138   p1572   n2283   3.73   n2282   3.85   30   0.405   5.99   6.16   200 mm   4331   p1731   n2514   1.23   n2516   1.11   30   0.402   3.43   3.25   200 mm   5603   0-690   n2106   1.98   n2102   1.45   24   2.222   5.65   5.55   200 mm   3657   p1156   n1688   3.1   n1690   3.22   30   0.4   5.31   5.28   200 mm   5519   0-624   mR58   2.02   n870   2.14   30   0.4   4.94   5.15   200 mm   5519   0-624   mR54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   2816   0-188   n2450   1.78   mH-324   1.62   41   0.4   6.08   7.41   200 mm   2816   0-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   3455   p993(2)   MH-223   3.45   n1447   3.4   11   0.4   6.93   7.07   200 mm   4921   p2239   n3253   3.78   n3255   3.9   30   0.4   5.53   5.68   200 mm   4921   p2239   n3253   3.78   n3255   3.9   30   0.4   5.53   5.68   200 mm   4921   p2239   n3253   3.56   MH-311   3.46   24   0.4   6.7   6.87   200 mm   2970   p580(1)(1)   n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm   2771   p395(1)   n610   3.18   MH-692   3.22   11   0.402   6   5.94   200 mm   2771   p395(1)   n610   3.18   MH-692   3.22   11   0.402   6   5.94   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.53   5.39   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.57   5.99   200 mm   3454   p994   n147   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm   4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.57   5.99   200 mm   3454   p994   n147   3.94   n1448   3.28   30   0.403   7.07   6.73   200 mm   4273   p1686(1)   n2488   3.02   n1688   3.1   17   0.4   5.34   5.31   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1470   3.98   n1313   3.32   30   0.4   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.1   17   0.4   5.34   5.31   5.31   200 mm   3456   p070   n1171   4.1   n1172   4.22   34   0.3	2773	CO-90	n614	3.36	MH-692	3.22	33	0.4	5.78	5.94	200 mm
4331 p1731	-		n2283	3.73	n2282	3.85	30	0.405	5.99	6.16	200 mm
Section   Sect	$\overline{}$	·	n2514	1.23	n2516	1.11	30	0.402	3.43	3.25	200 mm
3657   p156   n1688   3.1   n1690   3.22   30   0.4   5.31   5.28   200 mm   2971   p581   m868   2.02   n870   2.14   30   0.4   4.94   5.15   200 mm   2518   CO-624   MH-54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm   2818   CO-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   2816   CO-196   n671   4.45   n669   4.56   29   0.4   5.97   6.11   200 mm   2816   CO-268   n2800   4.74   n2804   4.93   46   0.4   6.08   7.07   200 mm   2816   CO-268   n2800   4.74   n2804   4.93   46   0.4   6.72   7.07   200 mm   2970   p580(1)(1) n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm   2970   p580(1)(1) n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm   3454   p994   n1447   3.4   n1448   3.28   30   0.40   5.57   5.94   200 mm   3454   p994   n1447   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.30   0.40   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.0   0.403   7.07   6.73   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.31   3.73   3.0   0.4   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.31   3.32   3.0   0.4   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.31   3.3   0.4   5.57   5.99   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.1   17   0.4   7.29   7.45   200 mm   3454   p994   n1447   3.4   n1448   3.28   3.1   17   0.4   7.29   7.45   200 mm   3458   p896   n1314   3.2   n1688   3.1   21   0.4   5.34   5.31   5.31   200 mm   3458   p896   n1314   3.2   n1688   3.0   1.15   1.11   2.9   0.4   6.3   7.41   200 mm   3458   p896   n1314   3.2   n1588   3.11   3.48   1.60   1.60   1.60   1.60   1.60		•	n2106	1.98	n2102	1.45	24	2.222	5.65	5.55	200 mm
2971   p581   n868   2.02   n870   2.14   30   0.4   4.94   5.15   200 mm     5519   CO-624   MH-54   3.1   n2649   3.27   43   0.4   7.45   7.63   200 mm     5218   CO-186   n2450   1.78   MH-324   1.62   41   0.4   6.08   7.41   200 mm     3455   p993(2)   MH-223   3.45   n1447   3.4   11   0.4   6.93   7.07   200 mm     3455   p993(2)   MH-223   3.45   n1447   3.4   11   0.4   6.93   7.07   200 mm     3455   p993(2)   MH-223   3.45   n1447   3.4   11   0.4   6.93   7.07   200 mm     3261   CO-268   n2800   4.74   n2804   4.93   46   0.4   6.72   7.07   200 mm     4921   p2239   n3253   3.78   n3255   3.9   30   0.4   5.53   5.68   200 mm     2970   p580(1)(1)   n866   1.91   MH-477   1.97   15   0.445   4.66   4.82   200 mm     3220   p789   n1170   3.98   n1171   4.1   30   0.4   6.11   6.38   200 mm     3220   p789   n1447   3.4   n1448   3.28   30   0.403   7.07   6.73   200 mm     5517   p1824(1)   n2646   3.03   MH-54   3.1   17   0.4   7.29   7.45   200 mm     4140   p1573   n2285   3.61   n2283   3.73   30   0.4   5.57   5.99   200 mm     5215   CO-182   n2517   1 n2516   1.11   29   0.4   3.25   3.25   200 mm     3343   p896   n1314   3.2   n1313   3.32   30   0.4   5.34   5.31   200 mm     3421   p1921   n2623   4.7   n2800   4.74   11   0.4   6.3   7.41   200 mm     3422   p789   n1171   4.1   n1172   4.2   3.0   3.55   6.38   7.51   200 mm     3431   p896   n1314   3.2   n1313   3.32   30   0.4   5.34   5.31   200 mm     3442   p1921   n2623   4.7   n2800   4.74   11   0.4   7.1   6.72   200 mm     3453   p896   n1314   3.2   n1313   3.32   30   0.4   5.34   5.31   200 mm     3454   p997   n1448   1.54   MH-324   1.62   19   0.4   6.3   7.41   200 mm     3452   p2179   n3170   2.77   n3171   2.65   28   0.429   5.08   5.04   200 mm     3453   p896   n1344   3.28   n1449   3.16   3.00   0.40   6.51   6.3   200 mm     3454   p997   n1448   3.28   n1449   3.16   3.00   0.40   6.51   6.3   200 mm     3455   p095   n1448   3.28   n1449   3.16   3.0   0.40   6.51   6.3   200 mm     3456   p095   n1448	_										
5519         CO-624         MH-54         3.1         n2649         3.27         43         0.4         7.45         7.63         200 mm           5218         CO-188         n2450         1.78         MH-324         1.62         41         0.4         6.08         7.41         200 mm           3455         p993(2)         MH-223         3.45         n1447         3.4         11         0.4         6.93         7.07         200 mm           5261         CO-268         n2800         4.74         n2804         4.93         46         0.4         6.72         7.07         200 mm           5261         CO-268         n2800         4.74         n2804         4.93         46         0.4         6.72         7.07         200 mm           5584         CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.73         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.32         200 mm           3771         p395(1)         n610         3.18         MH-692         3.22         11         0.402         <		•									
5218         CO-188         n2450         1.78         MH-324         1.62         41         0.4         6.08         7.41         200 mm           3455         p993(2)         MH-223         3.45         n1447         3.4         11         0.4         6.93         7.07         200 mm           3455         p993(2)         MH-223         3.45         n1447         3.4         11         0.4         6.93         7.07         200 mm           4921         p2239         n3253         3.78         n3255         3.9         30         0.4         5.53         5.68         200 mm           5584         CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.87         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           4517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4											
2816         CO-196         n671         4.45         n669         4.56         29         0.4         5.97         6.11         200 mm           3455         p993(2)         MH-223         3.45         n1447         3.4         11         0.4         6.93         7.07         200 mm           4921         p2239         n3253         3.78         n3255         3.9         30         0.4         5.53         5.68         200 mm           5584         CO-664         MH-225         3.56         MH-311         3.46         24         0.4         6.7         6.87         200 mm           2970         p580(1)(1)         n866         1.91         MH-477         1.97         15         0.445         4.66         4.82         200 mm           2771         p395(1)         n610         3.18         MH-692         3.22         11         0.402         6         5.94         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         7.75         6.73         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30	_					_					
3455         p993(2)         MH-223         3.45         n1447         3.4         11         0.4         6.93         7.07         200 mm           5261         CO-268         n2800         4.74         n2804         4.93         46         0.4         6.72         7.07         200 mm           4921         p2239         n3253         3.78         n3255         3.9         30         0.4         5.53         5.68         200 mm           5584         CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.87         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29<											
5261 CO-268         n2800         4.74         n2804         4.93         46         0.4         6.72         7.07         200 mm           4921 p2239         n3253         3.78         n3255         3.9         30         0.4         5.53         5.68         200 mm           5584 CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.87         200 mm           2970 p580(1)(1) n866         1.91         MH-477         1.97         15         0.445         4.66         4.82         200 mm           3220 p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3454 p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517 p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           5215 CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.21         200 mm           3656 CO-318         n1686         3.02					ļ						
4921         p2239         n3253         3.78         n3255         3.9         30         0.4         5.53         5.68         200 mm           5584         CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.87         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           515         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           5215         CO-182         n1686         3.02         n1688         3.02         1688         2.02         1											
5584         CO-664         MH-225         3.56         MH-31         3.46         24         0.4         6.7         6.87         200 mm           2970         p580(1)(1)         n866         1.91         MH-477         1.97         15         0.445         4.66         4.82         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3215         CO-152         MH-477         1.97         n868         2.02         12         0.4         4											
2970         p580(1)(1)         n866         1.91         MH-477         1.97         15         0.445         4.66         4.82         200 mm           3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           2771         p395(1)         n610         3.18         MH-692         3.22         11         0.402         6         5.94         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           3656         CO-152         MH-477         1.97         n868         2.02         12         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4 <td< td=""><td></td><td>'</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		'									
3220         p789         n1170         3.98         n1171         4.1         30         0.4         6.11         6.38         200 mm           2771         p395(1)         n610         3.18         MH-692         3.22         11         0.402         6         5.94         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           4140         p1573         n2285         3.61         n2516         1.11         29         0.4         3.25         3.25         200 mm           5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31											
2771         p395(1)         n610         3.18         MH-692         3.22         11         0.402         6         5.94         200 mm           3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3						_					
3454         p994         n1447         3.4         n1448         3.28         30         0.403         7.07         6.73         200 mm           5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.45         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         5.34         5.31         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           3222         p790         n171         4.1         n1172         4.22         34         0.355         6.38 </td <td></td> <td></td> <td></td> <td></td> <td>l</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>					l						
5517         p1824(1)         n2646         3.03         MH-54         3.1         17         0.4         7.29         7.4s         200 mm           4140         p1573         n2285         3.61         n2283         3.73         30         0.4         5.57         5.99         200 mm           5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         5.34         5.31         200 mm           2972         CO-152         MH-477         1.97         n868         2.02         12         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38											
4140 p1573         n2285         3.61 n2283         3.73         30         0.4         5.57         5.99 200 mm           5215 CO-182         n2517         1 n2516         1.11         29         0.4         3.25         3.25 200 mm           3656 CO-318         n1686         3.02 n1688         3.1         21         0.4         5.34         5.31 200 mm           2972 CO-152         MH-477         1.97 n868         2.02         12         0.4         4.82         4.94 200 mm           3343 p896         n1314         3.2 n1313         3.32         30         0.4         5.31         5.31 200 mm           4273 p1686(1)         n2448         1.54 MH-324         1.62         19         0.4         6.3         7.41 200 mm           4421 p1921         n2623         4.7 n2800         4.74         11         0.4         7.1         6.72 200 mm           3222 p790         n1171         4.1 n1172         4.22         34         0.355         6.38         7.5 200 mm           3281 p841(2)         MH-267         4.97 n1240         5.05         18         0.444         8.12         8.16 200 mm           3221 p788(2)         MH-310         3.93 n1170         3.98         14		·				<del> </del>					
5215         CO-182         n2517         1         n2516         1.11         29         0.4         3.25         3.25         200 mm           3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         5.34         5.31         200 mm           2972         CO-152         MH-477         1.97         n868         2.02         12         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           4421         p1921         n2623         4.7         n2800         4.74         11         0.4         7.1         6.72         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12											
3656         CO-318         n1686         3.02         n1688         3.1         21         0.4         5.34         5.31         200 mm           2972         CO-152         MH-477         1.97         n868         2.02         12         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           4421         p1921         n2623         4.7         n2800         4.74         11         0.4         7.1         6.72         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444		•									
2972         CO-152         MH-477         1.97         n868         2.02         12         0.4         4.82         4.94         200 mm           3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           4421         p1921         n2623         4.7         n2800         4.74         11         0.4         7.1         6.72         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399											
3343         p896         n1314         3.2         n1313         3.32         30         0.4         5.31         5.31         200 mm           4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           4421         p1921         n2623         4.7         n2800         4.74         11         0.4         7.1         6.72         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399         6.11         6.11         200 mm           4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406											
4273         p1686(1)         n2448         1.54         MH-324         1.62         19         0.4         6.3         7.41         200 mm           4421         p1921         n2623         4.7         n2800         4.74         11         0.4         7.1         6.72         200 mm           3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399         6.11         6.11         200 mm           4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406         6.51         6.3         200 mm           3456         p995         n1448         3.28         n1449         3.16         30         0.402											
4421 p1921         n2623         4.7 n2800         4.74         11         0.4         7.1         6.72 200 mm           3222 p790         n1171         4.1 n1172         4.22         34         0.355         6.38         7.5 200 mm           4852 p2179         n3170         2.77 n3171         2.65         28         0.429         5.08         5.04 200 mm           3281 p841(2)         MH-267         4.97 n1240         5.05         18         0.444         8.12         8.16 200 mm           3221 p788(2)         MH-310         3.93 n1170         3.98         14         0.399         6.11         6.11 200 mm           4272 p1685(2)         MH-323         1.5 n2448         1.54         10         0.406         6.51         6.3 200 mm           3456 p995         n1448         3.28 n1449         3.16         30         0.402         6.73         6.74 200 mm           5506 p1822(1)         n2643         2.8 MH-51         2.86         15         0.428         6.79         6.91 200 mm           4334 p1733         n2517         1 n2518         0.88         30         0.401         3.25         3.23 200 mm           4515 CO-622         MH-51         2.86 n2646         3.03				<u> </u>							
3222         p790         n1171         4.1         n1172         4.22         34         0.355         6.38         7.5         200 mm           4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399         6.11         6.11         200 mm           4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406         6.51         6.3         200 mm           3456         p995         n1448         3.28         n1449         3.16         30         0.402         6.73         6.74         200 mm           5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401	$\overline{}$										
4852         p2179         n3170         2.77         n3171         2.65         28         0.429         5.08         5.04         200 mm           3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399         6.11         6.11         200 mm           4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406         6.51         6.3         200 mm           3456         p995         n1448         3.28         n1449         3.16         30         0.402         6.73         6.74         200 mm           5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4 <td></td> <td></td> <td></td> <td></td> <td>l</td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td>					l	_					
3281         p841(2)         MH-267         4.97         n1240         5.05         18         0.444         8.12         8.16         200 mm           3221         p788(2)         MH-310         3.93         n1170         3.98         14         0.399         6.11         6.11         200 mm           4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406         6.51         6.3         200 mm           3456         p995         n1448         3.28         n1449         3.16         30         0.402         6.73         6.74         200 mm           5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4         5.73         5.57         200 mm           5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4	_										
3221 p788(2)         MH-310         3.93 n1170         3.98         14 0.399         6.11 6.11 200 mm           4272 p1685(2)         MH-323         1.5 n2448         1.54 10 0.406         6.51 6.3 200 mm           3456 p995 n1448         3.28 n1449         3.16 30 0.402 6.73 6.74 200 mm           5506 p1822(1) n2643         2.8 MH-51 2.86 15 0.428 6.79 6.91 200 mm           4334 p1733 n2517 1 n2518 0.88 30 0.401 3.25 3.23 200 mm           4141 p1574 n2287 3.49 n2285 3.61 30 0.4 5.73 5.57 200 mm           5515 CO-622 MH-51 2.86 n2646 3.03 43 0.4 6.91 7.29 200 mm           4419 p1808 n2622 4.65 n2623 4.7 12 0.4 7.18 7.1 200 mm           3458 p997 n1451 3.04 n1453 2.92 27 0.441 6.84 6.75 200 mm           4851 p2178 n3169 2.89 n3170 2.77 31 0.375 5.14 5.08 200 mm           3219 CO-6 MH-310 3.93 n1169 3.86 16 0.4 6.11 6.11 200 mm           3341 p893 n1311 3.44 n1309 3.56 38 0.315 5.51 5.49 200 mm		•									
4272         p1685(2)         MH-323         1.5         n2448         1.54         10         0.406         6.51         6.3         200 mm           3456         p995         n1448         3.28         n1449         3.16         30         0.402         6.73         6.74         200 mm           5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4         5.73         5.57         200 mm           5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4         6.91         7.29         200 mm           4419         p1808         n2622         4.65         n2623         4.7         12         0.4         7.18         7.1         200 mm           3458         p997         n1451         3.04         n1453         2.92         27         0.441 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td></t<>						_					
3456         p995         n1448         3.28         n1449         3.16         30         0.402         6.73         6.74         200 mm           5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4         5.73         5.57         200 mm           5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4         6.91         7.29         200 mm           4419         p1808         n2622         4.65         n2623         4.7         12         0.4         7.18         7.1         200 mm           3458         p997         n1451         3.04         n1453         2.92         27         0.441         6.84         6.75         200 mm           4851         p2178         n3169         2.89         n3170         2.77         31         0.375											
5506         p1822(1)         n2643         2.8         MH-51         2.86         15         0.428         6.79         6.91         200 mm           4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4         5.73         5.57         200 mm           5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4         6.91         7.29         200 mm           4419         p1808         n2622         4.65         n2623         4.7         12         0.4         7.18         7.1         200 mm           3458         p997         n1451         3.04         n1453         2.92         27         0.441         6.84         6.75         200 mm           4851         p2178         n3169         2.89         n3170         2.77         31         0.375         5.14         5.08         200 mm           3219         CO-6         MH-310         3.93         n1169         3.86         16         0.4         6											
4334         p1733         n2517         1         n2518         0.88         30         0.401         3.25         3.23         200 mm           4141         p1574         n2287         3.49         n2285         3.61         30         0.4         5.73         5.57         200 mm           5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4         6.91         7.29         200 mm           4419         p1808         n2622         4.65         n2623         4.7         12         0.4         7.18         7.1         200 mm           3458         p997         n1451         3.04         n1453         2.92         27         0.441         6.84         6.75         200 mm           4851         p2178         n3169         2.89         n3170         2.77         31         0.375         5.14         5.08         200 mm           3219         CO-6         MH-310         3.93         n1169         3.86         16         0.4         6.11         6.11         200 mm           3341         p893         n1311         3.44         n1309         3.56         38         0.315         5.51	$\overline{}$	·									
4141       p1574       n2287       3.49       n2285       3.61       30       0.4       5.73       5.57       200 mm         5515       CO-622       MH-51       2.86       n2646       3.03       43       0.4       6.91       7.29       200 mm         4419       p1808       n2622       4.65       n2623       4.7       12       0.4       7.18       7.1       200 mm         3458       p997       n1451       3.04       n1453       2.92       27       0.441       6.84       6.75       200 mm         4851       p2178       n3169       2.89       n3170       2.77       31       0.375       5.14       5.08       200 mm         3219       CO-6       MH-310       3.93       n1169       3.86       16       0.4       6.11       6.11       200 mm         3341       p893       n1311       3.44       n1309       3.56       38       0.315       5.51       5.49       200 mm											
5515         CO-622         MH-51         2.86         n2646         3.03         43         0.4         6.91         7.29         200 mm           4419         p1808         n2622         4.65         n2623         4.7         12         0.4         7.18         7.1         200 mm           3458         p997         n1451         3.04         n1453         2.92         27         0.441         6.84         6.75         200 mm           4851         p2178         n3169         2.89         n3170         2.77         31         0.375         5.14         5.08         200 mm           3219         CO-6         MH-310         3.93         n1169         3.86         16         0.4         6.11         6.11         200 mm           3341         p893         n1311         3.44         n1309         3.56         38         0.315         5.51         5.49         200 mm	_					_					
4419 p1808       n2622       4.65 n2623       4.7       12       0.4       7.18       7.1 200 mm         3458 p997       n1451       3.04 n1453       2.92       27       0.441       6.84       6.75 200 mm         4851 p2178       n3169       2.89 n3170       2.77       31       0.375       5.14       5.08 200 mm         3219 CO-6       MH-310       3.93 n1169       3.86       16       0.4       6.11       6.11 200 mm         3341 p893       n1311       3.44 n1309       3.56       38       0.315       5.51       5.49 200 mm		•									
3458 p997     n1451     3.04 n1453     2.92     27     0.441     6.84     6.75 200 mm       4851 p2178     n3169     2.89 n3170     2.77     31     0.375     5.14     5.08 200 mm       3219 CO-6     MH-310     3.93 n1169     3.86     16     0.4     6.11     6.11 200 mm       3341 p893     n1311     3.44 n1309     3.56     38     0.315     5.51     5.49 200 mm	5515	CO-622	MH-51	2.86	n2646	3.03	43	0.4	6.91	7.29	200 mm
4851     p2178     n3169     2.89     n3170     2.77     31     0.375     5.14     5.08     200 mm       3219     CO-6     MH-310     3.93     n1169     3.86     16     0.4     6.11     6.11     200 mm       3341     p893     n1311     3.44     n1309     3.56     38     0.315     5.51     5.49     200 mm	4419	p1808	n2622	4.65	n2623	4.7	12	0.4	7.18	7.1	200 mm
3219 CO-6 MH-310 3.93 n1169 3.86 16 0.4 6.11 6.11 200 mm 3341 p893 n1311 3.44 n1309 3.56 38 0.315 5.51 5.49 200 mm	3458	p997	n1451	3.04	n1453	2.92	27	0.441	6.84	6.75	200 mm
3341 p893 n1311 3.44 n1309 3.56 38 0.315 5.51 5.49 200 mm	4851	p2178	n3169	2.89	n3170	2.77	31	0.375	5.14	5.08	200 mm
	3219	CO-6	MH-310	3.93	n1169	3.86	16	0.4	6.11	6.11	200 mm
3279 p841(1) n1239 4.93 MH-267 4.97 10 0.435 8.1 8.12 200 mm	3341	p893	n1311	3.44	n1309	3.56	38	0.315	5.51	5.49	200 mm
	3279	p841(1)	n1239	4.93	MH-267	4.97	10	0.435	8.1	8.12	200 mm

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	. ,	n2446		MH-323	1.5	19	0.409	6.92		200 mm
3628	p1133(1)(1	n1648	1.66	MH-709	1.69	12	0.27	6.39	6.4	200 mm
3833	p1318(2)	MH-721	5.7	n1912	5.6	14	0.638	6.95	6.8	200 mm
3459	p998(1)	n1453	2.92	MH-222	2.84	19	0.456	6.75	6.82	200 mm
4336	p1734	n2518	0.88	n2519	0.76	30	0.4	3.23	3.31	200 mm
	CO-422	n1682		MH-380	2.93	38	0.4	5.43		200 mm
		n1167		MH-295	1.63	16	0.4	5.86		200 mm
	p1575	n2288		n2287	3.49	30	0.4	5.85		200 mm
	p1807	n2621		n2622	4.65	30	0.4	7.36		200 mm
	p2180	n3171		n3172	2.53	29	0.4	5.04		200 mm
	p842	n1240		n1241	5.17	33	0.359	8.16		200 mm
	p839	n1236	4.69	n1238	4.81	26	0.456	7.68		200 mm
5513	p1821(2)	MH-53	2.77	n2643	2.8	7	0.403	6.77	6.79	200 mm
3885	p1735	n2519	0.76	n1976	0.63	32	0.4	3.31	3.18	200 mm
4143	p1577	n2289	3.25	n2288	3.37	30	0.4	5.85	5.85	200 mm
5399	CO-540	n865	1.79	n238	1.67	30	0.4	4.35	4.05	200 mm
4270	p1684	LS5	1.3	n2446	1.42	30	0.4	7.27	6.92	200 mm
	p1806	n2620		n2621	4.53	30	0.4	7.45		200 mm
		MH-379		n1682	2.78	26	0.397	5.39		200 mm
	p1132(2) p1218	n1778		n1776	1.57	15	0.799	5.96		200 mm
						32				
	p2181	n3172		n3173	2.4		0.4	5		200 mm
	p579	n865		n866	1.91	33	0.363	4.35		200 mm
	p996	n1449		n1451	3.04	33	0.362	6.74		200 mm
	p2182	n3173	2.4	n3174	2.29	27	0.416	4.93	4.85	200 mm
	. ,	n2641	2.68	MH-53	2.77	22	0.403	6.7		200 mm
3659	p1158(1)	n1692	3.34	MH-383	3.41	28	0.253	5.32	5.38	200 mm
5035	CO-316	MH-378	2.58	MH-379	2.68	23	0.4	5.4	5.39	200 mm
4416	p1805	n2619	4.29	n2620	4.41	30	0.4	7.44	7.45	200 mm
3625	CO-306	n1644	5.97	MH-717	5.93	12	0.4	7.09	7.07	200 mm
3828	p1316(2)(2	MH-717	5.93	n1908	5.84	20	0.42	7.07	7.01	200 mm
	p1576(2)(2			n2289	3.25	15	0.388	5.92		200 mm
		MH-52		n2641	2.68	23	0.403	6.73		200 mm
		MH-180		n2124	3.14	15	0.4	5.92		200 mm
	CO-428 CO-314	n1677		MH-378	2.58	17	0.4	5.27		200 mm
	p1804									
	•	n2617		n2619	4.29	30	0.4	7.43		200 mm
		n1908		MH-719	5.8	9	0.418	7.01		200 mm
	' '	MH-380		n1686	3.02	27	0.308	5.32		200 mm
	p656	n977		n978	2.77	23	0.512	4.44		200 mm
	CO-142	n3174		MH-448	2.25	9	0.4	4.85		200 mm
3994	p1460	n2115	2.51	n2113	2.39	18	0.661	5.65	5.58	200 mm
2626	p150	n254	3.11	n255	3.31	49	0.4	5.63	5.51	200 mm
5514	CO-620	n2639	2.44	MH-52	2.58	37	0.4	6.83	6.73	200 mm
5339	CO-420	n1675	2.42	n1677	2.52	23	0.4	5.29	5.27	200 mm
	p838	n1234		n1236	4.69	30	0.4	7.54		200 mm
		n2615		n2617	4.17	30	0.4	7.51		200 mm
	p1317(2)(1			MH-720	5.77	7	0.417	7.51		200 mm
	. ,,,	n1569		MH-756	0.12	15	14.403	4.14		200 mm
5549	CO-440	111203	-2.09	סכ/-חואו	0.12	12	14.403	4.14	4.18	200 111111

5050     p2183(1)(2 MH-448     2.25     MH-447     2.2     14     0.398     4.86       5535     p1876(2)     MH-60     8.55     n2726     9.3     13     5.781     9.67       5534     p1876(1)     n2725     7.57     MH-60     8.55     17     5.809     8.69       5565     p1818(2)     MH-71     2.36     n2639     2.44     18     0.404     6.86       2625     p149     n253     2.99     n254     3.11     30     0.4     5.85       3274     p837     n1232     4.45     n1234     4.57     30     0.4     7.34	10.42	200 mm
5534     p1876(1)     n2725     7.57     MH-60     8.55     17     5.809     8.69       5565     p1818(2)     MH-71     2.36     n2639     2.44     18     0.404     6.86       2625     p149     n253     2.99     n254     3.11     30     0.4     5.85		200
5565     p1818(2)     MH-71     2.36     n2639     2.44     18     0.404     6.86       2625     p149     n253     2.99     n254     3.11     30     0.4     5.85	0 67	200 mm
2625 p149 n253 2.99 n254 3.11 30 0.4 5.85	9.67	200 mm
	6.83	200 mm
	5.63	200 mm
	7.54	200 mm
3647 p1148		200 mm
4413 p1802		200 mm
3830 p1317(2)(2 MH-720 5.77 n1910 5.72 12 0.418 7		200 mm
5049 CO-144 MH-447 2.2 MH-445 2.15 11 0.4 4.87		200 mm
3278 p840		200 mm
5564 p1818(1) n2637 2.32 MH-71 2.36 11 0.406 6.88		200 mm
2624 p148		200 mm
3646 p1147   n1672   2.18 n1674   2.3   30   0.4   5.31	5.29	200 mm
4412 p1801   n2612   3.81   n2613   3.93   30   0.4   7.63	7.6	200 mm
3849 p1332   n1931   3.29   n1932   3.17   30   0.4   6.36	6.31	200 mm
3462 p998(2) MH-222 2.84 n1454 2.8 13 0.327 6.82	6.56	200 mm
5400 CO-542 n248 2.71 n252 2.87 41 0.4 7.2	6.37	200 mm
3834 p1320 n1913 5.48 n1914 5.36 26 0.467 6.86	6.96	200 mm
4429 p1817 n2635 2.2 n2637 2.32 30 0.4 6.85		200 mm
3645 CO-312 n1670 2.1 n1672 2.18 22 0.4 5.34		200 mm
5008 CO-288 MH-265 4.35 MH-266 4.26 22 0.4 7.57		200 mm
		200 mm
4411 p1800   n2611   3.69 n2612   3.81   30   0.4   7.67		200 mm
2911 p519		315mm
5332 CO-406		200 mm
3275 p836(2) MH-265 4.35 n1232 4.45 26 0.363 7.57		200 mm
4000 p1466		200 mm
3273 CO-290 MH-266 4.26 n1228 4.1 41 0.4 7.47		200 mm
5562 p1816(2) MH-70 2.15 n2635 2.2 12 0.4 6.89		200 mm
4410 p1799   n2610   3.57 n2611   3.69   30   0.4   7.94	7.67	200 mm
3840 p1324  n1919   5.1 n1920   4.98  20  0.612  6.86	6.83	200 mm
5561 p1816(1) n2633 2.08 MH-70 2.15 18 0.405 6.95	6.89	200 mm
3831 p1318(1) n1910 5.72 MH-721 5.7 8 0.367 6.99	6.95	200 mm
4409 p1798 n2609 3.45 n2610 3.57 30 0.403 7.98		200 mm
3999 p1465 n2123 3.11 n2121 2.99 30 0.4 6.01		200 mm
3065 CO-118 MH-500 2.5 n977 2.65 36 0.4 4.4		200 mm
2817 p456		200 mm
3642 p1144		200 mm
3272 p1005(2)(2 MH-817		200 mm
4268 p1681(2) MH-321 6.35 n2442 6.41 22 0.287 8.2		200 mm
5559 p1815(2) MH-69 2.01 n2633 2.08 15 0.413 6.95		200 mm
3055 p651 n969 2.01 n971 2.13 21 0.582 4.42		200 mm
2620 p145 n247 2.63 n248 2.71 19 0.4 7.01		200 mm
3998 p1464   n2121   2.99   n2120   2.87   30   0.4   5.84		200 mm
3398 CO-386 MH-817 4.06 n1389 3.98 21 0.4 7.37	7.45	200 mm
2843 p457 n696 4.41 n698 4.29 30 0.4 5.95	5.83	200 mm

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5543	p1797(2)	MH-64	3.38	n2609	3.45	18	0.4	8.07	7.98	200 mm
5558	p1815(1)	n2631	1.96	MH-69	2.01	14	0.415	6.94	6.95	200 mm
5188	CO-132	n2719	4.96	n2594	2.46	41	6.033	7.63	7.87	200 mm
2766	p389(2)	MH-695	2.63	n600	2.66	6	0.537	5.86	5.88	200 mm
4861	p2188(1)(1	n3179	1.68	MH-444	1.62	14	0.4	4.81	4.78	200 mm
	p144	n246	2.51	n247	2.63	30	0.4	6.17	7.01	200 mm
	p1797(1)	n2607		MH-64	3.38	12	0.403	8.13		200 mm
	p1757(1) p1463	n2120		n2118	2.75	30	0.4	5.77		200 mm
	CO-192	n699		n698	4.29	30	0.4	5.88		200 mm
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	CO-116	MH-504		n976	2.48	19	0.4	4.44		200 mm
	CO-408	n1915		n1914	5.36	22	0.4	6.99		200 mm
	p653(2)	MH-507		n974	2.37	22	0.431	4.43		200 mm
	p2191	n3182		n3183	1.2	26	0.477	4.76		200 mm
	CO-146	MH-444		n3180	1.59	8	0.4	4.78		200 mm
5556	p1814(2)	MH-68	1.92	n2631	1.96	8	0.409	6.92	6.94	200 mm
4858	p2184(2)	MH-445	2.15	n3176	2.05	34	0.311	4.88	4.92	200 mm
3058	p653(1)	n973	2.25	MH-507	2.28	6	0.444	4.43	4.43	200 mm
2618	p143	n244	2.39	n246	2.51	30	0.4	5.03	6.17	200 mm
3996	p1462	n2118	2.75	n2116	2.63	30	0.4	5.59	5.61	200 mm
	p459	n699	4.17	n700	4.05	30	0.4	5.88	5.89	200 mm
	CO-576	MH-504		n974	2.37	8	0.4	4.44		200 mm
	p1796	n2605		n2607	3.33	30	0.4	8.1		200 mm
	p1025	n1498		n1499	5.53	30	3.154	6.37		200 mm
	p1814(1)	n2629		MH-68	1.92	21	0.411	6.87		200 mm
	p2189(1)(1			MH-442	1.51	18	0.411	4.77		200 mm
	p1681(1)	n1485		MH-321	6.35	22	0.262	8		200 mm
		n3178		n3179	1.68	35	0.202	4.91		200 mm
	p2187									
	CO-92	n606		n610	3.18	40	0.4	5.94		200 mm
	p142	n242		n244	2.39	30	0.4	4.47		200 mm
	p1795(2)	MH-61		n2605	3.21	14	0.402	8.13		200 mm
	p1219	n1666		n1780	1.81	30	0.4	5.35		200 mm
	p460	n700		n701	3.93	30	0.4	5.89		200 mm
	p1145	n1668	1.98	n1670	2.1	38	0.315	5.49		200 mm
	CO-148	MH-442		n3181	1.45	16	0.4	4.77		200 mm
	p1795(1)	n2603	3.09	MH-61	3.15	16	0.406	8.17	8.13	200 mm
4425	p1813	n2628	1.72	n2629	1.84	30	0.404	6.86	6.87	200 mm
2616	p141	n241	2.15	n242	2.27	30	0.4	3.97	4.47	200 mm
2847	p461	n701	3.93	n703	3.81	30	0.4	5.8	5.8	200 mm
2768	p392	n604	2.9	n606	3.02	30	0.4	5.87	5.94	200 mm
	p2190	n3181		n3182	1.33	31	0.4	4.77		200 mm
	p1217	n1776		n1774	1.45	28	0.427	6.22		200 mm
	CO-694	n526		n527	3.45	26	4.942	5.99		200 mm
	p140	n240		n241	2.15	30	0.4	4.07		200 mm
	p2192(2)	MH-440		n3184	1.08	10	0.444	4.89		200 mm
	p2132(2) p1812	n2626		n2628	1.72	30	0.444	6.84		200 mm
	p1612 p462	n703		n704		30		5.8		200 mm
					3.69		0.4			
4405	p1794	n2602	2.97	n2603	3.09	30	0.4	8.19	8.17	200 mm

2767		n602		n604	2.9	30	0.4	5.89		200 mm
	CO-66	n2982		n2980	2.77	41	0.4	5.06		200 mm
	p2185	n3176		n3177	1.94	41	0.278	4.92		200 mm
	p1811	n2625		n2626	1.6	30	0.4	6.99	6.84	200 mm
2849	p463	n704	3.69	n706	3.58	30	0.4	5.75	5.71	200 mm
3992	p1458	n2112	2.27	n2110	2.15	30	0.4	5.45	5.45	200 mm
4404	p1793	n2600	2.85	n2602	2.97	30	0.4	8.14	8.19	200 mm
5252	CO-250	MH-14	2.44	n2982	2.61	43	0.4	4.9	5.06	200 mm
3832	p1319	n1912	5.6	n1913	5.48	41	0.292	6.8	6.86	200 mm
3993	p1459	n2113	2.39	n2112	2.27	32	0.371	5.58	5.45	200 mm
3991	p1457	n2110	2.15	n2108	2.03	30	0.4	5.45	5.59	200 mm
4422	p1810	n2624	1.36	n2625	1.48	30	0.4	7.26	6.99	200 mm
3721	p1216	n1774	1.45	n1773	1.33	30	0.4	6.83	8.51	200 mm
	p464(1)	n706		MH-596	3.52	14	0.4	5.71		200 mm
	p1792	n2599		n2600	2.85	30	0.4	8.07		200 mm
	CO-102	n2987		MH-14	2.44	47	0.4	4.89		200 mm
	p652(2)	MH-508		n973	2.25	11	0.367	4.44		200 mm
	CO-410	n1915		n1919	5.1	43	0.307	6.99		200 mm
	CO-608	n817		n567	7.03	30	6.032	6.45		315mm
	p388(2)	MH-694		n598	2.54	7	0.032	5.8		200 mm
	p388(2)	n597		MH-694	2.54	19	0.456	5.77		200 mm
	. , ,									
	p1254	n1828		n1827	4.51	16	1.283	5.43		200 mm
	p1215	n1773		n1772	1.21	30	0.4	8.51		200 mm
	CO-480	n1466		n1389	3.98	28	0.4	7.55		200 mm
	p1809	n2584		n2624	1.36	30	0.4	7.57		200 mm
	p1456	n2108		n2106	1.98	12	0.4	5.59		200 mm
	p1791	n2597		n2599	2.73	30	0.4	7.96		200 mm
	CO-30	n2987		MH-16	2.16	22	0.4	4.89		200 mm
	p652(1)(2)			MH-508	2.21	8	0.367	4.44		200 mm
	. ,	MH-596		n527	3.45	18	0.398	5.78		200 mm
	•	n600		n602	2.78	33	0.364	5.88		200 mm
	p2196(1)(1			MH-438	0.66	14	0.464	5.07		200 mm
	. ,	MH-700		n1769	0.98	15	0.439	5.81		200 mm
	p655(1)	n976		MH-500	2.5	7	0.273	4.39		200 mm
3057	p652(1)(1)	n971	2.13	MH-509	2.18	14	0.37	4.46	4.44	200 mm
	p1007	n1467	3.74	n1466	3.86	30	0.4	7.44	7.55	200 mm
5178	CO-122	n2597	2.61	n2594	2.46	37	0.4	7.96	7.87	200 mm
5251	CO-248	n2991	2.03	MH-16	2.16	33	0.4	4.71	4.92	200 mm
4870	p2194	n3185	0.96	n3186	0.85	28	0.4	5.03	5.08	200 mm
3995	p1461	n2116	2.63	n2115	2.51	40	0.304	5.61	5.65	200 mm
5371	CO-484	MH-257	3.58	n1467	3.74	40	0.4	7.33	7.44	200 mm
3719	CO-342	MH-700	1.04	n1771	1.09	12	0.4	5.81	5.78	200 mm
5134	CO-48	n2991	2.03	n2992	1.9	33	0.4	4.71	4.76	200 mm
4867	p2192(1)	n3183	1.2	MH-440	1.13	22	0.343	4.84	4.89	200 mm
	p2195(1)	n3186		MH-28	0.75	24	0.4	5.08		200 mm
	p2193	n3184		n3185	0.96	34	0.362	4.92		200 mm
	CO-486	n1472		MH-257	3.58	28	0.4	7.22		200 mm
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	p649	n966		n968	1.89	30	0.4	4.52		200 mm
	p2051(1)	n2992		MH-12	1.81	22	0.401	4.76		200 mm
	p1214	n1772		n1771	1.09	33	0.368	6.11		200 mm
	p1353	n1960		n1961	2.54	25	0.479	5.05	4.95	200 mm
5447	p2195(2)	MH-28	0.75	n3187	0.72	7	0.393	5.07	5.07	200 mm
3052	p648	n964	1.65	n966	1.77	30	0.4	4.55	4.52	200 mm
3715	p1212	n1769	0.98	n1770	0.86	30	0.4	5.84	5.73	200 mm
2761	p387	n596	2.3	n597	2.42	30	0.4	5.67	5.77	200 mm
2764	p389(1)(1)	n598	2.54	MH-696	2.62	21	0.357	5.81	5.86	200 mm
5553	CO-626	MH-67	1.75	MH-12	1.81	15	0.4	4.57	4.65	200 mm
3875	p1357	n1966	2.18	n1967	2.06	23	0.52	4.57	4.42	200 mm
3846	p1329	n1926	3.65	n1928	3.53	25	0.48	6.6	6.61	200 mm
	p2052(2)	MH-67		n2995	1.66	23	0.402	4.57	4.42	200 mm
3183	•	n1126		n1127	5.2	23	0.4	8.44		200 mm
	p389(1)(2)			MH-695	2.63	4	0.331	5.86		200 mm
	CO-340	n1782		n1770	0.86	29	0.4	5.65		200 mm
	CO-596	n964		MH-25	1.51	36	0.4	4.55		200 mm
	p386	n595		n596	2.3	30	0.4	5.7		200 mm
	CO-150	MH-438		n3189	0.61	10	0.4	5.21		200 mm
	CO-404	n1957		n1936	3.02	29	0.4	5.4		200 mm
	p720	n1070		n1072	3.6	15	0.801	6.26		200 mm
	p760			-	_	30				200 mm
	•	n1127		n1129	5.08		0.4	8.48		
	p646(1)	n962		MH-25	1.51	24	0.4	4.37		200 mm
2758	•	n594		n595	2.18	13	0.4	5.76		200 mm
	p2053	n2995		n2997	1.54	30	0.4	4.42		200 mm
	p1351	n1957		n1958	2.78	30	0.4	5.4		200 mm
	p2054	n2997		n2998	1.42	29	0.402	4.37		200 mm
3187	•	n1129		n1131	4.96	30	0.4	8.45		200 mm
	p645	n960		n962	1.41	30	0.4	4.46		200 mm
	p1220	n1780		n1778	1.69	47	0.256	5.82		200 mm
	p1369	n1980		n1981	-0.11	25	1.383	2.92		200 mm
	p2055	n2998		n2999	1.3	31	0.402	4.32		200 mm
	p762	n1131		n1132	4.84	30	0.4	8.36		200 mm
	p644	n959		n960	1.29	30	0.4	4.45		200 mm
	p384	n593		n594	2.13	17	0.4	5.68		200 mm
	CO-412	n1925		n1922	3.93	38	0.4	6.63	6.79	200 mm
3056	p650(2)	MH-510	1.96	n969	2.01	16	0.305	4.46	4.42	200 mm
3146	p726	n1079	4.22	n1081	4.34	22	0.551	6.46	7.05	200 mm
5320	CO-382	n2069	3.24	n2067	1.77	32	4.549	5.67	5.51	250 mm
3189	p763	n1132	4.84	n1133	4.74	24	0.4	8.12	7.86	200 mm
3047	p643	n958	1.05	n959	1.17	30	0.4	4.37	4.45	200 mm
3725	p1222	n1782	0.74	n1784	0.72	6	0.4	5.65	5.64	200 mm
4706	p2056	n2999	1.3	n3000	1.2	24	0.4	4.25	4.31	200 mm
	p650(1)	n968	1.89	MH-510	1.96	23	0.309	4.52	4.46	200 mm
	p1354	n1961		n1963	2.42	30	0.4	4.95		200 mm
	p642	n956		n958	1.05	30	0.4	4.21		200 mm
	p2069	n3019		n3000	1.2	18	0.4	4.58		200 mm
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2756	•	n592		n593	2.06	30	0.4	5.61	5.68	200 mm
3873	p1355	n1963	2.42	n1965	2.3	30	0.4	4.82	4.68	200 mm
3877	p1359	n1968	1.94	n1969	1.82	27	0.453	4.17	4.11	200 mm
3045	p641	n954	0.81	n956	0.93	30	0.4	4.08	4.21	200 mm
4720	p2068	n3017	1.01	n3019	1.13	30	0.4	4.56	4.58	200 mm
3847	p1330	n1928	3.53	n1930	3.41	30	0.4	6.61	6.5	200 mm
	p382	n590		n592	1.94	30	0.4	5.47	5.61	200 mm
	p1356	n1965		n1966	2.18	30	0.4	4.68		200 mm
	CO-114	n285		n954	0.81	29	0.4	4.31		200 mm
	p1331	n1930		n1931	3.29	30	0.4	6.5		200 mm
	p2067	n3015		n3017	1.01	30	0.4	4.62		200 mm
	p1352	n1958		n1960	2.66	36	0.336	5.16		200 mm
	•	n3013		n3015	0.89	30	0.330	4.85		200 mm
	p717(2)(2)(			n1068	3.24	5	0.674	6.47		200 mm
	p717(2)(2)( p764	n1133		n1135		6	0.674	7.86		200 mm
	·				4.72					
	p1358	n1967		n1968	1.94	30	0.394	4.42		200 mm
	p2065	n3011		n3013	0.77	30	0.401	4.91		200 mm
	•	n1925		n1926	3.65	36	0.336	6.63		200 mm
	p2064	n3010		n3011	0.65	30	0.403	4.88		200 mm
	p765	n1135		n1136	4.6	30	0.4	7.81		200 mm
	. , ,	n1784		MH-697	0.7	4	0.4	5.64		200 mm
	p786	n1165		n1167	1.57	10	0.4	5.96		200 mm
2754	p2197	n3189	0.61	n588	0.56	18	0.296	5.31	5.46	200 mm
3150	p766	n1136	4.6	n1084	4.51	21	0.4	7.6	7.45	200 mm
4715	p2063	n3008	0.41	n3010	0.53	30	0.4	5.28	4.88	200 mm
3730	p1223(2)	MH-697	0.7	n1786	0.62	20	0.399	5.64	5.61	200 mm
3214	p785	n1163	1.41	n1165	1.53	30	0.4	6.14	5.96	200 mm
3144	p724	n1077	3.98	n1078	4.1	26	0.469	6.38	6.5	200 mm
3879	p1361	n1971	1.7	n1972	1.58	30	0.4	3.97	3.78	200 mm
5549	p2062(2)	MH-66	0.35	n3008	0.41	13	0.404	5.26	5.28	200 mm
3149	p728	n1082	4.46	n1084	4.51	14	0.4	7.38	7.45	200 mm
3729	p1224	n1786	0.62	n1788	0.52	25	0.4	5.61	5.57	200 mm
	p784	n1161		n1163	1.41	18	0.4	6.19	6.14	200 mm
	p1362	n1972		n1973	1.46	30	0.4	3.78		200 mm
	•	n3007		MH-66	0.35	17	0.406	5.24		200 mm
	p727	n1081		n1082	4.46	30	0.4	7.05		200 mm
	•	n1841		n1788	0.52	30	0.4	5.1		200 mm
	p1363	n1973		n1974	1.34	30	0.4	3.6		200 mm
	p999	n1454		n1456	2.68	29	0.4	6.56		200 mm
	p2061	n3006		n3007	0.29	30	0.4	5.25		200 mm
	p1364	n1974		n1975	1.22	30	0.4	3.51		200 mm
	p1304 p1000	n1456		n1458	2.56	30	0.401	6.23		200 mm
	p2060			n3006	0.17			5.39		200 mm
	•	LS 1			-	30	0.4			
	CO-130	MH-12		n2584	1.24	21	3.917	7.72		200 mm
	p1001	n1458		n1460	2.44	30	0.4	6.13		200 mm
	p1002	n1460		n1462	2.32	30	0.4	6.16		200 mm
3142	p723	n1076	3.86	n1077	3.98	30	0.4	6.24	6.38	200 mm

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	CO-488	n1474		n1472	3.47	18	0.4	7.42		200 mm
3466	p1003	n1462	2.32	n1463	2.2	30	0.4	6.26	6.95	200 mm
3797	p1285	n1865	0.5	n1867	0.38	22	0.541	5.22	5.23	200 mm
3479	p1012(2)	MH-246	3.32	n1474	3.39	19	0.404	7.54	7.42	200 mm
3482	p1012(1)	n1476	3.27	MH-246	3.32	11	0.414	7.61	7.54	200 mm
	p722(2)(2)	MH-800	3.78	n1076	3.86	19	0.399	6.16	6.24	200 mm
	p1004	n1463		n1465	2.14	16	0.4	6.95		200 mm
	CO-652	MH-424		n1841	0.4	24	0.4	5.39		200 mm
	CO-260	n1074		MH-800	3.78	10	0.4	6.12		200 mm
	p1292	n1877		n1879	4.16	20	0.589	5.4		200 mm
2933	•	n817		n816	4.45	30	2.601	6.45		315mm
	p1283	n1863		n1864	0.63	25	0.475	5.24		200 mm
3481	p1013	n1477	3.15	n1476	3.27	29	0.407	8.36		200 mm
3984	p1452	n2101	1.54	n2099	1.66	30	0.4	5.51	5.63	200 mm
3134	p716(1)	n1065	3	MH-791	3.09	20	0.502	6.67	6.55	200 mm
5577	CO-650	MH-425	0.19	MH-424	0.3	29	0.4	5.37	5.39	200 mm
3140	CO-258	MH-796	3.68	n1074	3.74	16	0.4	6.15	6.12	200 mm
3469	p1448	n2095	2.02	n1465	2.14	29	0.4	5.99	6.48	200 mm
	p1453	n2102		n2101	1.54	24	0.4	5.55		200 mm
	CO-24	n1857		n1161	1.34	30	0.4	5.43		200 mm
	p1014	LS 6		n1477	3.15	30	0.403	9.51		200 mm
	CO-654	MH-75		MH-425		51	0.403			200 mm
					0.19			5.38		
	p1449	n2096		n2095	2.02	30	0.4	5.83		200 mm
	p1279	n1857		n1858	1.1	30	0.4	5.43		200 mm
	p1360	n1969		n1971	1.7	42	0.282	4.11		200 mm
	p1259(2)	MH-427		n1833	3.89	4	0.644	5.54		200 mm
	p1450	n2097		n2096	1.9	30	0.4	5.73		200 mm
4709	p2058	n3001	4.22	n3003	4.34	30	0.401	5.63	5.46	200 mm
3792	p1280(1)	n1858	1.1	MH-769	0.99	27	0.4	5.38	5.45	200 mm
3983	p1451	n2099	1.66	n2097	1.78	30	0.4	5.63	5.73	200 mm
5095	CO-362	MH-771	0.92	MH-769	0.99	19	0.4	5.4	5.45	200 mm
	p1307	n1896	3.62	n1895	3.5	20	0.591	5.07		200 mm
3137	p719	n1069		n1070	3.48	30	0.4	6.44		200 mm
	p1281(2)(2			n1861	0.87	13	0.398	5.4		200 mm
	p1282	n1861		n1863	0.75	30	0.4	5.35		200 mm
	p1282	n237		n238	1.67	10	0.4	4.06		200 mm
	p138 p1286	n1867		n1869	0.26	27	0.439	5.23		200 mm
	p137	n236		n237	1.63	30	0.4	4.22		200 mm
	CO-256	MH-792		MH-794	3.21	16	0.4	6.5		200 mm
	CO-360	MH-774		n1864	0.63	13	0.4	5.28		200 mm
	p725(2)	MH-801		n1079	4.22	22	0.279	6.48		200 mm
	p136	n235		n236	1.51	30	0.4	4.28		200 mm
5097	CO-254	MH-791	3.09	MH-792	3.15	13	0.4	6.55	6.5	200 mm
3145	p725(1)	n1078	4.1	MH-801	4.15	21	0.281	6.5	6.48	200 mm
2608	p135	n233	1.32	n235	1.39	17	0.4	4.23	4.28	200 mm
5268	CO-282	n2578	6.05	n2575	4.41	40	4.145	7.55	7.3	200 mm
	CO-538	n230		n233	1.32	43	0.4	4.1		200 mm
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2422	60.252	.1061	2.00	1.4065	1 1	201	0.4	6.66	6.67	200
	CO-252	n1064		n1065	3	29	0.4	6.66		200 mm
	p132	n229		n230	1.15	30	0.4	4.15		200 mm
	p718	n1068		n1069	3.36	35	0.346	6.45		200 mm
	p1875	n2724		n2725	7.57	30	1.039	8.38		200 mm
	p131	n228		n229	1.03	30	0.4	4.15		200 mm
	p1256(2)(1	MH-434		MH-435	4.2	4	0.423	5.44		200 mm
	p167	n283		n285	0.7	27	0.4	4.31	4.31	200 mm
2603	p130	n227	0.79	n228	0.91	30	0.4	4.1	4.15	200 mm
3802	CO-358	n1874	-0.08	n1872	0.02	26	0.4	5.23	5.32	200 mm
2602	p129	n225	0.67	n227	0.79	30	0.4	3.89	4.1	200 mm
2643	p166	n282	0.47	n283	0.59	30	0.4	4.3	4.31	200 mm
2904	p512	n774	0.25	n773	0.37	16	0.734	4.21	4.07	200 mm
3803	CO-356	LS 8	-0.24	n1874	-0.08	38	0.4	5.29	5.23	200 mm
2642	p165	n280	0.35	n282	0.47	30	0.4	4.67	4.3	200 mm
2600	p128	n223	0.46	n225	0.67	53	0.4	4.06	3.89	200 mm
3798	p1284(2)(2	MH-774	0.57	n1865	0.5	21	0.34	5.28	5.22	200 mm
	p1258(2)(2		3.97	n1832	4.01	9	0.442	5.51	5.53	200 mm
		n1871	0.14	n1872	0.02	33	0.369	5.17	5.32	200 mm
	p164	n278	0.23	n280	0.35	30	0.4	4.61	4.67	200 mm
	p1293	n1879		n1881	4.04	30	0.4	5.41		200 mm
	p163	n276		n278	0.23	30	0.4	4.32		200 mm
	p1294	n1881		n1882	3.92	30	0.4	5.32		200 mm
	p162	n275	<u> </u>	n276	0.11	30	0.4	4.16		200 mm
	p1295	n1882		n1884	3.8	30	0.4	5.49		200 mm
	p1897	n2758		n2760	2.78	25	0.481	4.79		200 mm
	p161	n274		n275	-0.01	30	0.4	4.12		200 mm
	p1296	n1884		n1885	3.74	17	0.4	5.47		200 mm
	p721(2)(1)			MH-796	3.68	4	0.262	6.16		200 mm
	p160	n272		n274	-0.13	30	0.202	4.25		200 mm
	·	n1885		n1896	3.62	30	0.4	5.31		200 mm
		n1072		MH-795	3.66	23	0.262	6.21		200 mm
	p159	n270		n272	-0.25	30	0.202	4.41		200 mm
	p135 p1257(2)(1			MH-432	4.11	4	0.367	5.47		200 mm
	p1257(2)(1			MH-433	4.09	13	0.307	5.51		200 mm
				MH-435		26		5.43		
		n1828		n270	4.2 -0.37		0.4	4.7		200 mm 200 mm
	-	LS 13		MH-431	4.05	30 10	0.4 0.37	5.53		
		n1832 n264								200 mm
	p156			n266	4.07	30	0.4	5.66		200 mm
	CO-244	n1088		n1064	2.88	32	0.4	6.57		200 mm
	CO-678	MH-434		MH-432	4.11	20	0.4	5.44		200 mm
	p1259(1)	n1834		MH-427	3.86	23	0.401	5.73		200 mm
	p155	n262		n264	3.95	41	0.4	6.04		200 mm
	p731	n1087		n1088	2.75	30	0.4	6.55		200 mm
	CO-360	n2765		n2763	3.02	31	0.4	5.85		200 mm
	p730	n1085		n1087	2.63	30	0.4	6.82		200 mm
	p1260	n1835		n1834	3.77	30	0.4	5.59		200 mm
4512	p1899	n2762	2.9	n2763	3.02	31	0.4	5.1	5.59	200 mm

F044	n12E0/2\/1	NALL 420	2.05	MH-430	1 2 07	5	0.266	5.51	F F1	200 mm
	p1258(2)(1				3.97 0.14	41	0.366	5.09		
	p1287	n1869		n1871			0.293			200 mm
2676	•	n499		n1085	2.51	16	0.4	7.05		200 mm
	, ,	n1833		MH-429	3.95	17	0.367	5.48		200 mm
	p1896	n2757		n2758	2.66	30	0.4	4.79		200 mm
	p1366	n1976		n1977	0.47	39	0.4	3.18		200 mm
	p1895	n2755		n2757	2.54	18	0.401	4.71		200 mm
$\overline{}$	p1367	n1977		n1979	0.35	30	0.4	2.99		200 mm
	p1368	n1979		n1980	0.23	30	0.4	2.94		200 mm
	p1898	n2760		n2762	2.9	35	0.342	4.8		200 mm
	•	n1895		n1894	3.38	41	0.296	5.03		200 mm
	p1874	n2722		n2724	7.26	30	0.608	8.2		200 mm
-	. ,	n2092		MH-118	4.98	20	1.072	5.93		250 mm
	CO-228	n501		n499	2.45	29	0.4	6.81		200 mm
	p324(1)	n504		MH-804	2.03	14	0.418	6.6		200 mm
	p1019	n1487		n1485	6.29	14	0.405	7.86		200 mm
2678		n501		n502	2.21	30	0.4	6.81		200 mm
	p1994	n2909		n2910	1.59	26	0.453	4.38		200 mm
	p1020	n1489		n1487	6.23	30	0.401	7.38		200 mm
	. ,	MH-804		n506	1.97	15	0.411	6.53		200 mm
3491	p1021	n1491		n1489	6.11	30	0.4	7.28	7.38	200 mm
	p1995	n2910		n2912	1.47	27	0.447	4.46		200 mm
	p1992	n2905	1.95	n2907	1.83	28	0.426	4.35	4.3	200 mm
2752	•	n586		n588	0.56	7	0.4	5.47		200 mm
	p1022	n1493		n1491	5.99	30	0.4	7.22		200 mm
	p1579	n2292	1.27	n2291	1.39	22	0.554	6.89		200 mm
5627	CO-698	MH-73	2.35	n2901	2.19	40	0.4	4.71	4.48	200 mm
2679	•	n502	2.21	n504	2.09	31	0.385	6.68		200 mm
2751	p379	n584	0.41	n586	0.53	30	0.4	5.39		200 mm
2681	•	n506		n508	1.85	30	0.4	6.46		200 mm
3493	p1023	n1495	5.75	n1493	5.87	30	0.4	7.05	7.22	200 mm
2750	p378	n583	0.29	n584	0.41	30	0.4	5.42	5.39	200 mm
2683	p326	n508	1.85	n510	1.73	30	0.4	6.52	6.63	200 mm
2684	p327(1)	n510	1.73	MH-802	1.69	10	0.404	6.63	6.63	200 mm
2749	p377	n582	0.17	n583	0.29	30	0.4	5.45	5.42	200 mm
2905	p513	n775	0.13	n774	0.25	30	0.4	4.27	4.21	200 mm
5219	CO-190	n1499	5.53	MH-245	5.67	35	0.4	6.74	6.88	200 mm
4484	p1873	n2721	6.91	n2722	7.08	30	0.539	8.03	8.2	200 mm
2748	p376	n581	0.05	n582	0.17	30	0.4	5.5	5.45	200 mm
5313	CO-370	n2566	3.93	n2154	2.74	50	2.365	7.48	7.35	200 mm
4629	p1997	n2913	1.35	n2915	1.23	28	0.428	3.95	4.04	200 mm
2686	CO-226	n511	1.61	MH-802	1.69	19	0.4	6.62	6.63	200 mm
2747	p375	n579	-0.07	n581	0.05	30	0.4	5.58	5.5	200 mm
2907	60.460	n776	0.01	MH-785	-0.06	19	0.4	4.16	4.18	200 mm
	CO-168		0.01							
2685		n511		n512	1.49	30	0.4	6.62	6.65	200 mm
_			1.61		1.49 -0.52	30 19	0.4 0.639	6.62 4.64		200 mm 200 mm

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	p1991	n2903	<u> </u>	n2905	1.95	32	0.379	4.38		200 mm
2746	p374	LS 12	-0.19	n579	-0.07	30	0.4	5.81	5.58	200 mm
2909	CO-170	MH-785	-0.06	n780	-0.22	39	0.4	4.18	4.21	200 mm
2687	p329	n512	1.49	n513	1.37	30	0.4	6.65	6.5	200 mm
5206	CO-164	n1986	-0.37	n1985	-0.25	30	0.4	2.67	2.84	200 mm
2906	p514	n776	0.01	n775	0.13	31	0.382	4.16	4.27	200 mm
	p517	n782		n780	-0.22	30	0.4	4.22		200 mm
	p330	n513		n515	1.25	30	0.4	6.5		200 mm
	p1373	n1986		n1988	-0.49	30	0.4	2.67		200 mm
	p518	n783		n782	-0.34	30	0.4	4.19		200 mm
	p331	n515		n516	1.13	30	0.4	6.35		200 mm
	p1374	n1988		n1989	-0.61	30	0.401	2.78		200 mm
	p332	n516		n517	1.01	30	0.401	6.39		200 mm
	•				_					
	p1375	n1989		n1991	-0.73	30	0.4	3.17		200 mm
	CO-224	n518		n517	1.01	29	0.4	6.41		200 mm
	p1999	n2916		n2917	0.99	30	0.4	4.03		200 mm
	p1376	n1991		n1992	-0.85	30	0.4	3.13		200 mm
	p2000	n2917		n2919	0.87	30	0.402	3.96		200 mm
	p541	n816		n815	4.2	30	0.854	5.67		315mm
	p1024(2)	MH-245		n1495	5.75	25	0.346	6.88		200 mm
5200	CO-152	MH-118		MH-119	5.26	34	0.827	6.14	6.42	250 mm
4625	p1993	n2907	1.83	n2909	1.71	34	0.357	4.3	4.38	200 mm
3898	p1377	n1992	-0.85	n1993	-0.97	30	0.4	3.06	3.11	200 mm
4633	p2001	n2919	0.87	n2921	0.75	30	0.4	3.87	3.81	200 mm
3899	p1378	n1993	-0.97	n1994	-1.09	30	0.4	3.11	3.06	200 mm
4634	p2002	n2921	0.75	n2922	0.63	30	0.4	3.81	3.78	200 mm
4628	p1996	n2912	1.47	n2913	1.35	33	0.364	4.2	3.95	200 mm
3900	p1379	n1994	-1.09	n1995	-1.21	30	0.4	3.06	2.9	200 mm
4630	p1998	n2915	1.23	n2916	1.11	32	0.375	4.04	4.03	200 mm
4635	p2003	n2922	0.63	n2924	0.51	30	0.4	3.78	3.72	200 mm
3901	p1380	n1995	-1.21	n1996	-1.33	30	0.4	2.9	2.83	200 mm
	p1381	n1996		n1997	-1.45	30	0.4	2.83		200 mm
	p1987	n2755		MH-73	2.35	38	0.313	4.71		200 mm
	p1382	n1997		n1998	-1.57	30	0.4	2.86		200 mm
	p1045	n1525		n1526	3.47	22	0.535	5.73		200 mm
	p1383	n1998		n2000	-1.69	30	0.4	2.83		200 mm
	p1583	n2299		n2298	0.92	27	0.448	5.03		200 mm
	p1384	n2000		n2002	-1.81	30	0.440	2.87		200 mm
	p1385	n2002		n2003	-1.93	30	0.4	3		200 mm
	p1385	n2003		n2004	-2.05	30	0.4	3.1		200 mm
	p1603(2)	MH-159	<b></b>	n2328	-1.49	12	0.621	4.01		200 mm
		n2004								
	p1387	<b>-</b>		n2006	-2.17	30	0.4	3.13		200 mm
	p1581(2)	MH-201		n2294	1.16	18	0.406	5.28		200 mm
	CO-434	n2292		n2294	1.16	29	0.4	6.89		200 mm
	p1388	n2006		n2008	-2.29	30	0.4	3.04		200 mm
	p1990	n2901		n2903	2.07	42	0.286	4.48		200 mm
4467	p1872	n2696	6.79	n2721	6.91	30	0.405	8.03	8.03	200 mm

3910   1389   12008   -2.29   12009   -2.41   30   0.4   2.85   2.58   200 mm   3911   p1390   12090   -2.41   12011   -2.53   30   0.4   2.58   2.46   200 mm   3529   p1054   11538   2.51   11540   2.39   22   0.555   5.01   4.82   200 mm   3529   p1054   11538   2.51   11540   2.39   22   0.555   5.01   4.82   200 mm   4149   p1582   12298   0.92   12296   1.04   30   0.4   5.13   5.15   200 mm   4149   p1582   12298   0.92   12296   1.04   30   0.4   2.46   2.28   200 mm   4149   p1582   12011   -2.53   12012   -2.65   30   0.4   2.46   2.28   200 mm   4149   p1582   1.02011   -2.53   12012   -2.65   30   0.4   2.46   2.28   200 mm   4149   p1856   1.0700   6.64   1.0701   6.52   30   0.4   7.98   7.89   200 mm   4149   p1856   1.0700   6.64   1.0701   6.52   30   0.4   7.98   7.89   200 mm   4149   p1857   1.0700   6.64   1.0701   6.52   30   0.4   7.98   7.89   200 mm   4140   p1857   1.0701   6.52   1.0303   1.2.77   30   0.4   2.28   2.15   200 mm   4140   p1857   1.0701   6.52   1.0702   6.64   3.71   2.7   0.452   6.01   5.83   200 mm   41419   p1393   1.02013   -2.77   1.0204   -2.89   30   0.4   7.89   7.89   200 mm   41419   p1858   1.0702   6.4   1.0704   6.28   30   0.4   7.89   7.89   200 mm   41419   p1858   1.0702   6.4   1.0704   6.28   30   0.4   7.89   7.88   200 mm   4153   p1585   1.2303   0.56   1.2301   0.68   30   0.4   7.89   7.88   200 mm   4166   p1598   1.2003   0.56   1.20016   3.01   0.68   30   0.4   7.89   7.88   200 mm   4166   p1598   1.2003   0.56   1.20016   3.01   0.68   30   0.4   7.89   7.88   200 mm   4153   p1585   1.2303   0.56   1.2301   0.68   30   0.4   7.89   7.88   200 mm   4153   p1585   1.2303   0.56   1.0301   0.68   30   0.4   7.89   7.88   200 mm   4154   p1586   1.2004   1.		1	1								
3911   1390	3910	p1389	n2008			-2.41	30	0.4	2.85		
3529   1054   1058   2.51   1054   2.39   22   0.555   5.01   4.82   200 mm   2014   12696   6.79   10700   6.64   39   0.4   8.03   7.98   200 mm   2014   191582   12298   0.92   10296   1.04   30   0.4   5.13   5.15   200 mm   2017   2.53   10212   -2.65   30   0.4   2.46   2.28   200 mm   2017   2.53   10212   -2.65   30   0.4   2.46   2.28   200 mm   2018   2.500 mm   2019   2.500   2.	4150	p1581(1)	n2296	1.04	MH-201	1.08	12	0.4	5.15	5.28	200 mm
5179   CO-124   n2696   6.79   n2700   6.64   39   0.4   8.03   7.98   200 mm	3911	p1390	n2009	-2.41	n2011	-2.53	30	0.4	2.58	2.46	200 mm
4149   1582   n2298	3529	p1054	n1538	2.51	n1540	2.39	22	0.555	5.01	4.82	200 mm
3912   p1391   p2011	5179	CO-124	n2696	6.79	n2700	6.64	39	0.4	8.03	7.98	200 mm
2697   CO-220   n520   S.07   MH-602   S.13   13   0.467   6.19   6.25   200 mm	4149	p1582	n2298	0.92	n2296	1.04	30	0.4	5.13	5.15	200 mm
4469   p1856   n2700   c1.64   n2701   c1.52   c2.05   c2.01   c2.05   n2013   c2.77   c2.05   n2013   n2.07   c2.05   n2013   n2.07   c2.05   n2013   n2.07   n2014   c2.89   n2.05   n2010   nm   n2013   n2013   n2013   n2.07   n2014   n2.89   n2.05   n2.05   n2010   nm   n2013   n2.013   n2.07   n2014   n2.89   n2.05   n2	3912	p1391	n2011	-2.53	n2012	-2.65	30	0.4	2.46	2.28	200 mm
3913 p1392	2697	CO-220	n520	5.07	MH-602	5.13	13	0.467	6.19	6.25	200 mm
3516   p1043   n1522   3.83   n1524   3.71   27   0.452   6.01   5.83   200 mm   2010   1857   0.2701   6.52   n2702   6.4   30   0.4   7.89   7.89   200 mm   2013   n2013   -2.77   n2014   -2.89   30   0.4   2.15   2.12   200 mm   2019   2015   2012   2010 mm   2019   2015   2012   2010 mm   2019   2015   2012   2010 mm   2019   2015   2	4469	p1856	n2700	6.64	n2701	6.52	30	0.4	7.98	7.89	200 mm
3516   p1043   n1522   3.83   n1524   3.71   27   0.452   6.01   5.83   200 mm   1470   p1857   n2701   6.52   n2702   6.4   30   0.4   7.89   7.89   200 mm   19393   n2013   -2.77   n2014   -2.89   30   0.4   2.15   2.12   200 mm   19393   n2013   -2.77   n2014   -2.89   30   0.4   2.15   2.12   200 mm   1471   p1858   n2702   6.4   n2704   6.28   30   0.4   7.89   7.88   200 mm   1475   p1858   n2702   6.4   n2704   6.28   30   0.4   7.89   7.88   200 mm   14153   p1855   n2303   0.56   n2301   0.68   30   0.4   5.03   5.08   200 mm   14166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm   14154   p1866   n2304   0.44   n2303   0.56   6.16   30   0.4   7.88   7.81   200 mm   14154   p1866   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   14154   p1866   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   1598   0.2066   n2924   0.51   WELL 1   0.46   13   0.4   3.72   3.7   200 mm   1598   0.6684   n2924   0.51   WELL 1   0.46   13   0.4   3.72   3.7   200 mm   1598   0.2066   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm   1598   0.206   0.32   n2304   0.44   0.30   0.4   7.81   7.31   200 mm   1598   0.206   0.32   n2304   0.44   n2303   0.56   30   0.4   0.45   0.37   0.46   0.37   0.37   0.38   0.46   0.47   0.47   0.48   0.48   0.47   0.48	3913	p1392	n2012	-2.65	n2013	-2.77	30	0.4	2.28	2.15	200 mm
4470   p1857   n2701   6.52   n2702   6.4   30   0.4   7.89   7.89   200 mm   3914   p1393   n2013   -2.77   n2014   -2.89   30   0.4   2.15   2.12   200 mm   31915   1939   CO-150   MH-119   5.26   n2176   5.43   26   0.646   6.42   6.6   250 mm   4173   p1858   n2702   6.4   n2704   6.28   30   0.4   7.89   7.88   200 mm   4153   p1585   n2303   0.56   n2301   0.68   30   0.4   5.03   5.08   200 mm   4166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm   4172   p1859   n2704   6.28   n2705   6.16   30   0.4   4.97   5.03   200 mm   4154   p1586   n2304   0.44   n2303   0.56   6.16   30   0.4   4.99   5.03   200 mm   4154   p1586   n2304   0.44   n2303   0.56   6.16   30   0.4   4.99   5.03   200 mm   4154   p1586   n2304   0.44   n2303   0.56   30   0.4   4.99   5.03   200 mm   4154   p1861   n2706   6.04   MH-555   5.98   13   0.40   3.72   3.7   200 mm   4154   p1861   n2706   6.04   MH-555   5.98   13   0.407   7.31   7.49   200 mm   4173   p1860   n2705   6.16   n2706   6.04   MH-555   5.98   13   0.407   7.31   7.49   200 mm   4173   p1860   n2705   6.16   n2706   6.04   30   0.4   7.81   7.31   200 mm   4173   p1860   n2705   6.16   n2706   6.04   30   0.4   7.81   7.31   200 mm   4175   p1896   n2017   -3.13   n2018   -3.25   n30   0.4   2.16   2.22   200 mm   4175   p1896   n2017   -3.13   n2018   -3.25   n30   0.4   5.12   4.97   200 mm   4175   p1896   n2017   -3.13   n2018   -3.25   n30   0.4   5.12   4.97   200 mm   4185   p1897   n2186   n2017   -3.13   n2018   -3.25   n30   0.4   5.12   4.97   200 mm   4185   p1898   n2016   n2017   -3.13   n2018   n2.55   n30   0.4   5.12   4.97   200 mm   1918   n2018   n2		-	n1522	3.83	n1524	3.71	27	0.452	6.01	5.83	200 mm
3914   p1393   n2013   -2.77   n2014   -2.89   30   0.4   2.15   2.12   200 mm     5199   CO-150   MH-119   5.26   n2176   5.43   26   0.646   6.42   6.6   250 mm     4471   p1858   n2702   6.4   n2704   6.28   30   0.4   7.89   7.88   200 mm     3915   p1394   n2014   -2.89   n2016   -3.01   30   0.4   2.12   2.42   200 mm     3915   p1394   n2014   -2.89   n2016   -3.01   30   0.4   2.12   2.42   200 mm     4166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm     4472   p1859   n2704   6.28   n2705   6.16   30   0.4   4.97   5.03   200 mm     3916   p1395   n2016   -3.01   n2017   -3.13   30   0.4   2.42   2.16   200 mm     3916   p1395   n2016   -3.01   n2017   -3.13   30   0.4   2.42   2.16   200 mm     3916   p1395   n2016   -3.01   n2017   -3.13   30   0.4   2.42   2.16   200 mm     5582   D1861(1)   n2706   6.04   M1-55   5.98   13   0.407   7.31   7.49   200 mm     4473   p1860   n2705   6.16   n2706   6.04   33   0.4   7.81   7.31   200 mm     4473   p1860   n2705   6.16   n2706   6.04   30   0.4   7.81   7.31   200 mm     4155   p1587   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm     3917   p1396   n2017   -3.13   n2018   -3.25   30   0.4   2.16   2.22   200 mm     3917   p1396   n2017   -3.13   n2018   -3.25   30   0.4   2.16   2.22   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   6.67   6.06   200 mm     4156   p1588   n2308   0.2   n2306   0.32   30   0.4   4.64   5.12   200 mm     5524   p1862(1)   n2707   5.92   MH-56   5.88   8   0.408   7.7   7.68   200 mm     5525   p1861(2)   MH-55   5.98   n2707   5.92   16   0.402   7.49   7.7   200 mm     5521   p1039   n1516   4.31   n1518   4.19   30   0.4   6.06   5.99   200 mm     4157   p1589   n2310   0.08   n2308   0.2   3.37   30   0.4   4.64   5.12   200 mm     5525   p1862(1)   n4707   5.92   MH-56   5.88   8   0.408   7.7   7.68   200 mm     4159   p1591   n2312   -0.16   n2311   -0.04   30   0.4   4.96   4.77   200 mm     4159   p1594   n2511   -0.04   n2511   -0.04   30   0.4		<u> </u>	<del>                                     </del>	6.52	n2702		30			7.89	200 mm
Sign   Co-150   MH-119   S.26   n2176   S.43   26   0.646   6.42   6.6   250 mm   A471   p1858   n2702   6.4   n2704   6.28   30   0.4   7.89   7.88   200 mm   A153   p1585   n2303   0.56   n2301   0.68   30   0.4   5.03   5.08   200 mm   A166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm   A166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm   A164   p1886   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   A154   p1886   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   A154   p1886   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   A154   p1886   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm   A155   p1861(1)   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm   A155   p1861(1)   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm   A155   p1860   n2705   6.16   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm   A155   p187   n2306   0.32   n2304   0.44   30   0.4   7.81   7.31   200 mm   A155   p187   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm   A155   p187   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm   A155   p187   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm   A155   p1887   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm   A151   p1038   n1515   4.43   n1516   4.31   30   0.4   6.14   6.06   200 mm   A156   p1588   n2308   0.2   n2306   0.32   30   0.4   4.64   5.12   200 mm   A156   p1588   n2308   0.2   n2306   0.32   30   0.4   4.64   5.12   200 mm   A151   p1039   n1516   4.31   n1518   4.19   30   0.4   6.06   5.99   200 mm   A151   p1039   n1516   4.31   n1518   4.19   30   0.4   6.06   5.99   200 mm   A151   p1039   n1516   4.31   n1518   4.19   30   0.4   4.64   5.12   200 mm   A159   p1599   n2310   0.08   n2308   0.2   3.37   30   0.4   4.64   5.06   5.99   200 mm   A159   p1590   n2311   0.04   n1518   4.19   n1520   4.07   30   0.4   4.96   4.77   200 mm   A159   p1599   n		<u> </u>		-2.77	n2014	-2.89	30	0.4	2.15	2.12	200 mm
4471         p1858         n2702         6.4         n2704         6.28         30         0.4         7.89         7.88         200 mm           4153         p1585         n2303         0.56         n2301         0.68         30         0.4         5.03         5.08         200 mm           4166         p1598         n2302         -1         n2320         -0.88         25         0.471         4.46         4.43         200 mm           4166         p1598         n2704         6.28         n2705         6.16         30         0.4         7.88         7.81         200 mm           4154         p1586         n2304         0.44         n2303         0.56         30         0.4         4.97         5.03         200 mm           3916         p1395         n2016         -3.01         n2017         -3.13         30         0.4         2.42         2.16         200 mm           5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.40         7.31         7.49         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4											
4153 p1585   n2303   0.56 n2301   0.68   30   0.4   5.03   5.08   200 mm     3915 p1394   n2014   -2.89 n2016   -3.01   30   0.4   2.12   2.42   200 mm     4166 p1598   n2322   -1 n2320   -0.88   25   0.471   4.46   4.43   200 mm     4472 p1859   n2704   6.28   n2705   6.16   30   0.4   7.88   7.81   200 mm     4474 p1859   n2704   6.28   n2705   6.16   30   0.4   4.97   5.03   200 mm     3916 p1395   n2016   -3.01   n2017   -3.13   30   0.4   2.42   2.16   200 mm     3916 p1395   n2016   -3.01   n2017   -3.13   30   0.4   2.42   2.16   200 mm     5592   CO-684   n2924   0.51   WELL 1   0.46   13   0.40   3.72   3.7   200 mm     5591 p1861(1)   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm     4173 p1860   n2705   6.16   n2706   6.04   30   0.4   7.81   7.31   200 mm     4155 p1587   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm     4155 p1587   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm     4156 p1588   n2308   0.2   n2306   0.32   30   0.4   2.16   2.22   200 mm     3917 p1445   n2090   4.58   n2092   4.77   30   0.631   5.74   5.93   250 mm     3918 p1397   n2018   -3.25   n2020   -3.37   30   0.4   6.14   6.06   200 mm     3918 p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3918 p1397   n2018   -3.25   n2020   -3.37   30   0.4   2.22   2.24   200 mm     3919 p1398   n2020   -3.37   n2011   -3.49   30   0.4   4.64   5.12   200 mm     4157 p1589   n2310   0.08   n2308   0.2   30   0.4   4.64   5.12   200 mm     4158 p1590   n2311   -0.04   n2310   0.08   30   0.4   4.96   4.77   7.68   200 mm     4158 p1590   n2311   -0.04   n2310   0.08   30   0.4   4.96   4.77   200 mm     4159 p1584   n2301   0.68   n2299   0.8   33   0.365   5.08   5.03   200 mm     5525 p1862(2)   MH-56   5.88   n2708   5.8   n2708   5.8   n2708   5.8   200 mm     5525 p1863(1)   n2708   5.8   n2708   5.8   n2708   5.8   22   0.399   7.68   7.62   200 mm     5525 p1863(1)   n2708   5.8   n2708   5.8   n2708   5.8   0.04   4.93   4.96   200 mm     5525 p18	<b>-</b>		<b>†</b>								
3915   p1394   n2014   -2.89   n2016   -3.01   30   0.4   2.12   2.42   200 mm     4166   p1598   n2322   -1   n2320   -0.88   25   0.471   4.46   4.43   200 mm     4172   p1859   n2704   6.28   n2705   6.16   30   0.4   7.88   7.81   200 mm     4154   p1586   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm     4154   p1586   n2304   0.44   n2303   0.56   30   0.4   4.97   5.03   200 mm     5598   CO-684   n2924   0.51   WELL 1   0.46   13   0.4   3.72   3.7   200 mm     5521   p1861(1)   n2706   6.04   MH-55   5.98   13   0.407   7.31   7.49   200 mm     5364   CO-470   n1498   4.58   n1515   4.43   37   0.4   6.37   6.14   200 mm     4175   p1860   n2705   6.16   n2706   6.04   30   0.4   7.81   7.31   200 mm     4155   p1587   n2306   0.32   n2304   0.44   30   0.4   5.12   4.97   200 mm     3917   p1396   n2017   -3.13   n2018   -3.25   30   0.4   5.12   4.97   200 mm     3917   p1396   n2017   -3.13   n2018   -3.25   30   0.4   6.14   6.06   200 mm     4156   p1588   n2308   0.2   n2306   0.32   30   0.4   4.64   5.12   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3918   p1397   n2018   -3.25   n2020   -3.37   30   0.4   4.64   5.12   200 mm     3919   p1398   n2020   -3.37   n2021   -3.49   30   0.4   4.77   4.64   200 mm     3919   p1398   n2020   -3.37   n2021   -3.49   30   0.4   4.77   4.64   200 mm     3919   p1398   n2020   -3.37   n2021   -3.49   30   0.4   4.96   4.77   200 mm     4152   p1584   n2301   0.68   n2299   0.8   33   0.365   5.08   5.03   200 mm     4152   p1584   n2301   0.68   n2299   0.8   33   0.365   5.08   5.03   200 mm     5525   p1863(1)   n2708   5.8   MH-57   5.7   23   0.404   7.62   7.71   200 mm     5525   p1863(1)   n2708   5.8   MH-57   5.7   23   0.404   7.62		<u> </u>									
4166   p1598   n2322			+			_					
4472         p1859         n2704         6.28         n2705         6.16         30         0.4         7.88         7.81         200 mm           4154         p1586         n2304         0.44         n2303         0.56         30         0.4         4.97         5.03         200 mm           3916         p1395         n2016         -3.01         n2017         -3.13         30         0.4         2.42         2.16         200 mm           5598         CO-684         n2924         0.51         WELL 1         0.46         13         0.4         3.72         3.7         200 mm           5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.407         7.31         7.49         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4155         p1587         n2306         0.32         n2304         0.44         30         0.4         7.16         2.22         200 mm           3917         p1445         n20017         -3.13         n2018         -3.25         30         0.4											
4154         p1586         n2304         0.44         n2303         0.56         30         0.4         4.97         5.03         200 mm           3916         p1395         n2016         -3.01         n2017         -3.13         30         0.4         2.42         2.16         200 mm           5598         CO-684         n2924         0.51         WELL 1         0.46         13         0.4         3.72         3.7         200 mm           5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.407         7.31         7.49         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4475         p1896         n2017         -3.13         n2018         3.25         30         0.4         5.12         4.97         200 mm           3917         p1445         n2090         4.58         n2092         4.77         30         0.631											
3916         p1395         n2016         -3.01         n2017         -3.13         30         0.4         2.42         2.16         200 mm           5598         CO-684         n2924         0.51         WELL 1         0.46         13         0.4         3.72         3.7         200 mm           5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.407         7.31         7.49         200 mm           5364         CO-470         n1498         4.58         n1515         4.43         37         0.4         6.37         6.14         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4155         p1587         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3911         p1038         n1515         4.43         n1516         4.31         30         0.4		<u>'</u>									
5598         CO-684         n2924         0.51         WELL 1         0.46         13         0.4         3.72         3.7         200 mm           5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.407         7.31         7.49         200 mm           5364         CO-470         n1498         4.58         n1515         4.43         37         0.4         6.37         6.14         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4155         p1587         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3917         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4		·				_					
5521         p1861(1)         n2706         6.04         MH-55         5.98         13         0.407         7.31         7.49         200 mm           5364         CO-470         n1498         4.58         n1515         4.43         37         0.4         6.37         6.14         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           3917         p1387         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3917         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         <		•	<del>                                     </del>								
5364         CO-470         n1498         4.58         n1515         4.43         37         0.4         6.37         6.14         200 mm           4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4155         p1587         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3977         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           4156         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
4473         p1860         n2705         6.16         n2706         6.04         30         0.4         7.81         7.31         200 mm           4155         p1587         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3977         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           3918         p1397         n2018         -3.25         n2020         -3.37         30         0.4         2.22         2.24         200 mm           5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         <			+								
4155         p1587         n2306         0.32         n2304         0.44         30         0.4         5.12         4.97         200 mm           3917         p1396         n2017         -3.13         n2018         -3.25         30         0.4         2.16         2.22         200 mm           3977         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           3918         p1397         n2018         -3.25         n2020         -3.37         30         0.4         4.64         5.12         200 mm           5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         7.7         7.68         200 mm           5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402	<b>-</b>					_					
3917 p1396         n2017         -3.13 n2018         -3.25         30         0.4         2.16         2.22 200 mm           3977 p1445         n2090         4.58 n2092         4.77         30         0.631         5.74         5.93 250 mm           3511 p1038         n1515         4.43 n1516         4.31         30         0.4         6.14         6.06 200 mm           4156 p1588         n2308         0.2 n2306         0.32         30         0.4         4.64         5.12 200 mm           3918 p1397         n2018         -3.25 n2020         -3.37         30         0.4         2.22         2.24 200 mm           5524 p1862(1)         n2707         5.92 MH-56         5.88         8         0.408         7.7         7.68 200 mm           5522 p1861(2)         MH-55         5.98 n2707         5.92         16         0.402         7.49         7.7 200 mm           3512 p1039         n1516         4.31 n1518         4.19         30         0.4         6.06         5.99 200 mm           4157 p1589         n2310         0.08 n2308         0.2         30         0.4         4.77         4.64 200 mm           3919 p1398         n2020         -3.37 n2021         -3.49         3		·	<b>†</b>								
3977         p1445         n2090         4.58         n2092         4.77         30         0.631         5.74         5.93         250 mm           3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           3918         p1397         n2018         -3.25         n2020         -3.37         30         0.4         2.22         2.24         200 mm           5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         7.7         7.68         200 mm           5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402         7.49         7.7         200 mm           3512         p1039         n1516         4.31         n1518         4.19         30         0.4         4.77         4.64         200 mm           4152         p1388         n2200         -3.37         n2021         -3.49         30         0.4		•	<del>                                     </del>								
3511         p1038         n1515         4.43         n1516         4.31         30         0.4         6.14         6.06         200 mm           4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           3918         p1397         n2018         -3.25         n2020         -3.37         30         0.4         2.22         2.24         200 mm           5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         7.7         7.68         200 mm           5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402         7.49         7.7         200 mm           3512         p1039         n1516         4.31         n1518         4.19         30         0.4         6.06         5.99         200 mm           4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td></td<>						_					
4156         p1588         n2308         0.2         n2306         0.32         30         0.4         4.64         5.12         200 mm           3918         p1397         n2018         -3.25         n2020         -3.37         30         0.4         2.22         2.24         200 mm           5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         7.7         7.68         200 mm           5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402         7.49         7.7         200 mm           3512         p1039         n1516         4.31         n1518         4.19         30         0.4         6.06         5.99         200 mm           4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3919         p1398         n2020         -3.37         n2021         -3.49         30         0.4         4.77         4.64         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4         <			<b>-</b>								
3918 p1397         n2018         -3.25 n2020         -3.37         30         0.4         2.22         2.24 200 mm           5524 p1862(1)         n2707         5.92 MH-56         5.88         8         0.408         7.7         7.68 200 mm           5522 p1861(2)         MH-55         5.98 n2707         5.92 16         0.402         7.49         7.7 200 mm           3512 p1039         n1516         4.31 n1518         4.19 30         0.4 6.06         5.99 200 mm           4157 p1589         n2310         0.08 n2308         0.2 30 0.4 4.77         4.64 200 mm           3919 p1398         n2020         -3.37 n2021         -3.49 30 0.4 2.24 2.31 200 mm           3513 p1040         n1518         4.19 n1520 4.07 30 0.4 5.99 6.06 200 mm           4158 p1590         n2311 -0.04 n2310 0.08 30 0.4 5.99 6.06 200 mm           3514 p1041         n1520 4.07 n1521 3.95 30 0.4 6.06 5.98 200 mm           4152 p1584         n2301 0.68 n2299 0.8 33 0.365 5.08 5.03 200 mm           4152 p1584 n2301 0.68 n2299 0.8 33 0.365 5.08 5.03 200 mm           5527 p1863(1) n2708 5.8 MH-57 5.7 23 0.404 7.62 7.71 200 mm           5525 p1862(2) MH-56 5.88 n2708 5.8 n2708 5.8 22 0.399 7.68 7.62 200 mm           4160 p1592 n2314 -0.28 n2312 -0.16 30 0.4 4.86 4.93 200 mm           2693 CO-222 MH-604 0.85 n518 0.89 10 0.4 6.35 0.24 4.07 4.06		+	<b>.</b>								
5524         p1862(1)         n2707         5.92         MH-56         5.88         8         0.408         7.7         7.68         200 mm           5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402         7.49         7.7         200 mm           3512         p1039         n1516         4.31         n1518         4.19         30         0.4         6.06         5.99         200 mm           4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3919         p1398         n2020         -3.37         n2021         -3.49         30         0.4         2.24         2.31         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4         5.99         6.06         200 mm           4158         p1590         n2311         -0.04         n2310         0.08         30         0.4         4.96         4.77         200 mm           3514         p1041         n1520         4.07         n1521         3.95         30         0.4         <		•									
5522         p1861(2)         MH-55         5.98         n2707         5.92         16         0.402         7.49         7.7         200 mm           3512         p1039         n1516         4.31         n1518         4.19         30         0.4         6.06         5.99         200 mm           4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3919         p1398         n2020         -3.37         n2021         -3.49         30         0.4         2.24         2.31         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4         5.99         6.06         200 mm           4158         p1590         n2311         -0.04         n2310         0.08         30         0.4         4.96         4.77         200 mm           3514         p1041         n1520         4.07         n1521         3.95         30         0.4         4.96         4.77         200 mm           4152         p1584         n2301         0.68         n2299         0.8         33         0.365 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
3512         p1039         n1516         4.31         n1518         4.19         30         0.4         6.06         5.99         200 mm           4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3919         p1398         n2020         -3.37         n2021         -3.49         30         0.4         2.24         2.31         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4         5.99         6.06         200 mm           4158         p1590         n2311         -0.04         n2310         0.08         30         0.4         4.96         4.77         200 mm           3514         p1041         n1520         4.07         n1521         3.95         30         0.4         6.06         5.98         200 mm           4152         p1584         n2301         0.68         n2299         0.8         33         0.365         5.08         5.03         200 mm           5527         p1863(1)         n2708         5.8         MH-57         5.7         23         0.404			<del>                                     </del>								
4157         p1589         n2310         0.08         n2308         0.2         30         0.4         4.77         4.64         200 mm           3919         p1398         n2020         -3.37         n2021         -3.49         30         0.4         2.24         2.31         200 mm           3513         p1040         n1518         4.19         n1520         4.07         30         0.4         5.99         6.06         200 mm           4158         p1590         n2311         -0.04         n2310         0.08         30         0.4         4.96         4.77         200 mm           3514         p1041         n1520         4.07         n1521         3.95         30         0.4         6.06         5.98         200 mm           4152         p1584         n2301         0.68         n2299         0.8         33         0.365         5.08         5.03         200 mm           5527         p1863(1)         n2708         5.8         MH-57         5.7         23         0.404         7.62         7.71         200 mm           4159         p1591         n2312         -0.16         n2311         -0.04         30         0.4 <t< td=""><td></td><td>· · ·</td><td><del>                                     </del></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		· · ·	<del>                                     </del>								
3919 p1398         n2020         -3.37 n2021         -3.49         30         0.4         2.24         2.31 200 mm           3513 p1040         n1518         4.19 n1520         4.07         30         0.4         5.99         6.06 200 mm           4158 p1590         n2311         -0.04 n2310         0.08         30         0.4         4.96         4.77 200 mm           3514 p1041         n1520         4.07 n1521         3.95         30         0.4         6.06         5.98 200 mm           4152 p1584         n2301         0.68 n2299         0.8         33         0.365         5.08         5.03 200 mm           5527 p1863(1)         n2708         5.8 MH-57         5.7         23         0.404         7.62         7.71 200 mm           4159 p1591         n2312         -0.16 n2311         -0.04         30         0.4         4.93         4.96 200 mm           5525 p1862(2)         MH-56         5.88 n2708         5.8         22         0.399         7.68         7.62 200 mm           4160 p1592         n2314         -0.28 n2312         -0.16         30         0.4         4.86         4.93 200 mm           2693 CO-222         MH-604         0.85 n518         0.89 <t< td=""><td></td><td>·</td><td>+</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		·	+								
3513         p1040         n1518         4.19         n1520         4.07         30         0.4         5.99         6.06         200 mm           4158         p1590         n2311         -0.04         n2310         0.08         30         0.4         4.96         4.77         200 mm           3514         p1041         n1520         4.07         n1521         3.95         30         0.4         6.06         5.98         200 mm           4152         p1584         n2301         0.68         n2299         0.8         33         0.365         5.08         5.03         200 mm           5527         p1863(1)         n2708         5.8         MH-57         5.7         23         0.404         7.62         7.71         200 mm           4159         p1591         n2312         -0.16         n2311         -0.04         30         0.4         4.93         4.96         200 mm           5525         p1862(2)         MH-56         5.88         n2708         5.8         22         0.399         7.68         7.62         200 mm           4160         p1592         n2314         -0.28         n2312         -0.16         30         0.4		·									
4158 p1590         n2311         -0.04 n2310         0.08         30         0.4         4.96         4.77 200 mm           3514 p1041         n1520         4.07 n1521         3.95         30         0.4         6.06         5.98 200 mm           4152 p1584         n2301         0.68 n2299         0.8         33         0.365         5.08         5.03 200 mm           5527 p1863(1)         n2708         5.8 MH-57         5.7         23         0.404         7.62         7.71 200 mm           4159 p1591         n2312         -0.16 n2311         -0.04         30         0.4         4.93         4.96 200 mm           5525 p1862(2)         MH-56         5.88 n2708         5.8         22         0.399         7.68         7.62 200 mm           4160 p1592         n2314         -0.28 n2312         -0.16         30         0.4         4.86         4.93 200 mm           2693 CO-222         MH-604         0.85 n518         0.89         10         0.4         6.38         6.41 200 mm           2601 p511         n773         0.37 n223         0.46         35         0.24         4.07         4.06 200 mm		·									
3514         p1041         n1520         4.07         n1521         3.95         30         0.4         6.06         5.98         200 mm           4152         p1584         n2301         0.68         n2299         0.8         33         0.365         5.08         5.03         200 mm           5527         p1863(1)         n2708         5.8         MH-57         5.7         23         0.404         7.62         7.71         200 mm           4159         p1591         n2312         -0.16         n2311         -0.04         30         0.4         4.93         4.96         200 mm           5525         p1862(2)         MH-56         5.88         n2708         5.8         22         0.399         7.68         7.62         200 mm           4160         p1592         n2314         -0.28         n2312         -0.16         30         0.4         4.86         4.93         200 mm           2693         CO-222         MH-604         0.85         n518         0.89         10         0.4         6.38         6.41         200 mm           2601         p511         n773         0.37         n223         0.46         35         0.24		<del></del>	+								
4152       p1584       n2301       0.68       n2299       0.8       33       0.365       5.08       5.03       200 mm         5527       p1863(1)       n2708       5.8       MH-57       5.7       23       0.404       7.62       7.71       200 mm         4159       p1591       n2312       -0.16       n2311       -0.04       30       0.4       4.93       4.96       200 mm         5525       p1862(2)       MH-56       5.88       n2708       5.8       22       0.399       7.68       7.62       200 mm         4160       p1592       n2314       -0.28       n2312       -0.16       30       0.4       4.86       4.93       200 mm         2693       CO-222       MH-604       0.85       n518       0.89       10       0.4       6.38       6.41       200 mm         2601       p511       n773       0.37       n223       0.46       35       0.24       4.07       4.06       200 mm						_					
5527         p1863(1)         n2708         5.8         MH-57         5.7         23         0.404         7.62         7.71         200 mm           4159         p1591         n2312         -0.16         n2311         -0.04         30         0.4         4.93         4.96         200 mm           5525         p1862(2)         MH-56         5.88         n2708         5.8         22         0.399         7.68         7.62         200 mm           4160         p1592         n2314         -0.28         n2312         -0.16         30         0.4         4.86         4.93         200 mm           2693         CO-222         MH-604         0.85         n518         0.89         10         0.4         6.38         6.41         200 mm           2601         p511         n773         0.37         n223         0.46         35         0.24         4.07         4.06         200 mm		·									
4159       p1591       n2312       -0.16       n2311       -0.04       30       0.4       4.93       4.96       200 mm         5525       p1862(2)       MH-56       5.88       n2708       5.8       22       0.399       7.68       7.62       200 mm         4160       p1592       n2314       -0.28       n2312       -0.16       30       0.4       4.86       4.93       200 mm         2693       CO-222       MH-604       0.85       n518       0.89       10       0.4       6.38       6.41       200 mm         2601       p511       n773       0.37       n223       0.46       35       0.24       4.07       4.06       200 mm		<del>-</del>	<del></del>								
5525     p1862(2)     MH-56     5.88     n2708     5.8     22     0.399     7.68     7.62     200 mm       4160     p1592     n2314     -0.28     n2312     -0.16     30     0.4     4.86     4.93     200 mm       2693     CO-222     MH-604     0.85     n518     0.89     10     0.4     6.38     6.41     200 mm       2601     p511     n773     0.37     n223     0.46     35     0.24     4.07     4.06     200 mm		· · · ·	+								
4160 p1592       n2314       -0.28 n2312       -0.16       30       0.4       4.86       4.93 200 mm         2693 CO-222       MH-604       0.85 n518       0.89       10       0.4       6.38       6.41 200 mm         2601 p511       n773       0.37 n223       0.46       35       0.24       4.07       4.06 200 mm		·	<del> </del>			_					
2693 CO-222     MH-604     0.85 n518     0.89     10     0.4     6.38     6.41 200 mm       2601 p511     n773     0.37 n223     0.46     35     0.24     4.07     4.06 200 mm		· · · · ·	<b>†</b>								
2601 p511 n773 0.37 n223 0.46 35 0.24 4.07 4.06 200 mm		·	+			<del> </del>					
	2693	CO-222	MH-604			0.89	10	0.4	6.38	6.41	200 mm
5530 p1864(1)  n2710   5.68 MH-58   5.63  12  0.406  7.73  7.72 200 mm	2601	p511	n773	0.37	n223	0.46	35	0.24	4.07	4.06	200 mm
	5530	p1864(1)	n2710	5.68	MH-58	5.63	12	0.406	7.73	7.72	200 mm

5528   p1863(2)   MH-57   5.7   n2710   5.68   7   0.4   7.71   7.73   200 mm	5500	4060(0)			2740			0.4	7.74	7.70	200
2695 p334(2)(2) MH-604											
5531         p1864(2)         MH-58         5.63         n2711         5.56         17         0.404         7.72         7.69         200 mm           3543         p1065         n1554         1.33         n1555         1.21         21         0.581         4.18         4.28         200 mm           3575         p1092         n1588         1.74         n1590         1.68         21         0.279         3.48         3.38         315mm           2606         p336(1)(1)         n520         5.07         MH-598         5.02         12         0.401         6.19         6.22         200 mm           6634         CO-702         MH-75         -0.01         IS 11         -0.04         7         0.4         5.38         5         200 mm           4479         p1866         n2711         5.56         n2713         5.44         30         0.4         7.69         7.7         200 mm           4479         p1866         n2713         5.44         n2714         5.32         30         0.4         7.7         7.68         200 mm           4165         p1597         n2320         -0.88         n2319         -0.76         30         0.4						_					
3575 p1092						-					
3575   p1092	_										
2696   p336(1)(1)   n520   5.07   MH-598   5.02   12   0.401   6.19   6.22   200 mm		•									
5634   CO-702   MH-75   -0.01   S 11   -0.04   7   0.4   5.38   5   200 mm   4478   p1865   n2711   5.56   n2713   5.44   30   0.4   7.69   7.7   200 mm   3520   p1047   n1528   3.35   n1530   3.23   30   0.4   5.91   5.83   200 mm   4479   p1866   n2713   5.44   n2714   5.32   30   0.4   5.91   5.83   200 mm   4479   p1866   n2713   5.44   n2714   5.32   30   0.4   7.7   7.68   200 mm   4465   p1597   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm   4468   p1697   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm   4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm   4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm   4462   p1594   n2316   -0.52   n2315   -0.4   32   0.378   4.53   4.72   200 mm   3522   p1049   n1531   3.11   n1533   2.99   30   0.4   5.76   5.66   200 mm   4481   p1868   n2715   5.2   n2717   5.08   30   0.4   7.68   7.58   200 mm   3523   p1050   n1533   2.99   n1534   2.88   2.8   0.4   5.66   5.57   200 mm   3523   p1050   n1533   2.99   n1534   2.88   2.8   0.4   5.66   5.57   200 mm   3515   p1042   n1521   3.95   n1522   3.83   33   0.359   5.98   6.01   200 mm   3528   p1052   n1534   2.88   MH-170   2.83   n1536   2.75   5.49   200 mm   3528   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3528   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3528   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3528   p1050   n1533   2.98   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3526   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3526   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3526   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.57   5.49   200 mm   3526   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   4.19   2.00 mm   3545   p1067   n1	_							0.279			
4478   p1865   n2711   5.56   n2713   5.44   30   0.4   7.69   7.7   200 mm     2699   CO-218   n521   4.96   MH-598   5.02   16   0.4   6.28   6.22   200 mm     3520   p1047   n1528   3.35   n1530   3.23   30   0.4   5.91   5.83   200 mm     4165   p1597   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm     4165   p1597   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm     4165   p1597   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm     5388   CO-518   n521   4.96   n524   4.81   37   0.4   6.28   6.14   200 mm     3521   p1048   n1530   3.23   n1531   3.11   30   0.4   5.83   5.76   200 mm     4162   p1594   n2316   -0.52   n2315   -0.4   32   0.378   4.53   4.72   200 mm     4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm     4381   p1868   n2715   5.2   n2717   5.08   30   0.4   5.76   5.66   200 mm     4481   p1868   n2715   5.2   n2717   5.08   30   0.4   5.76   5.66   200 mm     3523   p1040   n1533   2.99   n1534   2.88   28   0.4   5.66   5.57   200 mm     3523   p1050   n1533   2.99   n1534   2.88   28   0.4   5.66   5.57   200 mm     3521   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm     3525   p1042   n1521   3.95   n1522   3.83   33   0.359   5.98   6.01   200 mm     3527   p1051(1)   n1534   2.88   MH-170   2.83   12   0.401   5.57   5.49   200 mm     3528   p1050   n1537   2.63   n1536   2.75   n1537   2.63   30   0.4   5.57   5.49   200 mm     3528   p1051   n1537   2.63   n1536   2.75   n1537   2.63   30   0.4   5.35   5.19   200 mm     3528   p1050   n1537   2.63   n1536   2.75   n1537   2.63   30   0.4   5.35   5.19   200 mm     3528   p1051   n1557   2.63   n1536   2.75   n1537   2.63   30   0.4   5.35   5.19   200 mm     3528   p1053   n1537   2.63   n1536   2.75   n1537   2.63   30   0.4   5.35   5.19   200 mm     3528   p1067   n1556   1.09   n1557   0.97   24   0.507   4.49   4.19   200 mm     3536   p1064   n1526   3.47   n1528   3.35   3.53   3.04   5.95   5.91   200 mm     3536	2696	p336(1)(1)	n520	5.07	MH-598	5.02	12	0.401	6.19		
2699   CO-218   n521	5634	CO-702	MH-75	-0.01	LS 11	-0.04	7	0.4	5.38	5	200 mm
3520 p1047 n1528 3.35 n1530 3.23 30 0.4 5.91 5.83 200 mm 4479 p1866 n2713 5.44 n2714 5.32 30 0.4 7.7 7.68 200 mm 4165 p1597 n2320 -0.88 n2319 -0.76 30 0.4 4.43 4.63 200 mm 35388 CO-518 n521 4.96 n524 4.81 37 0.4 6.28 6.14 200 mm 4480 p1867 n2714 5.32 n2715 5.2 30 0.4 7.68 7.68 200 mm 4480 p1867 n2714 5.32 n2715 5.2 30 0.4 7.68 7.68 200 mm 4480 p1867 n2714 5.32 n2715 5.2 30 0.4 7.68 7.68 200 mm 4481 p1868 n2715 5.2 n2717 5.08 30 0.4 5.76 5.66 200 mm 4481 p1868 n2715 5.2 n2717 5.08 30 0.4 7.68 7.58 200 mm 4482 p1869 n2717 5.08 n2719 4.96 30 0.4 7.68 7.58 200 mm 4482 p1869 n2717 5.08 n2719 4.96 30 0.4 7.68 7.63 200 mm 3521 p1044 n1524 3.71 n1525 3.59 32 0.37 5.83 5.73 200 mm 3515 p1042 n1521 3.95 n1522 3.83 33 0.359 5.98 6.01 200 mm 3526 p1052 n1536 2.75 n1537 2.63 n1538 2.51 30 0.4 5.99 5.01 200 mm 3528 p1050 n1537 2.63 n1538 2.51 30 0.4 7.58 7.53 200 mm 3529 p1050 n1531 3.11 n1533 2.99 31 0.4 5.66 5.57 200 mm 3515 p1042 n1524 3.71 n1525 3.59 32 0.37 5.83 5.73 200 mm 3516 p1042 n1524 3.71 n1525 3.59 32 0.37 5.83 5.73 200 mm 3529 p535 n808 3.77 n807 3.52 45 0.55 4.98 4.73 315mm 3524 p1051(1) n1534 2.88 MH-170 2.83 12 0.401 5.57 5.49 200 mm 3528 p1053 n1537 2.63 n1538 2.51 30 0.4 5.95 5.19 200 mm 3528 p1053 n1537 2.63 n1538 2.51 30 0.4 5.95 5.19 200 mm 3528 p1050 n1536 2.75 n1537 2.63 30 0.4 5.35 5.19 200 mm 3528 p1053 n1537 2.63 n1538 2.51 30 0.4 5.35 5.19 200 mm 3528 p1050 n1556 1.09 n1557 0.97 24 0.507 4.49 4.19 200 mm 3529 p1052 n1556 2.75 n1537 2.63 30 0.4 5.35 5.19 200 mm 3529 p1054 n1556 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3529 p1040 n1526 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3529 p1040 n1556 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3536 p1003 n1537 2.63 n1538 2.51 30 0.4 5.35 5.19 200 mm 3529 p1040 n1556 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3536 p1003 n1537 2.63 n1538 2.51 30 0.4 4.55 4.77 200 mm 3529 p1040 n1556 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3536 p1004 n1526 3.47 n1528 3.35 35 0.044 3.99 4.05 200 mm 3559 p1040 n1565 0.33 n1567 0.21 20 0.611 3.97 4.05 200 mm 3550 p104 n1565 0.33		•	n2711	5.56	n2713	5.44	30	0.4	7.69	7.7	200 mm
4479         p1866         n2713         5.44         n2714         5.32         30         0.4         7.7         7.68         200 mm           4165         p1597         n2320         -0.88         n2319         -0.76         30         0.4         4.43         4.63         200 mm           5388         CO-518         n521         4.96         n524         4.81         37         0.4         6.28         6.14         200 mm           4480         p1867         n2714         5.32         n2715         5.2         30         0.4         7.68         7.68         200 mm           4162         p1594         n2316         -0.52         n2315         -0.4         32         0.378         4.53         4.72         200 mm           3522         p1049         n1531         3.11         n1533         2.99         30         0.4         5.66         5.66         200 mm           4481         p1868         n2715         5.2         n2717         5.08         30         0.4         7.68         7.58         200 mm           3523         p1050         n1533         2.99         n1534         2.88         28         0.4         5.66<	2699	CO-218	n521	4.96	MH-598	5.02	16	0.4	6.28	6.22	200 mm
4165   p1597   n2320   -0.88   n2319   -0.76   30   0.4   4.43   4.63   200 mm   5388   CO-518   n521   4.96   n524   4.81   37   0.4   6.28   6.14   200 mm   3521   p1048   n1530   3.23   n1531   3.11   30   0.4   5.83   5.76   200 mm   4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm   3522   p1049   n1531   3.11   n1533   2.99   30   0.4   5.76   5.66   200 mm   4481   p1868   n2715   5.2   n2717   5.08   30   0.4   7.68   7.58   200 mm   4481   p1868   n2715   5.2   n2717   5.08   30   0.4   7.68   7.58   200 mm   4482   p1869   n1533   2.99   n1534   2.88   28   0.4   5.66   5.57   200 mm   3523   p1050   n1533   2.99   n1534   2.88   28   0.4   5.66   5.57   200 mm   3517   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm   3517   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm   3524   p1051(1)   n1534   2.88   MH-170   2.83   12   0.401   5.57   5.49   200 mm   3524   p1051(1)   n1534   2.88   MH-170   2.83   12   0.401   5.57   5.49   200 mm   3526   p1052   n1536   2.75   n1537   2.63   n1538   2.75   2.00   3.37   5.49   2.00   mm   3528   p1053   n1537   2.63   n1538   2.51   30   0.4   5.59   5.91   200 mm   3528   p1053   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.19   5.01   200 mm   3586   p103   n1604   1.08   n1605   1.02   24   0.252   2.89   2.97   315mm   4168   p1600   n2325   -1.24   n2323   -1.13   29   0.4   4.19   4.29   200 mm   3536   p1046   n1526   3.47   n1528   3.35   3.35   0.342   5.97   5.91   200 mm   3555   p1074   n1565   0.33   n1567   0.21   20   0.611   3.97   4.05   200 mm   3555   p1074   n1565   0.33   n1567   0.21   20   0.611   3.97   4.05   200 mm   3556   p1063   n1576   2.28   n1578   2.22   27   0.22   3.7   3.69   315mm   4175   p1603(1)   n2330   -1.61   MH-159   -1.56   11   0.404   3.92   4.46   200 mm   4176   p1605(2)   MH-158   -1.79   n2332   -1.73   n2330   -1.61   3.00   0.4   3.69   3.87   200 mm   4178   p1605(1)   n2334   -1.85   MH-158   -1.79   14   0.407   3.	3520	p1047	n1528	3.35	n1530	3.23	30	0.4	5.91	5.83	200 mm
S388   CO-518   n521   4.96   n524   4.81   37   0.4   6.28   6.14   200 mm   3521   p1048   n1530   3.23   n1531   3.11   30   0.4   5.83   5.76   200 mm   4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm   4162   p1594   n2316   -0.52   n2315   -0.4   32   0.378   4.53   4.72   200 mm   4382   p1049   n1531   3.11   n1533   2.99   30   0.4   5.76   5.66   200 mm   4481   p1868   n2715   5.2   n2717   5.08   30   0.4   7.68   7.58   200 mm   2701   p339   n524   4.81   n526   4.71   25   0.4   6.14   5.99   200 mm   3523   p1050   n1533   2.99   n1534   2.88   28   0.4   5.66   5.57   200 mm   3527   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm   3517   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm   3515   p1042   n1521   3.95   n1522   3.83   33   0.359   5.98   6.01   200 mm   3524   p1051(1)   n1534   2.88   MH-170   2.83   12   0.401   5.57   5.49   200 mm   3528   p1052   n1536   2.75   n1537   2.63   n1537   2.63   n1537   2.63   n1538   2.51   30   0.4   5.19   5.01   200 mm   3545   p1067   n1556   1.09   n1557   0.97   24   0.507   4.49   4.19   200 mm   3586   p1052   n1536   2.75   n1537   2.63   n1538   2.51   30   0.4   5.19   5.01   200 mm   3545   p1067   n1556   1.09   n1557   0.97   24   0.507   4.49   4.19   200 mm   3546   p1060   n2325   -1.24   n2323   -1.13   29   0.4   4.19   4.29   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   3.42   5.97   5.91   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   3.42   5.97   5.91   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   0.4   4.17   4.18   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   0.44   4.17   4.18   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   3.42   5.97   5.91   200 mm   3547   p046   n1526   3.47   n1565   0.33   n1567   0.21   20   0.611   3.97   4.05   200 mm   3547   p046   n1526   3.47   n1528   3.35   3.50   3.42   5.97   5.91   200 mm   3547   p046   n1526   3.47   n1565   0.33   n156	4479	p1866	n2713	5.44	n2714	5.32	30	0.4	7.7	7.68	200 mm
3521   p1048   n1530   3.23   n1531   3.11   30   0.4   5.83   5.76   200 mm     4480   p1867   n2714   5.32   n2715   5.2   30   0.4   7.68   7.68   200 mm     4162   p1594   n2316   -0.52   n2315   -0.4   32   0.378   4.53   4.72   200 mm     3522   p1049   n1531   3.11   n1533   2.99   30   0.4   5.76   5.66   200 mm     4481   p1868   n2715   5.2   n2717   5.08   30   0.4   7.68   7.58   200 mm     2701   p339   n524   4.81   n526   4.71   2.5   0.4   6.14   5.99   200 mm     3523   p1050   n1533   2.99   n1534   2.88   2.8   0.4   5.66   5.57   200 mm     4482   p1869   n2717   5.08   n2719   4.96   30   0.4   7.58   7.63   200 mm     3517   p1044   n1524   3.71   n1525   3.59   32   0.37   5.83   5.73   200 mm     3515   p1042   n1521   3.95   n1522   3.83   33   0.359   5.98   6.01   200 mm     3529   p535   n808   3.77   n807   3.52   45   0.555   4.98   4.73   115mm     3526   p1051   n1534   2.88   MH-170   2.83   11536   2.75   20   0.397   5.49   5.35   200 mm     3528   p1051   n1536   2.75   n1537   2.63   30   0.4   5.35   5.19   200 mm     3528   p1051   n1556   1.09   n1557   0.97   24   0.507   4.49   4.19   200 mm     3586   p1007   n1556   1.09   n1557   0.97   24   0.507   4.49   4.19   200 mm     3586   p1008   n1604   1.08   n1605   1.02   24   0.252   2.89   2.97   315mm     4168   p1600   n2325   -1.24   n2323   -1.13   2.9   0.4   4.19   4.29   200 mm     3536   C0-454   n1526   3.47   n1528   3.35   35   0.342   5.97   5.91   200 mm     5347   C0-436   n2327   -1.37   MH-161   -1.33   10   0.4   4.17   4.18   200 mm     5356   p1031   n1565   0.33   n1567   0.21   20   0.611   3.97   4.05   200 mm     3556   p1063   n1565   0.33   n1567   0.21   20   0.611   3.97   4.05   200 mm     3556   p1060   n1560   n2321   -1.13   n2322   -1   36   0.35   4.29   4.46   200 mm     3556   p1060   n1560   n2332   -1.13   n2322   -1   36   0.35   4.29   4.46   200 mm     3556   p1060   n1560   n2330   -1.61   MH-159   -1.56   11   0.404   3.92   4.01   200 mm     4175   p1603(1)   n2334   -1.85	4165	p1597	n2320	-0.88	n2319	-0.76	30	0.4	4.43	4.63	200 mm
4480         p1867         n2714         5.32         n2715         5.2         30         0.4         7.68         7.68         200 mm           4162         p1594         n2316         -0.52         n2315         -0.4         32         0.378         4.53         4.72         200 mm           3522         p1049         n1531         3.11         n1533         2.99         30         0.4         5.76         5.66         200 mm           4481         p1868         n2715         5.2         n2717         5.08         30         0.4         7.68         7.58         200 mm           3523         p1050         n1533         2.99         n1534         2.88         28         0.4         5.66         5.57         200 mm           4482         p1869         n2717         5.08         n2719         4.96         30         0.4         7.58         7.63         200 mm           3517         p1044         n1524         3.71         n1525         3.59         32         0.37         5.83         5.73         200 mm           3515         p1042         n1521         3.95         n1522         3.83         33         0.355         5.	5388	CO-518	n521	4.96	n524	4.81	37	0.4	6.28	6.14	200 mm
4162         p1594         n2316         -0.52         n2315         -0.4         32         0.378         4.53         4.72         200 mm           3522         p1049         n1531         3.11         n1533         2.99         30         0.4         5.76         5.66         200 mm           4481         p1868         n2715         5.2         n2717         5.08         30         0.4         7.68         7.58         200 mm           2701         p339         n524         4.81         n526         4.71         25         0.4         6.14         5.99         200 mm           3523         p1050         n1533         2.99         n1534         2.88         28         0.4         5.66         5.57         200 mm           4482         p1869         n2717         5.08         n2719         4.96         30         0.4         7.58         7.63         200 mm           3517         p1044         n1524         3.71         n1525         3.59         32         0.37         5.83         5.73         200 mm           3515         p1042         n1521         3.95         15.88         6.01         200 mm         315m         6	3521	p1048	n1530	3.23	n1531	3.11	30	0.4	5.83	5.76	200 mm
3522 p1049	4480	p1867	n2714	5.32	n2715	5.2	30	0.4	7.68	7.68	200 mm
4481 p1868         n2715         5.2 n2717         5.08         30         0.4         7.68         7.58 200 mm           2701 p339         n524         4.81 n526         4.71         25         0.4         6.14         5.99 200 mm           3523 p1050         n1533         2.99 n1534         2.88         28         0.4         5.66         5.57 200 mm           4482 p1869         n2717         5.08 n2719         4.96         30         0.4         7.58         7.63 200 mm           3517 p1044         n1524         3.71 n1525         3.59         32         0.37         5.83         5.73 200 mm           3515 p1042         n1521         3.95 n1522         3.83         33         0.359         5.98         6.01 200 mm           2925 p535         n808         3.77 n807         3.52         45         0.55         4.98         4.73         315mm           3524 p1051(1)         n1534         2.88 MH-170         2.83         12         0.401         5.57         5.49 200 mm           3526 p1052         n1536         2.75 n1537         2.63         30         0.4         5.35         5.19 200 mm           3528 p1053         n1537         2.63 n1538         2.51	4162	p1594	n2316	-0.52	n2315	-0.4	32	0.378	4.53	4.72	200 mm
4481 p1868         n2715         5.2 n2717         5.08         30         0.4         7.68         7.58 200 mm           2701 p339         n524         4.81 n526         4.71         25         0.4         6.14         5.99 200 mm           3523 p1050         n1533         2.99 n1534         2.88         28         0.4         5.66         5.57 200 mm           4482 p1869         n2717         5.08 n2719         4.96         30         0.4         7.58         7.63 200 mm           3517 p1044         n1524         3.71 n1525         3.59         32         0.37         5.83         5.73 200 mm           3515 p1042         n1521         3.95 n1522         3.83         33         0.359         5.98         6.01 200 mm           2925 p535         n808         3.77 n807         3.52         45         0.55         4.98         4.73         315mm           3524 p1051(1)         n1534         2.88 MH-170         2.83         12         0.401         5.57         5.49 200 mm           3526 p1052         n1536         2.75 n1537         2.63         30         0.4         5.35         5.19 200 mm           3528 p1053         n1537         2.63 n1538         2.51		•				2.99	30			5.66	200 mm
2701         p339         n524         4.81         n526         4.71         25         0.4         6.14         5.99         200 mm           3523         p1050         n1533         2.99         n1534         2.88         28         0.4         5.66         5.57         200 mm           4482         p1869         n2717         5.08         n2719         4.96         30         0.4         7.58         7.63         200 mm           3517         p1044         n1524         3.71         n1525         3.59         32         0.37         5.83         5.73         200 mm           3515         p1042         n1521         3.95         n1522         3.83         33         0.359         5.98         6.01         200 mm           2925         p535         n808         3.77         n807         3.52         45         0.55         4.98         4.73         315mm           3524         p1051(1)         n1534         2.88         MH-170         2.83         12         0.401         5.57         5.49         200 mm           3526         p1052         n1536         2.75         n1537         2.63         30         0.4         5.1		•									
3523 p1050											
4482 p1869         n2717         5.08 n2719         4.96         30         0.4         7.58         7.63 200 mm           3517 p1044         n1524         3.71 n1525         3.59         32         0.37         5.83         5.73 200 mm           3515 p1042         n1521         3.95 n1522         3.83         33         0.359         5.98         6.01 200 mm           2925 p535         n808         3.77 n807         3.52         45         0.55         4.98         4.73 315mm           3524 p1051(1)         n1534         2.88 MH-170         2.83         12 0.401         5.57         5.49 200 mm           3527 p1051(2)         MH-170         2.83 n1536         2.75         20 0.397         5.49         5.35 200 mm           3528 p1053         n1536         2.75 n1537         2.63         30 0.4         5.35         5.19 200 mm           3545 p1067         n1556         1.09 n1557         0.97 24 0.507         4.49 4.19 200 mm           3586 p1103         n1604         1.08 n1605         1.02 24 0.252         2.89 2.97 315mm           4168 p1600         n2325         -1.24 n2323         -1.13 29 0.4 4.19 4.29 200 mm           3519 p1046         n1526         3.47 n1528         3.35 35 0.342 5.97 5.91 200						_					
3517         p1044         n1524         3.71         n1525         3.59         32         0.37         5.83         5.73         200 mm           3515         p1042         n1521         3.95         n1522         3.83         33         0.359         5.98         6.01         200 mm           2925         p535         n808         3.77         n807         3.52         45         0.55         4.98         4.73         315mm           3524         p1051(1)         n1534         2.88         MH-170         2.83         12         0.401         5.57         5.49         200 mm           3527         p1051(2)         MH-170         2.83         n1536         2.75         20         0.397         5.49         5.35         200 mm           3526         p1052         n1536         2.75         n1537         2.63         30         0.4         5.35         5.19         200 mm           3528         p1053         n1537         2.63         n1538         2.51         30         0.4         5.19         5.01         200 mm           3545         p1067         n1556         1.09         n1557         0.97         24         0.507											
3515 p1042 n1521 3.95 n1522 3.83 33 0.359 5.98 6.01 200 mm 2925 p535 n808 3.77 n807 3.52 45 0.55 4.98 4.73 315mm 3524 p1051(1) n1534 2.88 MH-170 2.83 12 0.401 5.57 5.49 200 mm 3527 p1051(2) MH-170 2.83 n1536 2.75 20 0.397 5.49 5.35 200 mm 3526 p1052 n1536 2.75 n1537 2.63 30 0.4 5.35 5.19 200 mm 3528 p1053 n1537 2.63 n1538 2.51 30 0.4 5.19 5.01 200 mm 3545 p1067 n1556 1.09 n1557 0.97 24 0.507 4.49 4.19 200 mm 3586 p1103 n1604 1.08 n1605 1.02 24 0.252 2.89 2.97 315mm 4168 p1600 n2325 -1.24 n2323 -1.13 29 0.4 4.19 4.29 200 mm 3519 p1046 n1526 3.47 n1528 3.35 35 0.342 5.97 5.91 200 mm 3536 CO-454 n1542 2.23 MH-169 2.34 27 0.4 4.55 4.77 200 mm 5347 CO-436 n2327 -1.37 MH-161 -1.33 10 0.4 4.17 4.18 200 mm 4167 p1599 n2323 -1.13 n2322 -1 36 0.35 4.29 4.46 200 mm 3556 p1083 n1576 2.28 n1578 2.22 27 0.22 3.7 3.69 315mm 4175 p1603(1) n2330 -1.61 MH-159 -1.56 11 0.404 3.92 4.01 200 mm 4176 p1605(2) MH-158 -1.79 n2332 -1.73 15 0.404 3.69 3.87 200 mm 4178 p1605(1) n2334 -1.85 MH-158 -1.79 14 0.407 3.53 3.69 200 mm	-	•									
2925         p535         n808         3.77         n807         3.52         45         0.55         4.98         4.73         315mm           3524         p1051(1)         n1534         2.88         MH-170         2.83         12         0.401         5.57         5.49         200 mm           3527         p1051(2)         MH-170         2.83         n1536         2.75         20         0.397         5.49         5.35         200 mm           3526         p1052         n1536         2.75         n1537         2.63         30         0.4         5.35         5.19         200 mm           3528         p1053         n1537         2.63         n1538         2.51         30         0.4         5.19         5.01         200 mm           3545         p1067         n1556         1.09         n1557         0.97         24         0.507         4.49         4.19         200 mm           3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4											
3524 p1051(1) n1534						_					
3527         p1051(2)         MH-170         2.83         n1536         2.75         20         0.397         5.49         5.35         200 mm           3526         p1052         n1536         2.75         n1537         2.63         30         0.4         5.35         5.19         200 mm           3528         p1053         n1537         2.63         n1538         2.51         30         0.4         5.19         5.01         200 mm           3545         p1067         n1556         1.09         n1557         0.97         24         0.507         4.49         4.19         200 mm           3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4         4.19         4.29         200 mm           3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5347         CO-454         n1542         2.23         MH-169         2.34         27         0.4		·									
3526         p1052         n1536         2.75         n1537         2.63         30         0.4         5.35         5.19         200 mm           3528         p1053         n1537         2.63         n1538         2.51         30         0.4         5.19         5.01         200 mm           3545         p1067         n1556         1.09         n1557         0.97         24         0.507         4.49         4.19         200 mm           3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4         4.19         4.29         200 mm           3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5347         CO-436         n2327         -1.37         MH-169         2.34         27         0.4         4.55         4.77         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35						<del> </del>					
3528         p1053         n1537         2.63         n1538         2.51         30         0.4         5.19         5.01         200 mm           3545         p1067         n1556         1.09         n1557         0.97         24         0.507         4.49         4.19         200 mm           3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4         4.19         4.29         200 mm           3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5356         CO-454         n1542         2.23         MH-169         2.34         27         0.4         4.55         4.77         200 mm           5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35	_					_					
3545         p1067         n1556         1.09         n1557         0.97         24         0.507         4.49         4.19         200 mm           3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4         4.19         4.29         200 mm           3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5356         CO-454         n1542         2.23         MH-169         2.34         27         0.4         4.55         4.77         200 mm           5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35         4.29         4.46         200 mm           3555         p1074         n1565         0.33         n1567         0.21         20         0.611		•									
3586         p1103         n1604         1.08         n1605         1.02         24         0.252         2.89         2.97         315mm           4168         p1600         n2325         -1.24         n2323         -1.13         29         0.4         4.19         4.29         200 mm           3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5356         CO-454         n1542         2.23         MH-169         2.34         27         0.4         4.55         4.77         200 mm           5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35         4.29         4.46         200 mm           3555         p1074         n1565         0.33         n1567         0.21         20         0.611         3.97         4.05         200 mm           3566         p1083         n1576         2.28         n1578         2.22         27         0.22	-			<u> </u>							
4168 p1600       n2325       -1.24 n2323       -1.13       29       0.4       4.19       4.29 200 mm         3519 p1046       n1526       3.47 n1528       3.35       35       0.342       5.97       5.91 200 mm         5356 CO-454       n1542       2.23 MH-169       2.34       27       0.4       4.55       4.77 200 mm         5347 CO-436       n2327       -1.37 MH-161       -1.33       10       0.4       4.17       4.18 200 mm         4167 p1599       n2323       -1.13 n2322       -1       36       0.35       4.29       4.46 200 mm         3555 p1074       n1565       0.33 n1567       0.21       20       0.611       3.97       4.05 200 mm         3566 p1083       n1576       2.28 n1578       2.22       27       0.22       3.7       3.69 315mm         4175 p1603(1)       n2330       -1.61 MH-159       -1.56       11       0.404       3.92       4.01 200 mm         4174 p1604       n2332       -1.73 n2330       -1.61       30       0.4       3.87       3.92 200 mm         4176 p1605(2)       MH-158       -1.79 n2332       -1.73       15       0.404       3.69       3.87 200 mm         4178 p1605(1)       <											
3519         p1046         n1526         3.47         n1528         3.35         35         0.342         5.97         5.91         200 mm           5356         CO-454         n1542         2.23         MH-169         2.34         27         0.4         4.55         4.77         200 mm           5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35         4.29         4.46         200 mm           3555         p1074         n1565         0.33         n1567         0.21         20         0.611         3.97         4.05         200 mm           3566         p1083         n1576         2.28         n1578         2.22         27         0.22         3.7         3.69         315mm           4175         p1603(1)         n2330         -1.61         MH-159         -1.56         11         0.404         3.92         4.01         200 mm           4174         p1604         n2332         -1.73         n2330         -1.61         30         0.4						_					
5356         CO-454         n1542         2.23         MH-169         2.34         27         0.4         4.55         4.77         200 mm           5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35         4.29         4.46         200 mm           3555         p1074         n1565         0.33         n1567         0.21         20         0.611         3.97         4.05         200 mm           3566         p1083         n1576         2.28         n1578         2.22         27         0.22         3.7         3.69         315mm           4175         p1603(1)         n2330         -1.61         MH-159         -1.56         11         0.404         3.92         4.01         200 mm           4174         p1604         n2332         -1.73         n2330         -1.61         30         0.4         3.87         3.92         200 mm           4176         p1605(2)         MH-158         -1.79         n2332         -1.73         15         0.40											
5347         CO-436         n2327         -1.37         MH-161         -1.33         10         0.4         4.17         4.18         200 mm           4167         p1599         n2323         -1.13         n2322         -1         36         0.35         4.29         4.46         200 mm           3555         p1074         n1565         0.33         n1567         0.21         20         0.611         3.97         4.05         200 mm           3566         p1083         n1576         2.28         n1578         2.22         27         0.22         3.7         3.69         315mm           4175         p1603(1)         n2330         -1.61         MH-159         -1.56         11         0.404         3.92         4.01         200 mm           4174         p1604         n2332         -1.73         n2330         -1.61         30         0.4         3.87         3.92         200 mm           4176         p1605(2)         MH-158         -1.79         n2332         -1.73         15         0.404         3.69         3.87         200 mm           4178         p1605(1)         n2334         -1.85         MH-158         -1.79         14 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>											
4167 p1599       n2323       -1.13 n2322       -1       36       0.35       4.29       4.46 200 mm         3555 p1074       n1565       0.33 n1567       0.21       20       0.611       3.97       4.05 200 mm         3566 p1083       n1576       2.28 n1578       2.22       27       0.22       3.7       3.69 315mm         4175 p1603(1)       n2330       -1.61 MH-159       -1.56       11       0.404       3.92       4.01 200 mm         4174 p1604       n2332       -1.73 n2330       -1.61       30       0.4       3.87       3.92 200 mm         4176 p1605(2)       MH-158       -1.79 n2332       -1.73       15       0.404       3.69       3.87 200 mm         4178 p1605(1)       n2334       -1.85 MH-158       -1.79       14       0.407       3.53       3.69 200 mm											
3555         p1074         n1565         0.33         n1567         0.21         20         0.611         3.97         4.05         200         mm           3566         p1083         n1576         2.28         n1578         2.22         27         0.22         3.7         3.69         315mm           4175         p1603(1)         n2330         -1.61         MH-159         -1.56         11         0.404         3.92         4.01         200         mm           4174         p1604         n2332         -1.73         n2330         -1.61         30         0.4         3.87         3.92         200         mm           4176         p1605(2)         MH-158         -1.79         n2332         -1.73         15         0.404         3.69         3.87         200         mm           4178         p1605(1)         n2334         -1.85         MH-158         -1.79         14         0.407         3.53         3.69         200         mm											
3566         p1083         n1576         2.28         n1578         2.22         27         0.22         3.7         3.69         315mm           4175         p1603(1)         n2330         -1.61         MH-159         -1.56         11         0.404         3.92         4.01         200 mm           4174         p1604         n2332         -1.73         n2330         -1.61         30         0.4         3.87         3.92         200 mm           4176         p1605(2)         MH-158         -1.79         n2332         -1.73         15         0.404         3.69         3.87         200 mm           4178         p1605(1)         n2334         -1.85         MH-158         -1.79         14         0.407         3.53         3.69         200 mm		•									
4175       p1603(1)       n2330       -1.61       MH-159       -1.56       11       0.404       3.92       4.01       200 mm         4174       p1604       n2332       -1.73       n2330       -1.61       30       0.4       3.87       3.92       200 mm         4176       p1605(2)       MH-158       -1.79       n2332       -1.73       15       0.404       3.69       3.87       200 mm         4178       p1605(1)       n2334       -1.85       MH-158       -1.79       14       0.407       3.53       3.69       200 mm											
4174     p1604     n2332     -1.73     n2330     -1.61     30     0.4     3.87     3.92     200 mm       4176     p1605(2)     MH-158     -1.79     n2332     -1.73     15     0.404     3.69     3.87     200 mm       4178     p1605(1)     n2334     -1.85     MH-158     -1.79     14     0.407     3.53     3.69     200 mm		•									
4176     p1605(2)     MH-158     -1.79     n2332     -1.73     15     0.404     3.69     3.87     200 mm       4178     p1605(1)     n2334     -1.85     MH-158     -1.79     14     0.407     3.53     3.69     200 mm	_										
4178 p1605(1) n2334 -1.85 MH-158 -1.79 14 0.407 3.53 3.69 200 mm											
						_					
3987 p1578  n2291   1.39 n2102   1.45  22  0.243  5.43  5.55 200 mm						-					
						_					
4177 p1606 n2336 -1.97 n2334 -1.85 30 0.4 3.74 3.53 200 mm		•	n2336	-1.97	n2334	-1.85	30		3.74		
5348 CO-438 n2336 -1.97 n1569 -2.09 30 0.4 3.74 4.14 200 mm	5348	CO-438	n2336	-1.97	n1569	-2.09	30	0.4	3.74		
4170 p1601(2)(2 MH-161 -1.33 n2325 -1.24 23 0.36 4.18 4.19 200 mm	4170	p1601(2)(2	MH-161	-1.33	n2325	-1.24	23	0.36	4.18	4.19	200 mm
3533 p1057 n1542 2.23 n1544 2.16 18 0.4 4.55 4.28 200 mm	3533	p1057	n1542	2.23	n1544	2.16	18	0.4	4.55	4.28	200 mm

3585   D1058   D1574   2.4   D1575   2.34   30   0.2   3.62   3.7   315mm					ı						
3555   1082	3564	p1081	n1574	2.4	n1575	2.34	30	0.2	3.62	3.7	315mm
4171   p1602   p13288   -1.49   p1327   -1.37   33   0.362   4.17   4.17   200 mm   3536   p1059   n15466   2.04   n1547   1.92   30   0.4   4.22   4.32   200 mm   4164   p1596   p1391   -0.76   p13317   -0.64   40   2.29   4.63   4.64   200 mm   3568   p1085   n1579   2.16   n1581   2.1   30   0.2   3.72   3.64   315mm   3569   p1086   n1581   2.1   n1582   2.04   30   0.2   3.64   3.6   315mm   3579   p1087   n1582   2.04   n1583   1.98   30   0.2   3.6   3.56   315mm   3571   p1088   n1583   1.98   1.98   30   0.2   3.6   3.56   315mm   3571   p1088   n1583   1.98   1.98   30   0.2   3.6   3.56   315mm   3571   p1088   n1583   1.98   1.98   30   0.2   3.56   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.55   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.53   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.3   3.3   315mm   3574   p1063   n1591   1.57   n1552   1.62   30   0.2   3.3   3.3   315mm   3579   p1094   n1592   1.62   n1593   1.56   n1594   1.5   30   0.2   3.3   3.3   315mm   3579   p1094   n1592   1.62   n1593   1.56   n1594   1.5   30   0.2   3.3   3.3   315mm   3579   p1096   n1594   1.5   n1594   1.5   n1595   1.44   n1597   1.38   30   0.2   3.1   3.3   3.3   315mm   3589   p1095   n1594   1.5   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3589   p1096   n1594   1.5   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3589   p1096   n1594   1.5   n1595   1.44   n1597   1.38   30   0.2   3.12   3.13   315mm   3589   p1096   n1594   1.5   n1595   1.44   n1597   n138   30   0.2   3.11   3.12   315mm   3589   p1096   n1594   1.5   n1595   n144   n1597   n138   30   0.2   3.11   3.12   315mm   3589   p1096   n1594   n1596   n159	3535	p1058	n1544	2.16	n1546	2.04	30	0.401	4.28	4.22	200 mm
3536   1059   11546   2.04   11547   1.92   30   0.4   4.22   4.32   200 mm     4164   15596   10319   -0.76   12317   -0.64   40   0.299   4.63   4.64   200 mm     3568   1085   13579   2.16   1.1581   2.1   30   0.2   3.72   3.64   315 mm     3569   1086   11581   2.1   11582   2.04   30   0.2   3.64   3.6   315 mm     3570   1087   11582   2.04   11583   1.98   30   0.4   4.32   4.37   200 mm     3571   1088   11583   1.98   11584   1.92   30   0.2   3.56   3.56   315 mm     3571   1088   11583   1.98   11584   1.92   30   0.2   3.56   3.35   315 mm     3572   1089   11584   1.92   11585   1.86   30   0.2   3.56   3.33   315 mm     3572   1089   11584   1.92   11585   1.86   30   0.2   3.56   3.33   315 mm     5074   1085   1.06	3565	p1082	n1575	2.34	n1576	2.28	30	0.2	3.7	3.7	315mm
4164 p1596   n2319	4171	p1602	n2328	-1.49	n2327	-1.37	33	0.362	4.17	4.17	200 mm
3568   p1085   n1579   2.16   n1581   2.1   30   0.2   3.72   3.64   315mm   3569   p1086   n1581   2.1   n1582   2.04   30   0.2   3.64   3.6   315mm   3570   p1087   n1582   2.04   n1583   1.98   30   0.4   4.32   4.37   200 mm   3570   p1087   n1582   2.04   n1583   1.98   30   0.2   3.66   3.56   315mm   3571   p1088   n1583   1.98   n1584   1.92   30   0.2   3.56   3.53   315mm   3572   p1089   n1554   1.92   n1585   1.86   30   0.2   3.56   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.55   315mm   3573   p1090   n1585   1.86   n1587   1.8   27   0.4   4.36   4.37   200 mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.53   3.55   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.53   3.53   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.38   3.3   315mm   3575   p1093   n1590   1.68   n1592   1.62   30   0.2   3.38   3.3   315mm   3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.33   3.33   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.33   3.33   315mm   3580   p1097   n1595   1.44   1.57   n1595   1.44   30   0.2   3.33   3.13   315mm   3580   p1097   n1595   1.44   1.59   1.38   3159   3.58   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3580   p1097   n1595   1.44   1.59   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   1.59   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   1.59   1.38   30   0.2   3.12   3.13   315mm   3580   p1097   n1599   1.32   n1600   1.26   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.38   3.15   315mm   3580   p1097   n1599   1.32   n1600   1.26   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.39   3.15   3.15   315mm   3580   p1097   n1599   1.32   n1600   1.26   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.39   3.15   3.1	3536	p1059	n1546	2.04	n1547	1.92	30	0.4	4.22	4.32	200 mm
3569   p1086   n1581	4164	p1596	n2319	-0.76	n2317	-0.64	40	0.299	4.63	4.64	200 mm
3537   p1060   n1547   1.92   n1549   1.8   30   0.4   4.32   4.37   200 mm   3570   p1087   n1582   2.04   n1583   1.98   30   0.2   3.6   3.56   3.15mm   3.571   p1088   n1583   1.98   n1584   1.92   30   0.2   3.56   3.53   315mm   3575   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.53   315mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.53   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   315mm   3576   p1093   n1590   1.68   n1592   1.62   30   0.2   3.38   3.3   315mm   3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.3   3.35   315mm   3579   p1095   n1593   1.56   n1594   1.5   1.55   30   0.20   3.33   3.35   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.33   3.31   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.23   3.11   315mm   3581   p1098   n1597   1.38   n1599   1.32   n1098   n1597   1.38   n1599   1.32   n1099   n1590   n1590   n1590   n1591   1.44   n1597   n138   30   0.2   3.12   3.13   315mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.12   3.13   315mm   3582   p1097   n1595   1.44   n1597   1.38   30   0.2   3.12   3.13   315mm   3584   p1096   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3584   p1006   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1006   n1555   1.21   n1556   1.09   30   0.2   2.98   2.91   315mm   3583   p1000   n1600   1.26   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.98   2.91   315mm   3585   p1002   n1600   1.26   n1600   0.9   30   0.2   2.98   2.91   315mm   3585   p1002   n1600   1.26   n1600   0.9   30   0.2   2.97   2.88   315mm   3585   p1002   n1600   0.96   n1559   0.073   15   0.405   4.26   4.22   200 mm   3584   p1004   n1587   2.78   n1572	3568	p1085	n1579	2.16	n1581	2.1	30	0.2	3.72	3.64	315mm
3537   1060   11547   1.92   11549   1.8   30   0.4   4.32   4.37   200 mm   3570   1087   11582   2.04   11583   1.98   30   0.2   3.6   3.56   3.15mm   3571   1088   11583   1.98   11584   1.92   30   0.2   3.56   3.53   315mm   3575   1087   10550   1.69   11549   1.8   27   0.4   4.36   4.37   200 mm   3572   1089   11584   1.92   11585   1.86   30   0.2   3.53   3.53   315mm   3572   1089   11584   1.92   11585   1.86   30   0.2   3.53   3.53   315mm   3572   1090   11585   1.86   11587   1.8   30   0.2   3.53   3.53   315mm   3573   1090   1.1585   1.86   11587   1.8   30   0.2   3.5   3.51   315mm   3576   1093   11590   1.68   11587   1.8   30   0.2   3.35   3.35   315mm   3576   1093   1.1590   1.68   11592   1.62   30   0.2   3.38   3.3   315mm   3577   1094   11592   1.62   11593   1.56   30   0.2   3.33   3.35   315mm   3579   1095   1.1593   1.56   11594   1.5   30   0.20   3.33   3.35   315mm   3579   1096   11594   1.5   11595   1.44   30   0.2   3.23   3.11   315mm   3580   1097   11595   1.44   11597   1.38   30   0.2   3.13   3.15   315mm   3580   1097   11595   1.44   11597   1.38   30   0.2   3.12   3.13   315mm   3581   1098   11597   1.38   11599   1.32   1000   1.26   30   0.2   3.12   3.13   315mm   3582   1099   11590   1.56   1169   11551   1.57   31   0.386   4.36   4.39   200 mm   3584   1100   11600   1.26   11600   1.26   30   0.2   3.11   3.12   315mm   3584   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3584   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3584   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3584   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3585   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3585   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3585   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3585   1100   11600   1.26   11600   1.26   30   0.2   2.98   2.91   315mm   3585   1100   11600	3569	p1086	n1581	2.1	n1582	2.04	30	0.2	3.64	3.6	315mm
3570   p1087   n1582   2.04   n1583   1.98   3.0   0.2   3.56   3.56   3.15mm   3.571   p1088   n1583   1.98   n1584   1.92   30   0.2   3.56   3.53   3.15mm   3.572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   3.15mm   3.572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   3.15mm   3.572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   3.15mm   3.572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   3.15mm   3.573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   3.15mm   3.573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   3.15mm   3.574   p1093   n1590   1.68   n1592   1.62   30   0.4   4.39   4.3   200 mm   3.578   p1093   n1590   1.62   n1593   1.56   30   0.4   4.39   4.3   200 mm   3.578   p1094   n1592   1.62   n1593   1.56   30   0.20   3.3   3.3   3.15mm   3.578   p1095   n1593   1.56   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   3.15mm   3.580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.23   3.11   3.15mm   3.580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.12   3.13   3.15mm   3.581   p1098   n1597   1.38   n1599   1.32   n1600   1.26   n1590   n159		-	n1547	1.92	n1549	1.8	30	0.4	4.32	4.37	200 mm
3571   p1088   n1583   1.98   n1584   1.92   30   0.2   3.56   3.53   315mm   3555   CO-452   n1550   1.69   n1549   1.8   27   0.4   4.36   4.37   200 mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.53   315mm   3573   p1090   n1584   3.81   n808   3.77   10   0.431   5.03   4.98   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   315mm   3573   p1090   n1585   1.57   n1552   1.62   30   0.2   3.38   3.3   315mm   3574   p1063   n1551   1.57   n1552   1.45   30   0.4   4.39   4.3   200 mm   3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.33   3.35   315mm   3578   p1095   n1593   1.56   n1594   1.5   30   0.201   3.35   3.23   315mm   3578   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.21   3.13   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   n1597   1.38   n1599   1.32   30   0.2   3.11   3.12   315mm   3589   p1062   n1550   1.69   n1551   1.57   n13   0.386   4.36   4.39   200 mm   3584   p1009   n1599   1.32   n1600   1.26   n30   0.2   3.11   3.13   315mm   3539   p1066   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3584   p1009   n1599   1.32   n1600   1.26   n30   0.2   2.91   2.88   315mm   3538   p1099   n1599   1.32   n1600   1.26   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3539   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1001   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3539   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3584   p1009   n1598   n1599   n1599   n1599   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   3.72   315mm   3585   p1072   m1606   n1607   0.96   n1609   0.9   30   0.2   2.88   3.55mm   3.55mm   3556   p1009   n1588   n1560   n1559		•	n1582	2.04	n1583	1.98	30	0.2	3.6	3.56	315mm
S355   CO-452   n1550   1.69   n1549   1.8   27   0.4   4.36   4.37   200 mm   3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   315mm   3573   p36(2)(1)   MH-667   3.81   m808   3.77   10   0.431   5.03   4.98   315mm   3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.5   315mm   3576   p1093   n1590   1.68   n1592   1.62   30   0.2   3.3   3.3   315mm   3574   p1063   n1551   1.57   n1552   1.45   30   0.4   4.39   4.3   200 mm   3577   p1094   n1592   1.62   n1593   1.56   n1594   1.5   30   0.2   3.3   3.35   315mm   3578   p1095   n1593   1.56   n1594   1.5   30   0.20   3.33   3.23   315mm   3578   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3581   p1098   n1597   1.38   n1599   1.32   n1600   1.26   30   0.2   3.11   3.12   315mm   3583   p1009   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1009   n1599   1.32   n1600   1.26   30   0.2   2.98   2.91   315mm   3583   p1100   n1600   1.26   n1602   1.2   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1560   1.09   30   0.4   4.28   4.49   200 mm   3584   p1094   m1575   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3584   p1096   MH-168   0.79   n1557   0.97   46   0.49   4.15   4.09   200 mm   3584   p10094   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3550   0.044   M1-755   0.65   n1562   0.57   n1607   0.96   30   0.2   3.07   2.8   315mm   3550   0.044   M1-755   0.65   n1562   0.57   n1562   0.57   n1572   2.53   30   0.588   3.86   3.69   3.72   315mm   3550   0.044   M1-755   0.65   n1559   0.73   19   0.4   4.15   4.		•									
3572   p1089   n1584   1.92   n1585   1.86   30   0.2   3.53   3.5   315mm	$\overline{}$										
Social   S											
2926         p536(2)(2)         MH-667         3.81         n808         3.77         10         0.431         5.03         4.98         315mm           3573         p1090         n1585         1.86         n1587         1.8         30         0.2         3.5         3.51         315mm           3576         p1093         n1590         1.68         n1592         1.62         30         0.2         3.38         3.3         315mm           3577         p1094         n1592         1.62         n1593         1.56         30         0.2         3.33         3.35         315mm           3578         p1095         n1593         1.56         n1594         1.5         30         0.20         3.33         3.35         315mm           3580         p1096         n1594         1.5         n1595         1.44         30         0.2         3.23         3.11         315mm           3581         p1096         n1594         1.5         n1597         1.38         n1597         1.38         n1597         1.38         n1597         1.38         n1597         1.38         n1597         1.38         n1599         1.32         30         0.2         3.1		•				_					
3573   p1090   n1585   1.86   n1587   1.8   30   0.2   3.5   3.51   315mm   3576   p1093   n1590   1.68   n1592   1.62   30   0.2   3.38   3.3   315mm   3541   p1063   n1551   1.57   n1552   1.45   30   0.4   4.39   4.3   200 mm   3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.33   3.35   315mm   3578   p1095   n1593   1.56   n1594   1.5   30   0.201   3.35   3.23   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3581   p1098   n1597   1.38   n1599   1.32   30   0.2   3.11   3.12   315mm   3581   p1098   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   2.98   2.91   315mm   3583   p1000   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3584   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1001   n1602   1.2   n1603   1.14   30   0.2   2.91   2.88   315mm   3585   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3544   p1069(2)   MH-168   0.79   n1557   0.73   15   0.405   4.26   4.22   200 mm   3540   p1069(2)   MH-168   0.79   n1557   0.73   15   0.405   4.26   4.22   200 mm   3587   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3587   p104   n1605   1.02   n1607   0.96   n1609   0.9   30   0.2   3.07   2.8   315mm   3587   p104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   3.15   3.00   3.72   315mm   3587   p104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   3.15   3.00   3.	$\overline{}$										
3576   p1093   n1590   1.68   n1592   1.62   30   0.2   3.38   3.3   315mm   3541   p1063   n1551   1.57   n1552   1.45   30   0.4   4.39   4.3   200 mm   3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.3   3.35   315mm   3578   p1095   n1593   1.56   n1594   1.5   30   0.201   3.35   3.23   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.21   3.11   315mm   3581   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3582   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3582   p1099   n1590   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1006   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3584   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3585   p102   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3583   p100   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3583   p1009   n1609   n1599   n1559   0.73   15   0.405   4.26   4.22   200 mm   3549   p1069(2)   MH-168   0.79   n1557   0.97   46   0.49   4.15   4.09   200 mm   3540   p1069(2)   MH-168   0.79   n1557   0.97   46   0.4   4.26   4.19   200 mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3557   p1094   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3550   p1079   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   250 mm   3550   p1079   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   250 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3557   p1094   n1687   3.8   n1559   0.73   19   0.4   4.15   4.22   200 mm   3576   p1072   n1562   0.57   n1564   0.45   30   0.48   7.56   7.35   250 mm   3576   p1072   n1562   0.57   n1564   0.45   30   0.48   7.56   7.3											
3541         p1063         n1551         1.57         n1552         1.45         30         0.4         4.39         4.3         200 mm           3577         p1094         n1592         1.62         n1593         1.56         30         0.2         3.3         3.35         315mm           3578         p1095         n1594         1.5         n1595         1.44         n30         0.2         3.23         3.11         315mm           3579         p1096         n1594         1.5         n1595         1.44         n1597         1.38         30         0.2         3.21         3.13         315mm           3580         p1097         n1595         1.44         n1597         1.38         30         0.2         3.11         312         315mm           3581         p1098         n1590         1.69         n1551         1.57         31         0.386         4.36         4.39         200 mm           3582         p1099         n1599         1.32         n1600         1.26         30         0.2         3.13         2.98         315mm           3584         p1069         n1595         1.21         n1556         1.09         30		•									
3577   p1094   n1592   1.62   n1593   1.56   30   0.2   3.3   3.35   315mm   3578   p1095   n1593   1.56   n1594   1.5   30   0.201   3.35   3.23   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3581   p1098   n1597   1.38   n1599   1.32   n1590   1.350   0.2   3.11   3.12   315mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1002   n1600   1.26   n1602   1.2   30   0.2   3.13   2.98   315mm   3584   p1006   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1010   n1600   1.26   n1602   1.2   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1010   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.98   2.98   315mm   3585   p1102   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3585   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3549   p1069(2)   MH-168   0.79   n1557   0.97   46   0.49   4.15   4.09   200 mm   3549   p1089(2)   MH-168   0.79   n1557   0.97   46   0.4   4.26   4.12   200 mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3587   p1094   n1605   1.02   n1607   0.96   n1609   0.9   30   0.58   3.86   3.69   250 mm   3587   p1104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315 mm   3587   p1091   n1587   1.8   n1588   1.74   3.9   0.154   3.51   3.48   315mm   3587   p1091   n1587   1.8   n1588   1.74   3.9   0.154   3.51   3.48   315mm   3587   p1091   n1587   1.8   n1588   1.74   3.9   0.154   3.51   3.48   315mm   3587   p1091   n1587   1.8   n1588   1.74   3.9   0.154   3.51   3.48   315mm   3587   p1094   n1587   2.6   n1564   0.45   3.0   0.4   4.09   3.95   200 mm   3574   p1091   n1587   1.8   n1588   1.74   3.9   0.154   3.51   3.48   315mm   3587   p1094   n1587   2.8   n1564   0.45   3.0   0.4   4.09   3.95   200 mm   3587   p1094   n1587   3.45   n1564   0.45   3.0   0.4   4.09   3.95   200 mm   358		•									
3578   p1095   n1593   1.56   n1594   1.5   30   0.201   3.35   3.23   315mm   3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3581   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3539   p1062   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3583   p1100   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3584   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.98   2.89   315mm   3585   p102   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3585   p1092   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3584   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3549   p1069(2)   MH-168   0.79   n1557   0.97   46   0.44   4.26   4.19   200 mm   3549   p1069(2)   MH-168   0.79   n1557   0.97   46   0.44   4.26   4.19   200 mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3587   p1004   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3552   p1072   n1562   0.55   n1564   0.45   30   0.44   4.09   3.95   200 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1074   n1662   0.55   n1564   0.45   30   0.44   4.09   3.95   200 mm   3576   p076   n1562   0.57   n1564   0.45   30   0.44   4.09   3.95   200 mm   3587   p076   n1562   0.57   n1564   0.45   30   0.44   4.09   3.95   200 mm   3587   p1072   n1562   0.57   n1564   0.45   30   0.44   4.09   3.95   200 mm   3587   p1072   n1562   0.57   n1564   0.45   30   0.48   7.56   7.55   250 mm   3587   p0.61   n1552   1.4											
3579   p1096   n1594   1.5   n1595   1.44   30   0.2   3.23   3.11   315mm   3580   p1097   n1595   1.44   n1597   1.38   30   0.2   3.11   3.12   315mm   3581   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3539   p1062   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1100   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3544   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3585   p1102   n1603   1.14   n1604   1.08   30   0.2   2.91   2.88   315mm   3553   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.86   3.69   3.72   315mm   3562   p1079   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   250 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1004   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3587   p1072   n1562   0.57   n1564   0.45   30   0.4   4.09   3.95   200 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1072   n1562   0.57   n1564   0.45   30   0.4   4.09   3.95   200 mm   3587   p1084   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1084   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1084   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1072   n1562   0.57   n1564   0.45   30   0.4   4.09   3.95   200 mm   3587   p1084   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   p1084   n1587   3.51   3.51		·									
3580   p1097   p1595   p1.44   p1597   p1.38   p1098   p1098   p1098   p1062   p1550   p1699   p1551   p1.57   p1600   p1550   p1699   p1590   p1590   p1590   p1600   p1590   p1600   p1600		•									
3581   p1098   n1597   1.38   n1599   1.32   30   0.2   3.12   3.13   315mm   3539   p1062   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1100   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3544   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1603   1.14   30   0.2   2.91   2.88   315mm   3585   p1102   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3553   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3494   p1069(2)   MH-168   0.79   n1557   0.97   46   0.4   4.26   4.19   200 mm   3554   C0-450   MH-168   0.79   n1557   0.97   46   0.4   4.26   4.19   200 mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3562   p1079   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   250 mm   2931   p540   n815   4.2   n813   4.09   30   0.352   5.41   5.31   315mm   3587   p1104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3550   CO-442   MH-755   0.65   n1559   0.73   19   0.4   4.15   4.22   200 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3552   p1072   n1562   0.57   n1564   0.45   30   0.4   4.09   3.95   200 mm   3576   CO-298   n2156   2.62   n2154   2.74   43   0.28   7.56   7.35   250 mm   3587   CO-516   n527   3.45   n529   3.31   n531   3.19   30   0.4   5.88   5.92   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554		•									
3539   p1062   n1550   1.69   n1551   1.57   31   0.386   4.36   4.39   200 mm   3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1100   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3544   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1603   1.14   30   0.2   2.91   2.88   315mm   3585   p1102   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3553   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3540   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3567   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3587   p1104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3587   p1104   n1605   1.02   n1607   0.96   36   0.165   2.97   3.07   315mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3576   0.0-442   MH-755   0.65   n1559   0.73   19   0.4   4.15   4.22   200 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3552   p1072   n1562   0.57   n1564   0.45   30   0.4   4.09   3.95   200 mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3587   0.0-516   n527   3.45   n529   3.31   34   0.4   5.88   5.92   200 mm   5276   0.0-516   n527   3.45   n529   3.31   34   0.4   5.88   5.92   200 mm   4025   p1486   n2157   2.54   n2156   2.62   30   0.28   7.48   7.56   250 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm	-	•									
3582   p1099   n1599   1.32   n1600   1.26   30   0.2   3.13   2.98   315mm   3583   p1100   n1600   1.26   n1602   1.2   30   0.2   2.98   2.91   315mm   3544   p1066   n1555   1.21   n1556   1.09   30   0.4   4.28   4.49   200 mm   3584   p1101   n1602   1.2   n1603   1.14   30   0.2   2.91   2.88   315mm   3585   p1102   n1603   1.14   n1604   1.08   30   0.2   2.88   2.89   315mm   3553   p1071(2)   MH-755   0.65   n1562   0.57   16   0.49   4.15   4.09   200 mm   3549   p1069(2)   MH-168   0.79   n1559   0.73   15   0.405   4.26   4.22   200 mm   3549   p1069(2)   MH-168   0.79   n1557   0.97   46   0.4   4.26   4.19   200 mm   3540   p1084   n1578   2.22   n1579   2.16   34   0.178   3.69   3.72   315mm   3562   p1079   n1571   2.7   n1572   2.53   30   0.588   3.86   3.69   250 mm   2931   p540   n815   4.2   n813   4.09   30   0.352   5.41   5.31   315mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3574   p1091   n1587   1.8   n1588   1.74   39   0.154   3.51   3.48   315mm   3576   0.0-298   n2156   2.62   n2154   2.74   43   0.28   7.56   7.35   250 mm   2903   p534   n807   3.52   n772   3.45   2.2   0.326   4.73   4.67   315mm   3587   0.0-516   n527   3.45   n529   3.31   34   0.4   5.88   5.92   200 mm   4025   p1486   n2157   2.54   n2156   2.62   30   0.28   7.48   7.56   250 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm   3542   p1064   n1552   1.45   n1554   1.33   39   0.306   4.3   4.18   200 mm											
3583         p1100         n1600         1.26         n1602         1.2         30         0.2         2.98         2.91         315mm           3544         p1066         n1555         1.21         n1556         1.09         30         0.4         4.28         4.49         200 mm           3584         p1101         n1602         1.2         n1603         1.14         30         0.2         2.91         2.88         315mm           3585         p1102         n1603         1.14         n1604         1.08         30         0.2         2.88         2.89         315mm           3553         p1071(2)         MH-755         0.65         n1562         0.57         16         0.49         4.15         4.09         200 mm           3549         p1069(2)         MH-168         0.79         n1559         0.73         15         0.405         4.26         4.22         200 mm           5464         CO-616         n1607         0.96         n1609         0.9         30         0.2         3.07         2.8         315mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178		•				_					
3544 p1066         n1555         1.21 n1556         1.09         30         0.4         4.28         4.49 200 mm           3584 p1101         n1602         1.2 n1603         1.14         30         0.2         2.91         2.88 315mm           3585 p1102         n1603         1.14 n1604         1.08         30         0.2         2.88         2.89 315mm           3553 p1071(2)         MH-755         0.65 n1562         0.57         16         0.49         4.15         4.09 200 mm           3549 p1069(2)         MH-168         0.79 n1559         0.73         15         0.405         4.26         4.22 200 mm           5464 CO-616         n1607         0.96 n1609         0.9         30         0.2         3.07         2.8 315mm           3554 CO-450         MH-168         0.79 n1557         0.97         46         0.4         4.26         4.19 200 mm           3567 p1084         n1578         2.22 n1579         2.16         34         0.178         3.69         3.72 315mm           3562 p1079         n1571         2.7 n1572         2.53         30         0.588         3.86         3.69 250 mm           2931 p540         n815         4.2 n813         4.09         30		•									
3584 p1101         n1602         1.2 n1603         1.14 30         0.2 2.91         2.88 315mm           3585 p1102         n1603         1.14 n1604         1.08 30         0.2 2.88 2.89 315mm           3553 p1071(2)         MH-755         0.65 n1562         0.57 16 0.49 4.15 4.09 200 mm           3549 p1069(2)         MH-168 0.79 n1559 0.73 15 0.405 4.26 4.22 200 mm           5464 CO-616 n1607 0.96 n1609 0.9 30 0.2 3.07 2.8 315mm           5354 CO-450 MH-168 0.79 n1557 0.97 46 0.4 4.26 4.19 200 mm           3567 p1084 n1578 2.22 n1579 2.16 34 0.178 3.69 3.72 315mm           3562 p1079 n1571 2.7 n1572 2.53 30 0.588 3.86 3.69 250 mm           2931 p540 n815 4.2 n813 4.09 30 0.352 5.41 5.31 315mm           3587 p1104 n1605 1.02 n1607 0.96 36 0.165 2.97 3.07 315mm           3550 CO-442 MH-755 0.65 n1559 0.73 19 0.4 4.15 4.22 200 mm           3574 p1091 n1587 1.8 n1588 1.74 39 0.154 3.51 3.48 315mm           3552 p1072 n1562 0.57 n1564 0.45 30 0.4 4.09 3.95 200 mm           2976 CO-298 n2156 2.62 n2154 2.74 43 0.28 7.56 7.35 250 mm           2970 p343 n807 3.52 n772 3.45 p22 3.31 34 0.4 5.88 5.92 200 mm           4025 p1486 n2157 2.54 n2156 2.62 30 0.28 7.48 7.56 250 mm           2707 p343 n529 3.31 n531 3.19 30 0.4 5.92 5.94 200 mm           3542 p1064 n1552 1.45 n1554 1.33 39 0.306 4.3 4.18 200 mm	$\overline{}$	•									
3585         p1102         n1603         1.14         n1604         1.08         30         0.2         2.88         2.89         315mm           3553         p1071(2)         MH-755         0.65         n1562         0.57         16         0.49         4.15         4.09         200 mm           3549         p1069(2)         MH-168         0.79         n1559         0.73         15         0.405         4.26         4.22         200 mm           5464         CO-616         n1607         0.96         n1609         0.9         30         0.2         3.07         2.8         315mm           5354         CO-450         MH-168         0.79         n1557         0.97         46         0.4         4.26         4.19         200 mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352		•									
3553         p1071(2)         MH-755         0.65         n1562         0.57         16         0.49         4.15         4.09         200 mm           3549         p1069(2)         MH-168         0.79         n1559         0.73         15         0.405         4.26         4.22         200 mm           5464         CO-616         n1607         0.96         n1609         0.9         30         0.2         3.07         2.8         315mm           5354         CO-450         MH-168         0.79         n1557         0.97         46         0.4         4.26         4.19         200 mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165		•									
3549         p1069(2)         MH-168         0.79         n1559         0.73         15         0.405         4.26         4.22         200 mm           5464         CO-616         n1607         0.96         n1609         0.9         30         0.2         3.07         2.8         315mm           5354         CO-450         MH-168         0.79         n1557         0.97         46         0.4         4.26         4.19         200 mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           3550         CO-442         MH-755         0.65         n1559         0.73         19         0.4 <t< td=""><td><math>\overline{}</math></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	$\overline{}$										
5464         CO-616         n1607         0.96         n1609         0.9         30         0.2         3.07         2.8         315mm           5354         CO-450         MH-168         0.79         n1557         0.97         46         0.4         4.26         4.19         200 mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.5											
5354         CO-450         MH-168         0.79         n1557         0.97         46         0.4         4.26         4.19         200 mm           3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3525         p1072         n1562         0.57         n1564         0.45         30         0.4         4.											
3567         p1084         n1578         2.22         n1579         2.16         34         0.178         3.69         3.72         315mm           3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.						_					
3562         p1079         n1571         2.7         n1572         2.53         30         0.588         3.86         3.69         250 mm           2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73											
2931         p540         n815         4.2         n813         4.09         30         0.352         5.41         5.31         315mm           3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88 <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td>		•				_					
3587         p1104         n1605         1.02         n1607         0.96         36         0.165         2.97         3.07         315mm           5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.4		•									
5350         CO-442         MH-755         0.65         n1559         0.73         19         0.4         4.15         4.22         200 mm           3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.48         7.56         250 mm           2707         p343         n529         3.31         n531         3.19         30         0.4         5.92 <td><math>\overline{}</math></td> <td></td>	$\overline{}$										
3574         p1091         n1587         1.8         n1588         1.74         39         0.154         3.51         3.48         315mm           3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.48         7.56         250 mm           2707         p343         n529         3.31         n531         3.19         30         0.4         5.92         5.94         200 mm           3542         p1064         n1552         1.45         n1554         1.33         39         0.306         4.3 <td></td> <td>·</td> <td>n1605</td> <td></td> <td></td> <td></td> <td></td> <td>0.165</td> <td></td> <td></td> <td></td>		·	n1605					0.165			
3552         p1072         n1562         0.57         n1564         0.45         30         0.4         4.09         3.95         200 mm           5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.48         7.56         250 mm           2707         p343         n529         3.31         n531         3.19         30         0.4         5.92         5.94         200 mm           3542         p1064         n1552         1.45         n1554         1.33         39         0.306         4.3         4.18         200 mm			MH-755	0.65	n1559	0.73	19	0.4	4.15	4.22	200 mm
5276         CO-298         n2156         2.62         n2154         2.74         43         0.28         7.56         7.35         250 mm           2903         p534         n807         3.52         n772         3.45         22         0.326         4.73         4.67         315mm           5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.48         7.56         250 mm           2707         p343         n529         3.31         n531         3.19         30         0.4         5.92         5.94         200 mm           3542         p1064         n1552         1.45         n1554         1.33         39         0.306         4.3         4.18         200 mm		•	n1587	1.8	n1588	1.74		0.154	3.51	3.48	315mm
2903       p534       n807       3.52       n772       3.45       22       0.326       4.73       4.67       315mm         5387       CO-516       n527       3.45       n529       3.31       34       0.4       5.88       5.92       200 mm         4025       p1486       n2157       2.54       n2156       2.62       30       0.28       7.48       7.56       250 mm         2707       p343       n529       3.31       n531       3.19       30       0.4       5.92       5.94       200 mm         3542       p1064       n1552       1.45       n1554       1.33       39       0.306       4.3       4.18       200 mm		·	n1562	0.57	n1564	0.45	30	0.4	4.09		
5387         CO-516         n527         3.45         n529         3.31         34         0.4         5.88         5.92         200 mm           4025         p1486         n2157         2.54         n2156         2.62         30         0.28         7.48         7.56         250 mm           2707         p343         n529         3.31         n531         3.19         30         0.4         5.92         5.94         200 mm           3542         p1064         n1552         1.45         n1554         1.33         39         0.306         4.3         4.18         200 mm	5276	CO-298	n2156	2.62	n2154	2.74	43	0.28	7.56	7.35	250 mm
4025       p1486       n2157       2.54       n2156       2.62       30       0.28       7.48       7.56       250 mm         2707       p343       n529       3.31       n531       3.19       30       0.4       5.92       5.94       200 mm         3542       p1064       n1552       1.45       n1554       1.33       39       0.306       4.3       4.18       200 mm	2903	p534	n807	3.52	n772	3.45	22	0.326	4.73	4.67	315mm
2707     p343     n529     3.31     n531     3.19     30     0.4     5.92     5.94     200 mm       3542     p1064     n1552     1.45     n1554     1.33     39     0.306     4.3     4.18     200 mm	5387	CO-516	n527	3.45	n529	3.31	34	0.4	5.88	5.92	200 mm
3542 p1064 n1552 1.45 n1554 1.33 39 0.306 4.3 4.18 200 mm	4025	p1486	n2157	2.54	n2156	2.62	30	0.28	7.48	7.56	250 mm
	2707	p343	n529	3.31	n531	3.19	30	0.4	5.92	5.94	200 mm
4026 p1487 n2158 2.44 n2157 2.54 35 0.28 7.46 7.48 250 mm	3542	p1064	n1552	1.45	n1554	1.33	39	0.306	4.3	4.18	200 mm
	4026	p1487	n2158	2.44	n2157	2.54	35	0.28	7.46	7.48	250 mm

	1									•
4398	p1788	n2592	2.37	n2594	2.46	23	0.4	7.76	7.87	200 mm
4027	p1488	n2159	2.37	n2158	2.44	25	0.28	7.54	7.46	250 mm
2708	p344	n531	3.19	n533	3.07	30	0.4	5.94	5.9	200 mm
4397	p1787	n2590	2.25	n2592	2.37	30	0.4	7.64	7.76	200 mm
4029	p1489	LS3	2.28	n2159	2.37	30	0.28	7.56	7.54	250 mm
2709	p345	n533	3.07	n534	2.98	23	0.4	5.9	5.86	200 mm
	p1491	n2163	6.2	n2162	6.29	30	0.28	7.43		250 mm
	p1492	n2164		n2163	6.2	30	0.282	7.47		250 mm
	p1786	n2588		n2590	2.25	30	0.4	7.59		200 mm
	p1785(2)	MH-12		n2588	2.13	15	0.4	7.72		200 mm
	CO-294	n2166		n2164	6.12	30	0.28	7.44		250 mm
	p1494	n2167		n2166	6.04	30	0.28	7.44		250 mm
	p1434 p1416	n1609		n2051	1	26	0.388	2.8		250 mm
	p1410 p1495			n2167	5.95	30	0.388	7.16		250 mm
	p1495 p1496	n2169 n2170		n2169	5.87	30		7.16		250 mm
							0.28			
	CO-606	MH-666		n811	3.97	41	0.302	5.06		315mm
	p1497	n2172		n2170	5.78	30	0.28	7.12		250 mm
	p1498	n2174		n2172	5.7	30	0.28	7.02		250 mm
	p1499	n2175		n2174	5.62	30	0.28	6.86		250 mm
	p1075(1)	n1567		MH-756	0.12	25	0.376	4.05		200 mm
	p1055(1)	n1540		MH-169	2.34	24	0.229	4.82		200 mm
	p1444	n2089		n2090	4.58	30	0.28	7.57		250 mm
3975	p1443	n2088	4.41	n2089	4.49	29	0.281	5.89	7.57	250 mm
2728	p361	n560	1.37	n561	1.31	22	0.28	5.76	5.78	250 mm
5322	CO-386	n2088	4.41	MH-120	4.29	43	0.28	5.89	6.42	250 mm
2730	p362	n561	1.31	n563	1.22	32	0.28	5.78	6.04	250 mm
5323	CO-388	MH-120	4.29	n2083	4.17	43	0.28	6.42	6.26	250 mm
3590	p1415	n2047	0.88	n1609	0.9	17	0.14	2.88	2.8	400mm
3939	p1414	n2045	0.83	n2047	0.88	30	0.14	2.5	2.88	400mm
5201	CO-154	n2083	4.17	n2082	4.08	33	0.28	6.26	6.36	250 mm
3938	p1413	n2044	0.79	n2045	0.83	30	0.14	2.34	2.5	400mm
2714	p349	n538	2.71	n540	2.59	28	0.423	5.85		200 mm
3937	p1412	n2042		n2044	0.79	30	0.14	2.22	2.34	400mm
3936	p1411	n2041	0.71	n2042	0.75	30	0.14	2.16	2.22	400mm
	p1438	n2080		n2082	4.08	30	0.28	6.62		250 mm
	CO-400	n2041		MH-749	0.65	43	0.14	2.16		400mm
	CO-402	MH-749		MH-747	0.6	36	0.14	2.24		400mm
	p1437	n2079		n2080	3.99	30	0.28	6.71		250 mm
	CO-340	MH-747		n2035	0.54	39	0.23	2.31		400mm
	CO-342	n2035		MH-743	0.51	22	0.14	2.35		400mm
	CO-542 CO-686	n783		WELL 2	-0.47	9	0.14	4.19		400mm
	p1436	n2078		n2079	3.91	30	0.14	6.78		250 mm
	CO-162	MH-743		n2079	0.46	36	0.28	2.28		400mm
		<b>-</b>								
	p1404	n2030		n2032	0.46	30	0.14	2.36		400mm
	p1080	n1572		n1574	2.4	30	0.423	3.69		250 mm
	CO-344	n2030		n2028	0.39	24	0.14	2.36		400mm
5321	CO-384	n2078	3.82	n2077	3.74	30	0.28	6.78	6.73	250 mm

3921 p1401 n2024 0.3 n2026 0.35 30 0.14 2.51 2.51 400mm 3963 p1434 n2076 3.66 n2077 3.74 30 0.28 6.71 6.73 250 mm 3920 p1399 n2021 0.22 n2022 0.26 30 0.14 2.31 2.69 400mm 3973 p1434 n2075 3.57 n2076 3.66 30 0.28 6.71 6.73 250 mm 3980 p1439 n2021 0.22 n2022 0.26 30 0.14 2.31 2.69 400mm 3981 p1433 n2075 3.57 n2076 3.66 30 0.279 6.93 6.71 250 mm 3961 p1432 n2074 3.49 n2075 3.57 n2076 3.66 30 0.279 6.93 6.71 250 mm 3961 p1433 n2075 3.57 n2076 3.66 30 0.28 7.54 6.93 250 mm 39861 p1432 n2074 3.49 n2075 3.57 30 0.28 7.54 6.93 250 mm 39861 p1431 n2072 3.41 n2074 3.49 30 0.28 7.54 6.93 250 mm 39861 p1431 n2072 3.41 n2074 3.49 30 0.28 7.99 7.54 250 mm 3959 p1430 n2071 3.32 n2072 3.41 30 0.28 6.48 7.99 250 mm 3959 p1439 n537 2.83 n538 2.71 30 0.28 6.48 7.99 250 mm 3957 p1429 n2069 3.24 n2071 3.32 30 0.28 6.67 6.48 250 mm 2713 p348 n537 2.83 n538 2.71 30 0.4 5.81 5.85 200 mm 2715 p350 n540 2.59 n541 2.47 n543 2.36 2.6 0.4 5.86 5.67 6.48 250 mm 2719 p353 n545 2.24 n547 2.11 34 0.4 5.66 5.67 6.64 250 mm 2719 p353 n545 2.24 n547 2.11 34 0.4 5.64 5.74 200 mm 2720 p354 n547 2.11 n549 2 26 0.4 5.74 5.73 200 mm 2720 p354 n547 2.11 n549 2 26 0.4 5.74 5.73 200 mm 2722 p355 n549 2 n551 1.88 n553 1.76 30 0.401 5.69 5.69 200 mm 2723 p356 n551 1.88 n553 1.76 30 0.401 5.69 5.69 200 mm 2724 p357 n553 1.76 n555 1.64 30 0.4 5.74 5.73 200 mm 2724 p357 n553 1.76 n555 1.64 30 0.4 5.74 5.79 200 mm 2725 p358 n555 1.64 n556 1.52 38 0.4 5.76 5.79 200 mm 2726 p354 n553 1.76 n555 1.64 30 0.4 5.76 5.79 200 mm 2727 p352 n550 n560 1.37 n556 1.52 38 0.4 5.76 5.79 200 mm 2739 p361 n1564 0.45 n1565 0.33 140 0.28 4.76 5.12 250 mm 2739 p361 n252 n566 1.53 n2065 1.77 n2065 1.7 25 0.28 5.51 5.22 250 mm 2739 p361 n252 n543 2.66 n545 2.24 4 n4 6.0 2.8 3.94 3.38 250 mm 2739 p379 p1425 n2063 1.62 n2065 1.7 20 0.28 4.76 5.12 250 mm 2739 p370 n1560 0.58 n2065 1.7 n2065 1.7 25 0.28 5.51 5.22 250 mm 2739 p360 p1424 n2062 1.53 n2069 1.41 45 0.28 4.76 4.32 250 mm 2739 p379 p1425 n2063 1.62 n2065 1.7 n2065 1.7 25 0.28 3.38 3.22 250 mm 2739 p379 n1450 n2062 1.53 n2069 1			1		ı						
3963 p1434   n2076   3.66 n2077   3.74   30   0.28   6.71   6.73   250 mm   3920 p1399   n2021   0.22 n2022   0.26   30   0.14   2.31   2.69   400mm   2731 p363   n563   n563   1.22   1510   1.14   28   0.28   6.04   6.95   250 mm   3962 p1433   n2075   3.57   n2076   3.66   30   0.279   6.93   6.71   250 mm   3961 p1432   n2074   3.49   n2075   3.57   30   0.28   7.54   6.93   250 mm   3960 p1431   n2072   3.41   n2074   3.49   30   0.28   7.54   6.93   250 mm   3959 p1430   n2071   3.32   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm   3959 p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   2713   p348   n537   2.83   n538   2.71   30   0.4   5.81   5.85   200 mm   3957 p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm   2719   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm   2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2722   p355   n549   2   n551   1.88   n553   1.76   n30   0.401   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.4   5.69   5.74   5.79   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.4   5.76   5.79   200 mm   3939   p1402   n2069   1.37   n556   1.52   30   0.4   5.77   5.79   200 mm   3939   p1402   n2060   n.176   n555   1.64   30   0.4   5.77   5.79   200 mm   3939   p1402   n2060   n.176   n555   1.64   30   0.4   5.77   5.79   200 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 m	-	•	n2024			0.35	30	0.14	2.51	2.51	400mm
3920   p1399   n2021   0.22   n2022   0.26   30   0.14   2.31   2.69   400mm   2731   p363   n563   1.22   l510   1.14   28   0.28   6.04   6.95   250 mm   3961   p1433   n2075   3.57   n2076   3.66   30   0.279   6.93   6.71   250 mm   3961   p1432   n2074   3.49   n2075   3.57   30   0.28   7.54   6.93   250 mm   3366   0.514   n534   2.98   n537   2.83   37   0.4   5.86   5.81   200 mm   3960   p1431   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm   3959   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   2731   p348   n537   2.83   n538   2.71   30   0.4   5.81   5.85   200 mm   2731   p348   n537   2.83   n538   2.71   30   0.49   5.81   5.85   200 mm   3957   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   3955   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   3855   0.512   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm   3855   0.512   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm   3825   0.354   n547   2.11   n549   2   26   0.4   5.64   5.74   200 mm   2720   p353   n545   2.24   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2722   p355   n549   2   n551   1.88   30   0.40   5.69   5.69   200 mm   2724   p353   n554   2.11   n549   2   26   0.4   5.74   5.79   200 mm   2724   p357   n559   1.64   n556   1.52   30   0.40   5.73   5.69   200 mm   2724   p357   n550   1.88   n555   1.64   30   0.40   5.69   5.79   200 mm   2724   p357   n556   1.52   30   0.4   5.76   5.79   200 mm   3534   0.75   0.	3921	p1400	n2022	0.26	n2024	0.3	30	0.14	2.69	2.51	400mm
2731   p363   n563   1.22   LS 10   1.14   28   0.28   6.04   6.95   250 mm     3962   p1433   n2075   3.57   n2076   3.66   30   0.279   6.93   6.71   250 mm     3961   p1432   n2074   3.49   n2075   3.57   30   0.28   7.54   6.93   250 mm     3960   p1431   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm     3960   p1431   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm     3960   p1431   n2072   3.41   n2074   3.49   30   0.28   6.48   7.99   250 mm     3975   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm     3975   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm     2715   p350   n540   2.59   n541   2.47   33   0.401   5.81   5.85   200 mm     3385   CO-512   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm     2719   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm     2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm     2721   p355   n549   2   n551   1.88   n553   1.76   n555   1.64   30   0.40   5.69   5.74   200 mm     2722   p355   n549   2   n551   1.88   n553   1.76   n555   1.64   30   0.44   5.69   5.74   200 mm     2724   p357   n553   1.76   n555   1.64   30   0.44   5.69   5.74   200 mm     2725   p388   n555   1.64   n556   1.52   38   0.4   5.76   5.79   200 mm     2724   p357   n556   1.59   n560   1.37   n556   1.52   38   0.4   5.76   5.79   200 mm     3939   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm     3930   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   5.54   2.20   250 mm     3951   p1425   n2066   n.25   n.2065   1.77   n2065   1.7   2.5   0.28   5.51   5.22   250 mm     3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   5.56   2.00 mm     3931   p1425   n2066   n.2584   1.24   L52   1.22   4   0.4   7.57   7   200 mm     3931   p1425   n2066   n.2584   1.24   L52   1.22   4   0.4   7.57   7   200 mm     3932   p1402   n2066   n.2584   1.24   L52   1.22   4   0.4   7.57   7   200 mm     3939   p1424   n	3963	p1434	n2076	3.66	n2077	3.74	30	0.28	6.71	6.73	250 mm
3962   p1433   n2075   3.57   n2076   3.66   30   0.279   6.93   6.71   250 mm   3961   p1432   n2074   3.49   n2075   3.57   30   0.28   7.54   6.93   250 mm   3960   p1431   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm   3959   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   3959   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   3957   p1429   n2069   3.24   n2071   3.32   30   0.28   6.67   6.48   250 mm   2713   p350   n540   2.59   n541   2.47   30   0.40   5.81   5.85   200 mm   3957   p1429   n2069   3.24   n2071   3.32   30   0.28   6.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm   3385   C0-512   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   2729   p354   n547   2.11   n549   2   26   0.4   5.64   5.74   200 mm   2722   p355   n549   2   n551   1.88   30   0.4   5.69   5.79   200 mm   2722   p355   n549   2   n551   1.88   30   0.40   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.4   5.69   5.69   200 mm   2725   p358   n555   1.64   n556   1.52   30   0.4   5.69   5.74   200 mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3923   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   2.50   mm   3950   p1425   n2063   1.62   n2065   1.77   n2065   1.77   2.08   5.67   5.64   2.00   mm   3532   0.038   n41-154   1.19   n2053   1.09   39   0.28   3.38   3.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   2.50   mm   3532   0.039   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   2.50   mm   3532   0.039   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   2.50   mm   3532   0.039   n313   4.09   n812   4.03   30   0.2	3920	p1399	n2021	0.22	n2022	0.26	30	0.14	2.31	2.69	400mm
3961   p1432   p12074   3.49   p12075   3.57   30   0.28   7.54   6.93   250 mm   5386   CO-514   n534   2.98   n537   2.83   37   0.4   5.86   5.81   200 mm   3959   p1430   p12071   3.32   p12072   3.41   30   0.28   6.48   7.99   7.54   250 mm   3959   p1430   p12071   3.32   p12072   3.41   30   0.28   6.48   7.99   250 mm   2713   p348   n537   2.83   n538   2.71   30   0.4   5.81   5.85   200 mm   2715   p350   n540   2.59   n541   2.47   3.32   30   0.28   5.67   6.48   250 mm   3957   p1429   p12069   3.24   p12071   3.32   30   0.28   5.67   6.48   250 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   4042   p1500   n2176   5.43   n547   2.11   n549   2   26   0.4   5.64   5.74   200 mm   2722   p355   n549   2   n551   1.88   n553   1.76   30   0.401   5.69   5.69   200 mm   2722   p355   n549   2   n551   1.88   n553   1.76   30   0.401   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.40   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   n556   1.52   30   0.4   5.74   5.73   200 mm   3554   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3554   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3933   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3933   p1424   n2062   1.53   n2063   1.62   n30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n30   n30   n28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n30   n28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2059   n2067   n2053   n208   n28   3.38   3.22   250 mm   3350   n377   n366   n366   n366   n366   n366   n366   n3	2731	p363	n563	1.22	LS 10	1.14	28	0.28	6.04	6.95	250 mm
\$386   \$\color{1}{c}\$   \$\color{1}{c}\$   \$134   \$2.98   \$1537   \$2.83   \$37   \$0.4   \$5.86   \$5.81   \$200 mm   \$3950   \$1430   \$10272   \$3.41   \$10274   \$3.49   \$30   \$0.28   \$7.99   \$7.54   \$250 mm   \$3959   \$1430   \$10271   \$3.32   \$102072   \$3.41   \$30   \$0.28   \$6.48   \$7.99   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.48   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$1500   \$1540   \$2.59   \$1541   \$2.47   \$30   \$0.401   \$5.81   \$5.86   \$200 mm   \$3958   \$0.515   \$1.541   \$2.47   \$1543   \$2.36   \$26   \$0.4   \$5.86   \$5.67   \$200 mm   \$2729   \$355   \$1.545   \$2.24   \$1547   \$2.11   \$34   \$0.4   \$5.64   \$5.74   \$200 mm   \$2722   \$355   \$1.549   \$2.11   \$134   \$0.4   \$5.64   \$5.74   \$200 mm   \$2722   \$355   \$1549   \$2.11   \$1549   \$2.26   \$0.4   \$5.74   \$5.73   \$200 mm   \$2722   \$355   \$1549   \$2.1551   \$1.88   \$30   \$0.4   \$5.69   \$5.69   \$200 mm   \$2724   \$357   \$1553   \$1.76   \$1555   \$1.64   \$30   \$0.4   \$5.69   \$5.69   \$200 mm   \$2724   \$357   \$1553   \$1.76   \$1555   \$1.64   \$30   \$0.4   \$5.69   \$5.74   \$200 mm   \$2725   \$358   \$1555   \$1.64   \$1556   \$1.52   \$30   \$0.4   \$5.76   \$5.79   \$200 mm   \$2325   \$358   \$1555   \$1.64   \$1565   \$0.33   \$41   \$0.296   \$3.95   \$3.97   \$200 mm   \$354   \$1073   \$11564   \$0.45   \$11565   \$0.33   \$41   \$0.296   \$3.95   \$3.97   \$200 mm   \$3938   \$1402   \$12026   \$0.35   \$1.0208   \$0.39   \$35   \$0.12   \$2.51   \$2.32   \$400mm   \$2593   \$0.42   \$1.24   \$1.24   \$1.25   \$1.26   \$1.25   \$	3962	p1433	n2075	3.57	n2076	3.66	30	0.279	6.93	6.71	250 mm
\$386   \$\color{1}{c}\$   \$\color{1}{c}\$   \$134   \$2.98   \$1537   \$2.83   \$37   \$0.4   \$5.86   \$5.81   \$200 mm   \$3950   \$1430   \$10272   \$3.41   \$10274   \$3.49   \$30   \$0.28   \$7.99   \$7.54   \$250 mm   \$3959   \$1430   \$10271   \$3.32   \$102072   \$3.41   \$30   \$0.28   \$6.48   \$7.99   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.28   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$12069   \$3.24   \$12071   \$3.32   \$30   \$0.48   \$5.67   \$6.48   \$250 mm   \$3957   \$1429   \$1500   \$1540   \$2.59   \$1541   \$2.47   \$30   \$0.401   \$5.81   \$5.86   \$200 mm   \$3958   \$0.515   \$1.541   \$2.47   \$1543   \$2.36   \$26   \$0.4   \$5.86   \$5.67   \$200 mm   \$2729   \$355   \$1.545   \$2.24   \$1547   \$2.11   \$34   \$0.4   \$5.64   \$5.74   \$200 mm   \$2722   \$355   \$1.549   \$2.11   \$134   \$0.4   \$5.64   \$5.74   \$200 mm   \$2722   \$355   \$1549   \$2.11   \$1549   \$2.26   \$0.4   \$5.74   \$5.73   \$200 mm   \$2722   \$355   \$1549   \$2.1551   \$1.88   \$30   \$0.4   \$5.69   \$5.69   \$200 mm   \$2724   \$357   \$1553   \$1.76   \$1555   \$1.64   \$30   \$0.4   \$5.69   \$5.69   \$200 mm   \$2724   \$357   \$1553   \$1.76   \$1555   \$1.64   \$30   \$0.4   \$5.69   \$5.74   \$200 mm   \$2725   \$358   \$1555   \$1.64   \$1556   \$1.52   \$30   \$0.4   \$5.76   \$5.79   \$200 mm   \$2325   \$358   \$1555   \$1.64   \$1565   \$0.33   \$41   \$0.296   \$3.95   \$3.97   \$200 mm   \$354   \$1073   \$11564   \$0.45   \$11565   \$0.33   \$41   \$0.296   \$3.95   \$3.97   \$200 mm   \$3938   \$1402   \$12026   \$0.35   \$1.0208   \$0.39   \$35   \$0.12   \$2.51   \$2.32   \$400mm   \$2593   \$0.42   \$1.24   \$1.24   \$1.25   \$1.26   \$1.25   \$	3961	p1432	n2074	3.49	n2075	3.57	30	0.28	7.54	6.93	250 mm
3950   p1431   n2072   3.41   n2074   3.49   30   0.28   7.99   7.54   250 mm   3959   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   3959   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.40   5.81   5.85   200 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm   3985   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   5.67   200 mm   2720   p353   n545   2.24   n547   2.11   n549   2   26   0.4   5.64   5.74   200 mm   2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2722   p355   n549   2   n551   1.88   30   0.401   5.69   5.69   200 mm   2723   p356   n551   1.88   n553   1.76   a35   3.176   a35   3.55   1.64   a30   0.4   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   a30   0.4   5.69   5.69   200 mm   2725   p358   n555   1.64   n556   1.52   38   0.4   5.76   5.79   200 mm   3554   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3554   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3951   p1425   n2063   1.62   n2065   1.77   n2065   1.7   30   0.28   5.16   5.22   250 mm   3951   p1425   n2063   1.62   n2065   1.7   30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2063   1.62   n2065   1.7   30   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62	5386	CO-514	n534	2.98	n537	2.83	37	0.4	5.86	5.81	200 mm
3959   p1430   n2071   3.32   n2072   3.41   30   0.28   6.48   7.99   250 mm   2713   p348   n537   2.83   n538   2.71   30   0.4   5.81   5.85   200 mm   3957   n1429   n2069   3.24   n2071   3.32   30   0.401   5.81   5.85   200 mm   2715   p350   n540   2.59   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   250 mm   2719   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm   2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2720   p355   n549   2   n551   1.88   30   0.401   5.69   5.69   200 mm   2722   p355   n549   2   n551   1.88   30   0.4   5.69   5.69   200 mm   2722   p355   n549   2   n551   1.88   30   0.40   5.69   5.69   200 mm   2724   p357   n553   1.76   n5555   1.64   30   0.401   5.69   5.69   200 mm   2724   p357   n553   1.76   n5555   1.64   30   0.4   5.74   5.79   200 mm   3554   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3950   p1424   n2062   1.53   n2065   1.7   2065   1.7   25   0.28   5.16   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   4.76   5.16   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   4.76   5.16   250 mm   3524   CO-390   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3528   CO-396   n2058   1.32   MH-154   1.19   46   0.28   3.94   3.38   250 mm   3559   p1077   n1569   -2.09   L54   -2.14   19   0.281   4.14   4.01   250 mm   3528   CO-396   m258   1.32   MH-154   1.19   n2053   1.09   39   0.28   3.46   4.57   5.75   2.00 mm   3559   p1077   n1569   -2.09   L54   -2.14   19   0.281   4.14   4.01   250 mm   3500   p1781   n2580   n566   n567   n503   n703   n0.2   n538   n313   n5250   n515	3960	p1431	n2072	3.41	n2074	<del> </del>	30	0.28	7.99	7.54	250 mm
2713   p348   n537   2.83   n538   2.71   30   0.4   5.81   5.85   200 mm   3957   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.85   200 mm   4042   p1500   n2176   5.43   n2175   5.53   40   0.244   6.6   6.86   5.67   200 mm   2720   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm   2720   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm   2720   p355   n549   2   n551   1.88   30   0.40   5.73   5.73   200 mm   2723   p356   n551   1.88   n553   1.76   n555   1.64   30   0.401   5.69   5.69   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.4   5.74   5.79   200 mm   2725   p358   n555   1.64   n556   1.52   30   0.4   5.74   5.79   200 mm   3934   n073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3950   p1424   n2062   1.53   n2065   1.7   25   0.28   5.51   5.22   250 mm   2717   p352   n543   2.36   n545   2.24   34   0.35   5.67   5.64   200 mm   3952   n540   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3950   p1424   n2062   1.53   n2063   1.62   30   0.28   4.76   4.32   250 mm   3528   CO-396   n2058   1.32   MH-154   1.19   46   0.28   3.94   3.38   250 mm   3559   p1077   n1569   -2.09   L54   -2.14   19   0.281   4.14   4.01   250 mm   3528   CO-396   n258   1.32   MH-154   1.19   46   0.28   3.94   3.38   250 mm   3559   p1077   n1569   -2.09   L54   -2.14   19   0.281   4.14   4.01   250 mm   3940   p1781   n2580   n566   7.06   n567   7.03   17   0.2   8.28   9.02   315mm   4391   p1782   n2581   6.29   n2582   6.41   30   0.4   7.55   7.52   00 mm   3940   n1417   n2051   1 n2053   1.09   33   0.25		•					30				
3957   p1429   n2069   3.24   n2071   3.32   30   0.28   5.67   6.48   250 mm   2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm   368   CO-512   n541   2.47   n543   2.36   26   0.4   5.86   6.66   6.86   250 mm   2719   p353   n545   2.24   n547   2.11   34   0.4   5.64   5.74   200 mm   2720   p354   n547   2.11   n549   2   26   0.4   5.74   5.73   200 mm   2722   p355   n549   2   n551   1.88   30   0.4   5.73   5.69   200 mm   2723   p356   n551   1.88   n553   1.76   30   0.401   5.69   5.74   200 mm   2724   p357   n553   1.76   n555   1.64   30   0.4   5.69   5.74   200 mm   2725   p358   n555   1.64   n556   1.52   30   0.4   5.74   5.79   200 mm   3354   p1073   n1564   0.45   n1565   0.33   41   0.296   3.95   3.97   200 mm   3923   p1402   n2026   0.35   n2028   0.39   35   0.12   2.51   2.32   400mm   3923   p1425   n2063   1.62   n2065   1.7   2.5   0.28   5.51   5.22   250 mm   3950   p1424   n2062   1.53   n2063   1.62   n2065   1.7   30   0.28   4.76   5.16   5.22   250 mm   2527   CO-396   n2058   1.32   MH-154   1.19   n2053   1.09   39   0.28   3.94   3.38   250 mm   2734   p365   n566   7.06   n567   7.03   1.62   0.28   3.94   3.38   250 mm   3559   p1077   n1569   2.29   IS4   2.24   4.4   4.5   0.28   3.94   3.38   250 mm   3959   p1424   n2062   1.53   n2063   1.62   n2065   1.7   0.28   3.94   3.38   250 mm   3959   p1427   n2068   1.32   MH-154   1.19   n2053   1.09   39   0.28   3.38   3.22   250 mm   3359   p1077   n1569   -2.09   IS4   -2.14   19   0.281   4.14   4.01   250 mm   3559   p1077   n1569   -2.09   IS4   -2.14   19   0.281   4.14   4.01   250 mm   3900   p1381   n2782   n2581   6.29   n2582   6.41   30   0.4   7.55   7.53   200 mm   3900   p1781   n2580   6.17   n2581   6.29   n2582   6.41   30   0.4   7.55   7.53   200 mm   3900   p1781   n2580   6.17   n2581   6.29   n2582   6.41   30   0.4   7.55   7.53   200 mm   3900   p1781   n2580   6.17   n2580   6.17   30   0.4   7.55   7.55   200 mm   3900   p1781   n2580   6.17   n2580   6.17   30	-	•							5.81		
2715   p350   n540   2.59   n541   2.47   30   0.401   5.81   5.86   200 mm	-	•									
S385   CO-512   n541   2.47   n543   2.36   26   0.4   5.86   5.67   200 mm		·									
4042         p1500         n2176         5.43         n2175         5.53         40         0.244         6.6         6.86         250 mm           2719         p353         n545         2.24         n547         2.11         34         0.4         5.64         5.74         200 mm           2720         p354         n547         2.11         n549         2         6.6         0.4         5.74         5.73         200 mm           2722         p355         n549         2         n551         1.88         30         0.4         5.73         5.69         200 mm           2722         p357         n553         1.76         n555         1.64         30         0.401         5.69         5.69         200 mm           2725         p358         n555         1.64         n556         1.52         30         0.4         5.74         5.79         200 mm           2725         p358         n555         1.64         n556         1.52         30         0.4         5.74         5.79         200 mm           3354         p1073         n1564         0.45         n1565         0.33         41         0.296         3.95         3.	-	•									
2719 p353         n545         2.24 n547         2.11         34         0.4         5.64         5.74 200 mm           2720 p354         n547         2.11 n549         2 26         0.4         5.74         5.73 200 mm           2722 p355         n549         2 n551         1.88 n553         1.76 30         0.401         5.69         5.69 200 mm           2724 p357         n553         1.76 n555         1.64 30         0.4         5.69         5.74 200 mm           2725 p358         n555         1.64 n556         1.52         30         0.4         5.74         5.79 200 mm           3384 CO-510         n560         1.37 n556         1.52         38         0.4         5.76         5.79 200 mm           3554 p1073         n1564         0.45 n1565         0.33         41         0.296         3.95         3.97 200 mm           3923 p1402         n2026         0.35 n2028         0.39         35         0.12         2.51         2.32 400mm           5293 CO-332         n2067         1.77 n2065         1.7         25         0.28         5.51         5.22 250 mm           3951 p1425         n263         1.62 n2065         1.7         30         0.28         5.16	_										
2720         p354         n547         2.11         n549         2         26         0.4         5.74         5.73         200 mm           2722         p355         n549         2         n551         1.88         30         0.4         5.73         5.69         200 mm           2723         p356         n551         1.88         n553         1.76         30         0.401         5.69         5.69         200 mm           2724         p357         n553         1.76         n555         1.64         30         0.4         5.69         5.74         200 mm           2725         p358         n555         1.64         n556         1.52         30         0.4         5.74         5.79         200 mm           384         CO-510         n560         1.37         n556         1.52         38         0.4         5.76         5.79         200 mm           3923         p1402         n2066         0.45         n1565         0.33         41         0.296         3.95         3.97         200 mm           3923         p1402         n2067         1.77         n2065         1.7         25         0.28         5.51         5.2		·		<u> </u>							
2722         p355         n549         2         n551         1.88         30         0.4         5.73         5.69         200 mm           2723         p356         n551         1.88         n553         1.76         30         0.401         5.69         5.69         200 mm           2724         p357         n553         1.76         n555         1.64         30         0.4         5.69         5.74         200 mm           2725         p358         n555         1.64         n556         1.52         30         0.4         5.76         5.79         200 mm           5384         CO-510         n560         1.37         n556         1.52         38         0.4         5.76         5.79         200 mm           3554         p1073         n1564         0.45         n1565         0.33         41         0.296         3.95         3.97         200 mm           3920         p1402         n2026         0.35         n2028         0.39         35         0.12         2.51         2.32         400 mm           5293         CO-332         n2067         1.77         n2065         1.7         25         0.28         5.51	-	•									
2723 p356         n551         1.88 n553         1.76         30         0.401         5.69         5.69 200 mm           2724 p357         n553         1.76 n555         1.64         30         0.4         5.69         5.74 200 mm           2725 p358         n555         1.64 n556         1.52         30         0.4         5.74         5.79 200 mm           5384 CO-510         n560         1.37 n556         1.52         38         0.4         5.76         5.79 200 mm           3554 p1073         n1564         0.45 n1565         0.33         41         0.296         3.95         3.97 200 mm           3923 p1402         n2026         0.35 n2028         0.39         35         0.12         2.51         2.32 400mm           5293 CO-332         n2067         1.77 n2065         1.7         25         0.28         5.51         5.22 250 mm           3950 p1424         n2063         1.62 n2065         1.7         30         0.28         5.16         5.22 250 mm           3950 p1424         n2062         1.53 n2063         1.62 30         0.28         4.76         5.16 250 mm           3717 p352         n543         2.36 n545         2.24         34         0.35		•									
2724 p357         n553         1.76 n555         1.64 30         0.4 5.69         5.74 200 mm           2725 p358 n555         1.64 n556         1.52 30         0.4 5.74         5.79 200 mm           5384 CO-510 n560         1.37 n556         1.52 38 0.4 5.76         5.79 200 mm           3554 p1073 n1564         0.45 n1565         0.33 41 0.296 3.95 3.97 200 mm           3923 p1402 n2026         0.35 n2028 0.39 35 0.12 2.51 2.32 400mm           5293 CO-332 n2067 1.77 n2065 1.7 25 0.28 5.51 5.22 250 mm           3951 p1425 n2063 1.62 n2065 1.7 30 0.28 5.16 5.22 250 mm           3950 p1424 n2062 1.53 n2063 1.62 n2065 1.7 30 0.28 4.76 5.16 250 mm           2717 p352 n543 2.36 n545 2.24 34 0.35 5.67 5.64 200 mm           5324 CO-390 n2062 1.53 n2059 1.41 45 0.28 4.76 4.32 250 mm           5327 CO-396 n2058 1.32 MH-154 1.19 46 0.28 3.94 3.38 250 mm           2913 p521 n787 2.74 n786 2.68 26 0.234 4.53 4.31 315mm           5328 CO-398 MH-154 1.19 n2053 1.09 39 0.28 3.38 3.22 250 mm           3559 p1077 n1569 -2.09 L54 -2.14 19 0.281 4.14 4.01 250 mm           2734 p365 n566 7.06 n567 7.03 17 0.2 8.28 9.02 315mm           5611 CO-696 n2584 1.24 L5 2 1.22 4 0.4 7.57 7 200 mm           2930 p539 n813 4.09 n812 4.03 n811 3.97 30 0.2 5.27 5.26 315mm           4391 p1782 n2581 6.29 n2582 6.41 30 0.4 7.55 7.53 200 mm           3940 p1781 n2580 6.17 n2581 6.29 n2580 6.17 n2581 6.29 30 0.4 7.6 7.55 200 mm	-	•									
2725 p358         n555         1.64 n556         1.52         30         0.4         5.74         5.79 200 mm           5384 CO-510         n560         1.37 n556         1.52         38         0.4         5.76         5.79 200 mm           3554 p1073         n1564         0.45 n1565         0.33         41         0.296         3.95         3.97 200 mm           3923 p1402         n2026         0.35 n2028         0.39         35         0.12         2.51         2.32 400mm           5293 CO-332         n2067         1.77 n2065         1.7         25         0.28         5.51         5.22 250 mm           3951 p1425         n2063         1.62 n2065         1.7         30         0.28         5.16         5.22 250 mm           3950 p1424         n2062         1.53 n2063         1.62         30         0.28         4.76         5.16 250 mm           2717 p352         n543         2.36 n545         2.24         34         0.35         5.67         5.64 200 mm           5324 CO-390         n2062         1.53 n2059         1.41         45         0.28         4.76         4.32 250 mm           5327 CO-396 n2058         1.32 MH-154         1.19         46         0.28		•									
5384         CO-510         n560         1.37         n556         1.52         38         0.4         5.76         5.79         200 mm           3554         p1073         n1564         0.45         n1565         0.33         41         0.296         3.95         3.97         200 mm           3923         p1402         n2026         0.35         n2028         0.39         35         0.12         2.51         2.32         400mm           5293         CO-332         n2067         1.77         n2065         1.7         25         0.28         5.51         5.22         250 mm           3951         p1425         n2063         1.62         n2065         1.7         30         0.28         5.16         5.22         250 mm           3950         p1424         n2062         1.53         n2063         1.62         30         0.28         4.76         5.16         250 mm           2717         p352         n543         2.36         n545         2.24         34         0.35         5.67         5.64         200 mm           5324         CO-390         n2062         1.53         n2059         1.41         45         0.28         4.7		•									
3554 p1073		•									
3923 p1402         n2026         0.35 n2028         0.39         35         0.12         2.51         2.32 400mm           5293 CO-332         n2067         1.77 n2065         1.7         25         0.28         5.51         5.22 250 mm           3951 p1425         n2063         1.62 n2065         1.7         30         0.28         5.16         5.22 250 mm           3950 p1424         n2062         1.53 n2063         1.62         30         0.28         4.76         5.16 250 mm           2717 p352         n543         2.36 n545         2.24         34         0.35         5.67         5.64 200 mm           5324 CO-390         n2062         1.53 n2059         1.41         45         0.28         4.76         4.32 250 mm           5327 CO-396         n2058         1.32 MH-154         1.19         46         0.28         3.94         3.38 250 mm           2913 p521         n787         2.74 n786         2.68         26         0.234         4.53         4.31 315mm           5328 CO-398         MH-154         1.19 n2053         1.09         39         0.28         3.38         3.22 250 mm           3559 p1077         n1569         -2.09 LS4         -2.14         19	-					+					
5293 CO-332         n2067         1.77         n2065         1.7         25         0.28         5.51         5.22         250 mm           3951 p1425         n2063         1.62         n2065         1.7         30         0.28         5.16         5.22         250 mm           3950 p1424         n2062         1.53         n2063         1.62         30         0.28         4.76         5.16         250 mm           2717 p352         n543         2.36         n545         2.24         34         0.35         5.67         5.64         200 mm           5324 CO-390         n2062         1.53         n2059         1.41         45         0.28         4.76         4.32         250 mm           5327 CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913 p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328 CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559 p1077         n1569 <t< td=""><td></td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		•									
3951         p1425         n2063         1.62         n2065         1.7         30         0.28         5.16         5.22         250 mm           3950         p1424         n2062         1.53         n2063         1.62         30         0.28         4.76         5.16         250 mm           2717         p352         n543         2.36         n545         2.24         34         0.35         5.67         5.64         200 mm           5324         CO-390         n2062         1.53         n2059         1.41         45         0.28         4.76         4.32         250 mm           5327         CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913         p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328         CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281 <td< td=""><td>-</td><td>•</td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td></td<>	-	•				_					
3950         p1424         n2062         1.53         n2063         1.62         30         0.28         4.76         5.16         250 mm           2717         p352         n543         2.36         n545         2.24         34         0.35         5.67         5.64         200 mm           5324         CO-390         n2062         1.53         n2059         1.41         45         0.28         4.76         4.32         250 mm           5327         CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913         p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328         CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281         4.14         4.01         250 mm           2734         p365         n566         7.06         n567         7.03         17         0.2         8.											
2717         p352         n543         2.36         n545         2.24         34         0.35         5.67         5.64         200 mm           5324         CO-390         n2062         1.53         n2059         1.41         45         0.28         4.76         4.32         250 mm           5327         CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913         p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328         CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281         4.14         4.01         250 mm           2734         p365         n566         7.06         n567         7.03         17         0.2         8.28         9.02         315mm           5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57<	$\overline{}$	•									
5324         CO-390         n2062         1.53         n2059         1.41         45         0.28         4.76         4.32         250 mm           5327         CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913         p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328         CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281         4.14         4.01         250 mm           2734         p365         n566         7.06         n567         7.03         17         0.2         8.28         9.02         315mm           5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57         7         200 mm           2930         p539         n813         4.09         n812         4.03         30         0.2         5.31		•									
5327         CO-396         n2058         1.32         MH-154         1.19         46         0.28         3.94         3.38         250 mm           2913         p521         n787         2.74         n786         2.68         26         0.234         4.53         4.31         315mm           5328         CO-398         MH-154         1.19         n2053         1.09         39         0.28         3.38         3.22         250 mm           3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281         4.14         4.01         250 mm           2734         p365         n566         7.06         n567         7.03         17         0.2         8.28         9.02         315mm           5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57         7         200 mm           2930         p539         n813         4.09         n812         4.03         30         0.2         5.31         5.27         315mm           2929         p538         n812         4.03         n811         3.97         30         0.2         5.27	-	•									
2913 p521         n787         2.74 n786         2.68         26 0.234         4.53         4.31 315mm           5328 CO-398 MH-154         1.19 n2053         1.09 39 0.28 3.38 3.22 250 mm           3559 p1077 n1569         -2.09 LS4         -2.14 19 0.281 4.14 4.01 250 mm           2734 p365 n566 7.06 n567 7.06 n567 7.03 17 0.2 8.28 9.02 315mm           5611 CO-696 n2584 1.24 LS 2 1.22 4 0.4 7.57 7 200 mm           2930 p539 n813 4.09 n812 4.03 30 0.2 5.31 5.27 315mm           2929 p538 n812 4.03 n811 3.97 30 0.2 5.27 5.26 315mm           4391 p1782 n2581 6.29 n2582 6.41 30 0.4 7.55 7.53 200 mm           3940 p1417 n2051 1 n2053 1.09 33 0.252 3.1 3.22 250 mm           4390 p1781 n2580 6.17 n2581 6.29 30 0.4 7.6 7.55 200 mm           4389 p1780 n2578 6.05 n2580 6.17 30 0.4 7.55 7.6 200 mm           2902 p533 n772 3.45 n804 3.4 24 0.2 4.67 4.66 315mm	-			<u> </u>							
5328 CO-398         MH-154         1.19 n2053         1.09         39         0.28         3.38         3.22 250 mm           3559 p1077         n1569         -2.09 LS4         -2.14         19         0.281         4.14         4.01 250 mm           2734 p365         n566         7.06 n567         7.03         17         0.2         8.28         9.02 315mm           5611 CO-696         n2584         1.24 LS 2         1.22         4         0.4         7.57         7 200 mm           2930 p539         n813         4.09 n812         4.03         30         0.2         5.31         5.27 315mm           2929 p538         n812         4.03 n811         3.97         30         0.2         5.27         5.26 315mm           4391 p1782         n2581         6.29 n2582         6.41         30         0.4         7.55         7.53 200 mm           3940 p1417         n2051         1 n2053         1.09         33         0.252         3.1         3.22 250 mm           4389 p1780         n2578         6.05 n2580         6.17         30         0.4         7.55         7.6 200 mm           2902 p533         n772         3.45 n804         3.4         24         0.2											
3559         p1077         n1569         -2.09         LS4         -2.14         19         0.281         4.14         4.01         250 mm           2734         p365         n566         7.06         n567         7.03         17         0.2         8.28         9.02         315mm           5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57         7         200 mm           2930         p539         n813         4.09         n812         4.03         30         0.2         5.31         5.27         315mm           2929         p538         n812         4.03         n811         3.97         30         0.2         5.27         5.26         315mm           4391         p1782         n2581         6.29         n2582         6.41         30         0.4         7.55         7.53         200 mm           3940         p1417         n2051         1         n2053         1.09         33         0.252         3.1         3.22         250 mm           4389         p1780         n2580         6.17         n2580         6.17         30         0.4         7.55	_										
2734         p365         n566         7.06         n567         7.03         17         0.2         8.28         9.02         315mm           5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57         7 200 mm           2930         p539         n813         4.09         n812         4.03         30         0.2         5.31         5.27         315mm           2929         p538         n812         4.03         n811         3.97         30         0.2         5.27         5.26         315mm           4391         p1782         n2581         6.29         n2582         6.41         30         0.4         7.55         7.53         200 mm           3940         p1417         n2051         1         n2053         1.09         33         0.252         3.1         3.22         250 mm           4390         p1781         n2580         6.17         n2581         6.29         30         0.4         7.6         7.55         200 mm           4389         p1780         n2578         6.05         n2580         6.17         30         0.4         7.55         7.6 <td< td=""><td>_</td><td></td><td><b>-</b></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td></td<>	_		<b>-</b>			_					
5611         CO-696         n2584         1.24         LS 2         1.22         4         0.4         7.57         7 200 mm           2930         p539         n813         4.09         n812         4.03         30         0.2         5.31         5.27         315mm           2929         p538         n812         4.03         n811         3.97         30         0.2         5.27         5.26         315mm           4391         p1782         n2581         6.29         n2582         6.41         30         0.4         7.55         7.53         200 mm           3940         p1417         n2051         1         n2053         1.09         33         0.252         3.1         3.22         250 mm           4390         p1781         n2580         6.17         n2581         6.29         30         0.4         7.6         7.55         200 mm           4389         p1780         n2578         6.05         n2580         6.17         30         0.4         7.55         7.6         200 mm           2902         p533         n772         3.45         n804         3.4         24         0.2         4.67         4.66 <td< td=""><td></td><td>•</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		•	-								
2930 p539         n813         4.09 n812         4.03         30         0.2         5.31         5.27 315mm           2929 p538         n812         4.03 n811         3.97 30         0.2         5.27         5.26 315mm           4391 p1782         n2581         6.29 n2582         6.41 30         0.4 7.55         7.53 200 mm           3940 p1417         n2051         1 n2053         1.09 33 0.252         3.1 3.22 250 mm           4390 p1781         n2580         6.17 n2581         6.29 30 0.4 7.6 7.55 200 mm           4389 p1780         n2578         6.05 n2580         6.17 30 0.4 7.55 7.6 200 mm           2902 p533         n772         3.45 n804         3.4 24 0.2 4.67 4.66 315mm	_	•					-				
2929         p538         n812         4.03         n811         3.97         30         0.2         5.27         5.26         315mm           4391         p1782         n2581         6.29         n2582         6.41         30         0.4         7.55         7.53         200 mm           3940         p1417         n2051         1         n2053         1.09         33         0.252         3.1         3.22         250 mm           4390         p1781         n2580         6.17         n2581         6.29         30         0.4         7.6         7.55         200 mm           4389         p1780         n2578         6.05         n2580         6.17         30         0.4         7.55         7.6         200 mm           2902         p533         n772         3.45         n804         3.4         24         0.2         4.67         4.66         315mm											
4391       p1782       n2581       6.29       n2582       6.41       30       0.4       7.55       7.53       200 mm         3940       p1417       n2051       1       n2053       1.09       33       0.252       3.1       3.22       250 mm         4390       p1781       n2580       6.17       n2581       6.29       30       0.4       7.6       7.55       200 mm         4389       p1780       n2578       6.05       n2580       6.17       30       0.4       7.55       7.6       200 mm         2902       p533       n772       3.45       n804       3.4       24       0.2       4.67       4.66       315mm	-	•									
3940     p1417     n2051     1     n2053     1.09     33     0.252     3.1     3.22     250 mm       4390     p1781     n2580     6.17     n2581     6.29     30     0.4     7.6     7.55     200 mm       4389     p1780     n2578     6.05     n2580     6.17     30     0.4     7.55     7.6     200 mm       2902     p533     n772     3.45     n804     3.4     24     0.2     4.67     4.66     315mm	-	•									
4390     p1781     n2580     6.17     n2581     6.29     30     0.4     7.6     7.55     200 mm       4389     p1780     n2578     6.05     n2580     6.17     30     0.4     7.55     7.6     200 mm       2902     p533     n772     3.45     n804     3.4     24     0.2     4.67     4.66     315mm		•									
4389     p1780     n2578     6.05     n2580     6.17     30     0.4     7.55     7.6     200 mm       2902     p533     n772     3.45     n804     3.4     24     0.2     4.67     4.66     315mm	-	•									
2902 p533 n772 3.45 n804 3.4 24 0.2 4.67 4.66 315mm		•	-								
	_	•									
2916 p524  n791   2.92 n790   2.86  29  0.205  4.48  4.42 315mm	_	•	<b>-</b>								
		•	<b>-</b>								
2924 p532 n804 3.4 n802 3.34 30 0.2 4.66 4.69 315mm			n804			3.34			4.66		
2923 p531 n802 3.34 n800 3.28 30 0.2 4.69 4.74 315mm	2923	p531	n802	3.34	n800	3.28	30	0.2	4.69	4.74	315mm
2922 p530 n800 3.28 n799 3.22 30 0.2 4.74 4.82 315mm	2922	p530	n800			3.22	30	0.2	4.74	4.82	315mm
2921 p529   n799   3.22 n798   3.16   30   0.2   4.82   4.76   315mm	2921	p529	n799	3.22	n798	3.16	30	0.2	4.82	4.76	315mm

2920	p528	n798	3.16	n796	3.1	30	0.2	4.76	4.56	315mm
2918	p527	n796	3.1	n794	3.04	30	0.2	4.56	4.53	315mm
2919	CO-174	MH-670	2.96	n794	3.04	41	0.2	4.51	4.53	315mm
5395	CO-532	MH-670	2.96	n791	2.92	19	0.2	4.51	4.48	315mm
2915	p523	n790	2.86	n789	2.8	30	0.2	4.42	4.44	315mm
2912	p520	n786	2.68	n784	2.62	30	0.2	4.31	4.21	315mm
4384	p1777	n2573	4.38	n2575	4.41	6	0.4	7.28	7.3	200 mm
5270	CO-286	n2573	4.38	n2570	4.21	44	0.4	7.28	7.54	200 mm
4381	p1774	n2569	4.09	n2570	4.21	30	0.4	7.51	7.54	200 mm
5192	CO-140	n2569	4.09	n2566	3.93	40	0.4	7.51	7.48	200 mm
5605	CO-692	n2021	-3.49	O-4	-3.52	22	0.14	2.31	2	400mm
2914	p522	n789	2.8	n787	2.74	35	0.171	4.44	4.53	315mm
3946	p1421	n2058	1.32	n2059	1.41	45	0.187	3.94	4.32	250 mm

## **APPENDIX- VIII-FLEX TABLE-MANHOLE**

					ı	1		1	
		Elevati		Elevatio			Hydraulic	Hydraulic	
		on	Elevatio	n	Flow	Flow	Grade	Grade	Depth
		(Groun	n (Rim)	(Invert)	(Total In)	(Total	Line (Out)	Line (In)	(Structure
ID	Label	d) (m)	(m)	(m)	(L/s)	Out) (L/s)		(m)	) (m)
30	n1	5.15	5.15	3.99	1.032	1.075	4.02	4.02	1.16
31	n2	5.49	5.49	4.37	0.387	0.43	4.39	4.02	1.12
39	n167	8.54	8.54	6.91	0.215	0.45	6.92	6.92	1.64
40	n168	8.21	8.21	6.98	0.213	0.235	7	7	1.23
41	n170	8.23	8.23	7.1	0.172	0.213	7.12	7.12	1.13
42	n170	8.4	8.4	7.23	0.123	0.172	7.12	7.12	1.17
43	n172	8.52	8.52	7.23	0.043	0.123	7.24	7.24	1.17
44	n174	9.01	9.01	7.4	0.043	0.080	7.41	7.41	1.12
45	n175	9.61	9.61	8.49	0.301	0.043	8.51	8.51	1.12
46	n177	10.24	10.24	9.12	0.301	0.344	9.13	9.13	1.12
47	n180	12.15	12.15	11.03	0.238	0.301	11.05	11.05	1.12
48		14.28		13.16			13.17		1.12
48	n181	16.07	14.28 16.07		0.172	0.215		13.17	
	n183			14.95	0.129	0.172	14.96	14.96	1.12
50	n185	17.89	17.89	16.77	0.086	0.129	16.78	16.78	1.12
51	n187	18.49	18.49	17.36	0.043	0.086	17.36	17.36	1.13
52	n188	18.78	18.78	17.66	0	0.043	17.67	17.67	1.12
54	n191	19.28	19.28	18.17	0	0.043	18.17	18.17	1.12
55	n193	18.88	18.88	17.76	0.043	0.086	17.77	17.77	1.12
56	n194	17.9	17.9	16.78	0.086	0.129	16.79	16.79	1.12
57	n196	17.13	17.13	16.01	0.559	0.602	16.03	16.03	1.12
58	n198	16.74	16.74	15.62	0.602	0.645	15.65	15.65	1.12
59	n199	15.98	15.98	14.86	0.645	0.688	14.88	14.88	1.12
60	n200	15.27	15.27	14.15	0.688	0.731	14.17	14.17	1.12
61	n201	14.85	14.85	13.73	0.731	0.774	13.75	13.75	1.12
62	n203	14.64	14.64	13.52	0.774	0.817	13.54	13.54	1.12
63	n205	14.13	14.13	13.01	0.817	0.86	13.04	13.04	1.12
64	n206	13.08	13.08	11.97	0.86	0.903	11.99	11.99	1.12
65	n208	11.49	11.49	10.38	0.903	0.946	10.4	10.4	1.12
66	n209	9.59	9.59	8.47	0.946	0.989	8.49	8.49	1.12
67	n211	7.68	7.68	6.56	0.989	1.032	6.59	6.59	1.12
69	n214	4.55	4.55	3.43	1.032	1.075	3.46	3.46	1.12
70	n216	4.97	4.97	3.31	1.075	1.118	3.34	3.34	1.66
71	n218	4.4	4.4	3.19	1.118	1.161	3.22	3.22	1.21
72	n220	4.09	4.09	2.97	1.161	1.204	3	3	1.12
73	n222	4.16	4.16	2.85	1.204	1.247	2.88	2.88	1.31
74	n223	4.06	4.06	0.46	5.154	5.197	0.53	0.53	3.6
75	n225	3.89	3.89	0.67	3.864	3.907	0.73	0.73	3.23
76	n227	4.1	4.1	0.79	3.821	3.864	0.85	0.85	3.31
77	n228	4.15	4.15	0.91	3.778	3.821	0.97	0.97	3.24

78	n229	4.15	4.15	1.03	3.735	3.778	1.09	1.09	3.12
79	n230	4.1	4.1	1.15	3.692	3.735	1.21	1.21	2.95
81	n233	4.23	4.23	1.32	3.649	3.692	1.38	1.38	2.91
82	n235	4.28	4.28	1.39	3.606	3.649	1.45	1.45	2.89
83	n236	4.22	4.22	1.51	3.563	3.606	1.57	1.57	2.72
84	n237	4.06	4.06	1.63	3.52	3.563	1.69	1.69	2.43
85	n238	4.05	4.05	1.67	3.477	3.52	1.73	1.73	2.38
86	n240	4.07	4.07	2.03	2.015	2.058	2.07	2.07	2.04
87	n241	3.97	3.97	2.15	1.972	2.015	2.2	2.2	1.82
88	n242	4.47	4.47	2.27	1.929	1.972	2.32	2.32	2.2
89	n244	5.03	5.03	2.39	1.886	1.929	2.44	2.44	2.64
90	n246	6.17	6.17	2.51	1.843	1.886	2.56	2.56	3.65
91	n247	7.01	7.01	2.63	1.8	1.843	2.67	2.67	4.38
92	n248	7.2	7.2	2.71	1.757	1.8	2.75	2.75	4.49
94	n252	6.37	6.37	2.87	1.628	1.671	2.91	2.91	3.5
95	n253	5.85	5.85	2.99	1.585	1.628	3.03	3.03	2.86
96	n254	5.63	5.63	3.11	1.542	1.585	3.15	3.15	2.52
97	n255	5.51	5.51	3.31	1.499	1.542	3.35	3.35	2.2
98	n257	5.54	5.54	3.47	0.295	0.338	3.49	3.49	2.07
99	n258	5.78	5.78	3.59	0.252	0.295	3.61	3.61	2.18
100	n260	5.96	5.96	3.71	0.209	0.252	3.73	3.73	2.25
101	n262	6.04	6.04	3.79	0.086	0.209	3.8	3.73	2.25
102	n264	5.66	5.66	3.95	4.251	4.294	4.02	4.02	1.71
103	n266	5.19	5.19	4.07	0	4.251	4.14	4.14	1.12
105	n270	4.41	4.41	-0.37	4.165	4.208	-0.31	-0.31	4.79
106	n272	4.25	4.25	-0.25	4.122	4.165	-0.19	-0.19	4.5
107	n274	4.12	4.12	-0.13	4.079	4.122	-0.07	-0.07	4.25
108	n275	4.16	4.16	-0.01	4.036	4.079	0.05	0.05	4.18
109	n276	4.32	4.32	0.11	3.993	4.036	0.17	0.17	4.21
110	n278	4.61	4.61	0.23	3.95	3.993	0.29	0.17	4.38
111	n280	4.67	4.67	0.35	3.907	3.95	0.41	0.41	4.33
112	n282	4.3	4.3	0.47	3.864	3.907	0.53	0.53	3.83
113	n283	4.31	4.31	0.59	3.821	3.864	0.65	0.65	3.73
114	n285	4.31	4.31	0.7	3.778	3.821	0.75	0.75	3.62
115	n287	4.28	4.28	3.08	1.069	1.112	3.11	3.11	1.2
116	n289	4.32	4.32	3.2	1.026	1.069	3.23	3.23	1.12
117	n291	4.63	4.63	3.32	0.983	1.026	3.35	3.35	1.32
118	n293	4.75	4.75	3.44	0.94	0.983	3.47	3.47	1.31
119	n294	4.68	4.68	3.56	0.897	0.94	3.59	3.59	1.12
120	n295	4.91	4.91	3.79	0.854	0.897	3.81	3.81	1.12
121	n296	5.44	5.44	4.32	0.811	0.854	4.34	4.34	1.12
122	n298	6.31	6.31	5.2	0.688	0.811	5.22	5.22	1.12
123	n300	7.6	7.6	6.48	0.805	0.848	6.51	6.51	1.12
124	n302	9.51	9.51	8.4	0.762	0.805	8.42	8.42	1.12
125	n304	11	11	9.88	0.719	0.762	9.91	9.91	1.12
126	n305	14.22	14.22	11.09	0.676	0.702	11.12	11.12	3.12
127	n307	12.28	12.28	11.16	0.633	0.676	11.18	11.18	1.12
	11307	12.20	12.20	11.10	0.055	0.070	11.10	11.10	1.14

128										
130	128	n310	17.19	17.19	16.07	0.59	0.633	16.09	16.09	1.12
131	129	n311	20.38	20.38	19.26	0.547	0.59	19.28	19.28	1.12
133	130	n312	23.65	23.65	22.53	0.461	0.504	22.55	22.55	1.12
134	131	n313	26.88	26.88	25.77	0.375	0.418	25.78	25.78	1.12
136         n485         7.94         7.94         6.82         0.258         0.301         6.84         6.84         1.12           137         n487         7.75         7.75         6.63         0.301         0.344         6.64         6.64         1.12           138         n491         7.32         7.32         6.2         0.387         0.43         6.26         6.22         6.22         1.12           139         n492         7.17         7.17         6.04         0.43         0.473         6.06         6.06         1.12           140         n495         7.17         7.17         5.8         0.473         0.516         5.82         5.82         1.36           141         n496         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n499         7.05         7.05         2.48         4.943         4.986         2.51         2.51         4.66           143         n501         6.81         6.81         2.33         4.986         5.029         2.4         2.4         4.48           144         n502         6.66         6.68         2.09         5.	133	n316	34.83	34.83	33.71	0.043	0.246	33.72	33.72	1.12
137         n487         7.75         7.75         6.63         0.301         0.344         6.64         6.64         1.12           138         n491         7.32         7.32         6.2         0.387         0.43         6.22         6.22         1.12           139         n492         7.17         7.17         7.17         5.8         0.473         0.516         5.82         5.82         1.36           140         n495         7.17         7.17         5.8         0.473         0.516         5.82         5.82         1.36           141         n496         6.99         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n496         6.99         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n496         7.05         2.48         4.48         1.44         n500         6.68         6.81         2.33         4.986         5.029         2.4         2.4         4.44         4.48           144         n502         6.68         6.66         1.29         5.072         2.28         2.28         4.47	134	n318	39.12	39.12	38	0	0.203	38.01	38.01	1.12
138         n491         7.32         7.32         6.2         0.387         0.43         6.22         6.22         1.12           139         n492         7.17         7.17         6.04         0.43         0.473         6.06         6.06         1.12           140         n495         7.17         7.17         5.8         0.473         0.516         5.82         5.82         1.36           141         n496         6.99         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n499         7.05         7.05         2.45         4.943         4.986         2.51         2.51         4.6           143         n501         6.81         6.81         2.33         4.986         5.029         2.4         2.4         4.48           144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         2.44         4.47           145         n504         6.6         6.6         2.09         5.072         5.15         2.16         2.04         2.04         4.49           147         n508         6.6         6.6 <td>136</td> <td>n485</td> <td>7.94</td> <td>7.94</td> <td>6.82</td> <td>0.258</td> <td>0.301</td> <td>6.84</td> <td>6.84</td> <td>1.12</td>	136	n485	7.94	7.94	6.82	0.258	0.301	6.84	6.84	1.12
139	137	n487	7.75	7.75	6.63	0.301	0.344	6.64	6.64	1.12
139	138	n491	7.32	7.32	6.2	0.387	0.43	6.22	6.22	1.12
140         n495         7.17         7.17         5.8         0.473         0.516         5.82         5.82         1.36           141         n496         6.99         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n499         7.05         7.05         2.45         4.943         4.986         2.51         2.51         4.6           143         n501         6.81         6.81         2.33         4.986         2.51         2.24         4.48           144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         4.47           145         n504         6.6         6.6         6.60         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.3	139	n492	7.17	7.17	6.04	0.43	0.473	6.06	6.06	1.12
141         n496         6.99         6.99         5.68         0.516         0.559         5.7         5.7         1.31           142         n499         7.05         7.05         2.45         4.943         4.986         2.51         2.51         4.6           143         n5001         6.81         6.81         2.33         4.986         5.029         2.4         2.4         4.48           144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         4.47           145         n504         6.6         6.6         2.09         5.072         5.115         2.16         2.16         4.51           146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.65         6.62         1.61         5.										
142         n499         7.05         7.05         2.45         4.943         4.986         2.51         2.51         4.6           143         n501         6.81         6.81         2.33         4.986         5.029         2.4         2.4         4.48           144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         4.47           145         n504         6.6         6.60         2.09         5.072         5.115         2.16         2.16         4.51           146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.65         1.69         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.55         1.49         5		<del> </del>								
143         n501         6.81         6.81         2.33         4.986         5.029         2.4         2.4         4.48           144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         4.47           145         n504         6.6         6.6         2.09         5.072         5.115         2.16         2.16         4.51           146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.33         5.373         1.68         1.68         5.02           150         n515         6.35         6.35         1.25         5.		-								
144         n502         6.68         6.68         2.21         5.029         5.072         2.28         2.28         4.47           145         n504         6.6         6.6         2.09         5.072         5.115         2.16         2.16         4.51           146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5										
145         n504         6.6         6.6         2.09         5.072         5.115         2.16         2.16         4.51           146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         1.13         5.502		<del>                                     </del>								
146         n506         6.46         6.46         1.97         5.158         5.201         2.04         2.04         4.49           147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5		<del>                                     </del>								
147         n508         6.52         6.52         1.85         5.201         5.244         1.92         1.92         4.67           148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         1.56         1.56         5.16           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706		-								
148         n510         6.63         6.63         1.73         5.244         5.287         1.8         1.8         4.91           149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         1.24         1.2         5.26           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.		<del>                                     </del>								
149         n511         6.62         6.62         1.61         5.33         5.373         1.68         1.68         5.02           150         n512         6.65         6.65         1.49         5.373         5.416         1.56         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96 <td< td=""><td></td><td>-</td><td></td><td></td><td></td><td><del> </del></td><td></td><td></td><td></td><td></td></td<>		-				<del> </del>				
150         n512         6.65         6.65         1.49         5.373         5.416         1.56         5.16           151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         <										
151         n513         6.5         6.5         1.37         5.416         5.459         1.44         1.44         5.13           152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71 <t< td=""><td></td><td><del> </del></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		<del> </del>								
152         n515         6.35         6.35         1.25         5.459         5.502         1.32         1.32         5.11           153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         <						<del> </del>				
153         n516         6.39         6.39         1.13         5.502         5.545         1.2         1.2         5.26           154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31 <td< td=""><td></td><td><del>                                     </del></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		<del>                                     </del>								
154         n517         6.48         6.48         1.01         5.545         5.588         1.08         1.08         5.47           155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286		<del> </del>								
155         n518         6.41         6.41         0.89         6.663         6.706         0.97         0.97         5.52           157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07 <td< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		-								
157         n520         6.19         6.19         5.07         6.792         6.835         5.15         5.15         1.12           158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
158         n521         6.28         6.28         4.96         6.878         6.921         5.04         5.04         1.32           160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.94         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         <										
160         n524         6.14         6.14         4.81         6.964         7.007         4.89         4.89         1.33           161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71										
161         n526         5.99         5.99         4.71         7.007         7.05         4.79         4.79         1.28           162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59										
162         n527         5.88         5.88         3.45         9.2         9.243         3.55         3.55         2.43           164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47		<del>                                     </del>								
164         n529         5.92         5.92         3.31         9.243         9.286         3.41         3.41         2.61           165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36					<u> </u>					
165         n531         5.94         5.94         3.19         9.286         9.329         3.29         3.29         2.75           166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11 <td></td> <td><del> </del></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		<del> </del>								
166         n533         5.9         5.9         3.07         9.329         9.372         3.17         3.17         2.83           167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11 </td <td></td>										
167         n534         5.86         5.86         2.98         10.06         10.103         3.08         3.08         2.89           169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2<		<del>                                     </del>								
169         n537         5.81         5.81         2.83         10.103         10.146         2.93         2.93         2.98           170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88		<del> </del>								
170         n538         5.85         5.85         2.71         10.146         10.189         2.81         2.81         3.14           171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76<		<del> </del>								
171         n540         5.81         5.81         2.59         10.189         10.232         2.69         2.69         3.22           172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64 </td <td></td> <td><del> </del></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		<del> </del>								
172         n541         5.86         5.86         2.47         10.232         10.275         2.58         2.58         3.39           173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1		-								
173         n543         5.67         5.67         2.36         10.275         10.318         2.47         2.47         3.3           174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1		<del> </del>								
174         n545         5.64         5.64         2.24         10.318         10.361         2.35         2.35         3.39           175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1	<b>———</b>									
175         n547         5.74         5.74         2.11         10.361         10.404         2.21         2.21         3.63           176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1		-								
176         n549         5.73         5.73         2         10.404         10.447         2.11         2.11         3.72           177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1		-								
177         n551         5.69         5.69         1.88         10.447         10.49         1.99         1.99         3.81           178         n553         5.69         5.69         1.76         10.49         10.533         1.87         1.87         3.92           179         n555         5.74         5.74         1.64         10.533         10.576         1.75         1.75         4.1		-			2.11					
178     n553     5.69     5.69     1.76     10.49     10.533     1.87     1.87     3.92       179     n555     5.74     5.74     1.64     10.533     10.576     1.75     1.75     4.1	176	n549	5.73	5.73	2		10.447	2.11	2.11	3.72
179 n555 5.74 5.74 1.64 10.533 10.576 1.75 1.75 4.1	177	n551	5.69	5.69	1.88	10.447	10.49	1.99	1.99	3.81
	178	n553	5.69	5.69	1.76	10.49	10.533	1.87	1.87	3.92
180 n556 5.79 5.79 1.52 10.576 10.619 1.63 1.63 4.26	179	n555	5.74	5.74	1.64	10.533	10.576	1.75	1.75	4.1
	180	n556	5.79	5.79	1.52	10.576	10.619	1.63	1.63	4.26

182	n560	5.76	5.76	1.37	14.875	14.918	1.5	1.5	4.39
183	n561	5.78	5.78	1.31	14.918	14.961	1.44	1.44	4.47
184	n563	6.04	6.04	1.22	15.219	15.262	1.35	1.35	4.82
186	n566	8.28	8.28	7.06	0	27.55	7.23	7.23	1.22
187	n567	9.02	9.02	7.03	27.593	27.636	7.16	7.16	1.99
188	n568	9.62	9.62	8.51	0	0.043	8.51	8.51	1.12
189	n569	10.76	10.76	9.64	0	0.043	9.65	9.65	1.12
190	n571	10.67	10.67	9.55	0.043	0.086	9.56	9.56	1.12
191	n573	9.72	9.72	8.61	0.086	3.784	8.66	8.66	1.12
196	n579	5.58	5.58	-0.07	5.368	5.411	0	0	5.64
197	n581	5.5	5.5	0.05	5.325	5.368	0.12	0.12	5.45
198	n582	5.45	5.45	0.17	5.282	5.325	0.24	0.24	5.28
199	n583	5.42	5.42	0.29	5.239	5.282	0.36	0.36	5.13
200	n584	5.39	5.39	0.41	5.196	5.239	0.48	0.48	4.98
201	n586	5.47	5.47	0.53	5.153	5.196	0.6	0.6	4.94
202	n588	5.46	5.46	0.56	5.11	5.153	0.63	0.63	4.89
203	n590	5.47	5.47	1.82	2.641	2.684	1.87	1.87	3.65
204	n592	5.61	5.61	1.94	2.598	2.641	1.99	1.99	3.67
205	n593	5.68	5.68	2.06	2.365	2.598	2.11	2.11	3.61
206	n594	5.76	5.76	2.13	2.452	2.495	2.18	2.18	3.62
207	n595	5.7	5.7	2.18	2.366	2.409	2.23	2.23	3.51
208	n596	5.67	5.67	2.3	2.323	2.366	2.35	2.35	3.37
209	n597	5.77	5.77	2.42	2.28	2.323	2.47	2.47	3.35
210	n598	5.81	5.81	2.54	2.194	2.237	2.59	2.59	3.27
211	n600	5.88	5.88	2.66	2.065	2.108	2.71	2.71	3.22
212	n602	5.89	5.89	2.78	2.022	2.065	2.83	2.83	3.11
213	n604	5.87	5.87	2.9	1.849	2.022	2.95	2.95	2.97
214	n606	5.94	5.94	3.02	1.806	1.979	3.07	3.07	2.92
215	n610	6	6	3.18	1.873	1.916	3.22	3.22	2.82
216	n614	5.78	5.78	3.36	1.185	1.228	3.39	3.39	2.43
217	n616	5.47	5.47	3.5	1.142	1.185	3.53	3.53	1.97
218	n617	5.48	5.48	3.62	1.099	1.142	3.65	3.65	1.86
219	n618	5.24	5.24	3.74	0.946	1.099	3.77	3.77	1.5
220	n620	4.94	4.94	3.82	0.903	1.046	3.85	3.85	1.12
240	n647	8.62	8.62	7.5	0.344	0.387	7.52	7.52	1.12
241	n648	8.25	8.25	7.13	0.387	0.43	7.15	7.15	1.12
242	n650	8.61	8.61	7.04	0.43	0.473	7.06	7.06	1.56
243	n651	7.7	7.7	6.58	0.516	0.559	6.6	6.6	1.12
244	n654	7.06	7.06	5.79	0.602	0.645	5.81	5.81	1.27
245	n656	6.76	6.76	5.64	0.688	0.731	5.67	5.67	1.12
246	n657	6.79	6.79	5.52	0.731	0.774	5.55	5.55	1.27
247	n659	6.7	6.7	5.4	0.774	0.817	5.43	5.43	1.3
248	n660	6.79	6.79	5.28	0.86	0.903	5.31	5.31	1.51
249	n663	6.52	6.52	5.05	1.032	1.075	5.08	5.08	1.47
250	n664	6.41	6.41	4.93	1.075	1.118	4.96	4.96	1.48
251 252	n666	6.24	6.24	4.81	1.118	1.161	4.85	4.85	1.42
	n667	6.18	6.18	4.68	1.161	1.204	4.72	4.72	1.49

253	n669	6.11	6.11	4.56	1.204	1.247	4.6	4.6	1.55
254	n671	5.97	5.97	4.45	1.72	1.763	4.49	4.49	1.53
255	n672	17.27	17.27	16.15	0.387	0.43	16.17	16.17	1.12
256	n674	18.79	18.79	17.67	0.344	0.387	17.69	17.69	1.12
258	n676	19.31	19.31	17.97	0.215	0.258	17.99	17.99	1.34
259	n678	19.53	19.53	18.09	0.172	0.215	18.11	18.11	1.44
260	n679	19.89	19.89	18.21	0.129	0.172	18.23	18.23	1.67
261	n680	19.38	19.38	18.26	0.086	0.129	18.27	18.27	1.12
262	n682	19.94	19.94	18.82	0.043	0.086	18.83	18.83	1.12
263	n683	20.52	20.52	19.4	0	0.043	19.41	19.41	1.12
264	n684	20.65	20.65	19.53	0	0.043	19.54	19.54	1.12
265	n686	20.34	20.34	19.22	0.043	0.086	19.23	19.23	1.12
266	n687	19.29	19.29	18.17	0.129	0.172	18.18	18.18	1.12
267	n689	16.84	16.84	15.72	0.172	0.215	15.73	15.73	1.12
268	n690	12.07	12.07	10.95	0.172	0.213	10.97	10.97	1.12
269	n691	8.38	8.38	7.27	0.301	0.344	7.28	7.28	1.12
270				5.73		0.344		5.75	
270	n692 n694	6.85 6.22	6.85 6.22	5.73	0.344	0.387	5.75 5.11	5.75	1.12 1.12
-									1.12
272	n696	5.95	5.95	4.41	1.763	1.806	4.45	4.45	
273	n698	5.83	5.83	4.29	1.806	1.849	4.33	4.33	1.54
274	n699	5.88	5.88	4.17	1.849	1.892	4.22	4.22	1.71
275	n700	5.89	5.89	4.05	1.892	1.935	4.1	4.1	1.84
276	n701	5.8	5.8	3.93	1.935	1.978	3.98	3.98	1.87
277	n703	5.8	5.8	3.81	1.978	2.021	3.86	3.86	1.99
278	n704	5.75	5.75	3.69	2.021	2.064	3.74	3.74	2.06
279	n706	5.71	5.71	3.58	2.064	2.107	3.62	3.62	2.13
322	n772	4.67	4.67	3.45	28.066	28.109	3.63	3.63	1.22
323	n773	4.07	4.07	0.37	5.197	5.24	0.44	0.44	3.7
324	n774	4.21	4.21	0.25	5.24	5.283	0.32	0.32	3.96
325	n775	4.27	4.27	0.13	5.283	5.326	0.2	0.2	4.13
326	n776	4.16	4.16	0.01	5.326	5.369	0.09	0.09	4.15
327	n780	4.21	4.21	-0.22	5.412	5.455	-0.15	-0.15	4.43
328	n782	4.22	4.22	-0.34	5.455	5.498	-0.26	-0.26	4.56
329	n783	4.19	4.19	-0.46	34.209	34.252	-0.28	-0.28	4.65
330	n784	4.21	4.21	2.62	28.668	28.711	2.75	2.75	1.59
331	n786	4.31	4.31	2.68	28.625	28.668	2.86	2.86	1.63
332	n787	4.53	4.53	2.74	28.582	28.625	2.93	2.93	1.79
333	n789	4.44	4.44	2.8	28.539	28.582	2.99	2.99	1.64
334	n790	4.42	4.42	2.86	28.496	28.539	3.05	3.05	1.56
335	n791	4.48	4.48	2.92	28.453	28.496	3.11	3.11	1.56
336	n794	4.53	4.53	3.04	28.367	28.41	3.23	3.23	1.49
337	n796	4.56	4.56	3.1	28.324	28.367	3.28	3.28	1.47
338	n798	4.76	4.76	3.16	28.281	28.324	3.34	3.34	1.61
339	n799	4.82	4.82	3.22	28.238	28.281	3.4	3.4	1.61
340	n800	4.74	4.74	3.28	28.195	28.238	3.46	3.46	1.46
341	n802	4.69	4.69	3.34	28.152	28.195	3.52	3.52	1.36
342	n804	4.66	4.66	3.4	28.109	28.152	3.58	3.58	1.26

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343	n807	4.73	4.73	3.52	28.023	28.066	3.7	3.7	1.22
344	n808	4.98	4.98	3.77	27.98	28.023	3.9	3.9	1.22
346	n811	5.26	5.26	3.97	27.851	27.894	4.13	4.13	1.29
347	n812	5.27	5.27	4.03	27.808	27.851	4.21	4.21	1.23
348	n813	5.31	5.31	4.09	27.765	27.808	4.27	4.27	1.22
349	n815	5.41	5.41	4.2	27.722	27.765	4.35	4.35	1.22
350	n816	5.67	5.67	4.45	27.679	27.722	4.59	4.59	1.22
351	n817	6.45	6.45	5.23	27.636	27.679	5.37	5.37	1.22
385	n865	4.35	4.35	1.79	1.376	1.419	1.82	1.82	2.57
386	n866	4.66	4.66	1.91	1.333	1.376	1.94	1.94	2.75
387	n868	4.94	4.94	2.02	1.247	1.29	2.06	2.06	2.92
388	n870	5.15	5.15	2.14	1.204	1.247	2.18	2.18	3.01
389	n872	4.96	4.96	2.26	1.161	1.204	2.3	2.3	2.7
390	n873	5.16	5.16	2.38	1.118	1.161	2.41	2.41	2.77
391	n875	5.33	5.33	2.56	1.032	1.075	2.54	2.54	2.82
392	n877	5.61	5.61	2.62	0.989	1.073	2.65	2.65	2.82
393	n878	5.71	5.71	2.02	0.946	0.989	2.03	2.03	2.99
394	n880	5.74	5.74	2.74	0.940	0.989	2.89	2.77	2.88
395	n882	5.85	5.85	2.98	0.903	0.940	3	3	2.87
					0.80	0.903	3.1		
396	n884	6.11	6.11	3.08				3.1	3.04
397	n885	6.04	6.04	3.2	0.645	0.688	3.22	3.22	2.84
398	n886	6.59	6.59	3.32	0.602	0.645	3.34	3.34	3.27
399	n887	7.38	7.38	3.44	0.559	0.602	3.46	3.46	3.95
400	n888	8.93	8.93	3.52	0.473	0.516	3.54	3.54	5.41
401	n889	9.02	9.02	3.64	0.43	0.473	3.66	3.66	5.38
402	n891	8.34	8.34	3.76	0.258	0.301	3.77	3.77	4.58
403	n893	7.87	7.87	3.88	0.215	0.258	3.89	3.89	3.99
404	n894	6.7	6.7	3.98	0.129	0.172	3.99	3.99	2.72
405	n896	5.9	5.9	4.1	0.086	0.129	4.11	4.11	1.8
406	n899	12.63	12.63	11.51	0	0.043	11.52	11.52	1.12
407	n900	15.19	15.19	14.07	0	0.043	14.07	14.07	1.12
408	n901	9.28	9.28	8.17	0.086	0.129	8.18	8.18	1.12
409	n902	6.83	6.83	5.71	0.129	0.172	5.72	5.72	1.12
410	n903	6.18	6.18	5.06	0.172	0.215	5.07	5.07	1.12
412	n906	6.55	6.55	5.43	0	0.043	5.44	5.44	1.12
413	n907	6.42	6.42	5.13	0.043	0.086	5.14	5.14	1.29
414	n909	5.88	5.88	4.76	0.086	0.129	4.77	4.77	1.12
415	n910	5.36	5.36	4.19	0.473	0.516	4.21	4.21	1.17
416	n911	5.16	5.16	3.79	1.118	1.161	3.82	3.82	1.37
417	n912	5.15	5.15	3.91	1.075	1.118	3.94	3.94	1.24
419	n918	5.41	5.41	4.29	0.301	0.344	4.31	4.31	1.12
420	n919	5.89	5.89	4.77	0.258	0.301	4.79	4.79	1.12
421	n920	6.61	6.61	5.49	0.215	0.258	5.5	5.5	1.12
422	n921	7.23	7.23	6.11	0.172	0.215	6.12	6.12	1.12
423	n923	8.61	8.61	6.91	0.129	0.172	6.93	6.93	1.7
425	n926	13.98	13.98	12.86	0	0.043	12.87	12.87	1.12
427	n929	13.46	13.46	12.34	0	0.043	12.35	12.35	1.12
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428	n931	11.74	11.74	10.62	0.086	0.129	10.63	10.63	1.12
441	n954	4.08	4.08	0.81	2.623	2.666	0.86	0.86	3.26
442	n956	4.21	4.21	0.93	2.58	2.623	0.98	0.98	3.27
443	n958	4.37	4.37	1.05	2.537	2.58	1.1	1.1	3.32
444	n959	4.45	4.45	1.17	2.494	2.537	1.22	1.22	3.28
445	n960	4.46	4.46	1.29	2.451	2.494	1.34	1.34	3.16
446	n962	4.37	4.37	1.41	2.408	2.451	1.46	1.46	2.95
448	n964	4.55	4.55	1.65	2.322	2.365	1.7	1.7	2.89
449	n966	4.52	4.52	1.77	2.279	2.322	1.82	1.82	2.74
450	n968	4.52	4.52	1.89	2.236	2.279	1.94	1.94	2.63
451	n969	4.42	4.42	2.01	2.15	2.193	2.06	2.06	2.41
452	n971	4.46	4.46	2.13	2.107	2.15	2.18	2.18	2.32
453	n973	4.43	4.43	2.25	1.978	2.021	2.3	2.3	2.18
454	n974	4.46	4.46	2.37	1.892	1.935	2.41	2.41	2.08
455	n976	4.39	4.39	2.48	1.806	1.849	2.52	2.52	1.91
456	n977	4.44	4.44	2.65	1.72	1.763	2.69	2.69	1.8
457	n978	4.45	4.45	2.77	1.677	1.72	2.81	2.81	1.68
458	n981	4.52	4.52	2.91	1.634	1.677	2.95	2.95	1.61
459	n983	4.73	4.73	3.16	0.688	0.731	3.18	3.18	1.57
460	n984	4.76	4.76	3.28	0.602	0.645	3.3	3.3	1.48
461	n985	4.82	4.82	3.4	0.559	0.602	3.42	3.42	1.42
462	n986	4.78	4.78	3.52	0.535	0.559	3.54	3.54	1.26
463	n987	4.77	4.78	3.64	0.473	0.516	3.66	3.66	1.13
464	n988	4.77	4.77	3.76	0.473	0.473	3.78	3.78	1.13
465	n990	5.01	5.01	3.89	0.344	0.473	3.78	3.78	1.12
466	n992	5.31	5.31	4.19	0.344	0.344	4.21	4.21	1.12
467	n994	5.72	5.72	4.61	0.258	0.301	4.62	4.62	1.12
468	n996	6.73	6.73	5.61	0.238	0.258	5.62	5.62	1.12
469	n997	8	8	6.88	0.213	0.238	6.9	6.9	1.12
470	n999	9.23	9.23	8.12	0.172	0.213	8.13	8.13	1.12
	n1000	11.34	11.34	10.23	0.129	0.172	10.24		1.12
4/1 472	n1000	13.56	13.56	12.44	0.043	0.129	12.45	10.24 12.45	1.12
472		<b>-</b>	11.74		0.043	-			
474	n1004 n1006	9.31	9.31	10.62 8.2	0.086	0.043 0.129	10.62 8.2	10.62 8.2	1.12 1.12
476	n1007	8.09	8.09	6.97	0.129	0.172	6.99	6.99	1.12
477	n1009	6.71	6.71	5.59	0.172	0.215	5.6	5.6	1.12
478	n1010	5.91	5.91	4.79	0.215	0.258	4.81	4.81	1.12
479	n1012	5.51	5.51	4.39	0.258	0.301	4.4	4.4	1.12
480	n1013	5.53	5.53	4.27	0.301	0.344	4.29	4.29	1.26
481	n1014	5.67	5.67	4.15	0.344	0.387	4.17	4.17	1.52
482	n1015	5.62	5.62	4.01	0.473	0.516	4.03	4.03	1.61
483	n1018	5.64	5.64	3.78	0.559	0.602	3.81	3.81	1.86
485	n1022	11.91	11.91	10.79	0	0.043	10.8	10.8	1.12
486	n1023	10.69	10.69	9.57	0.043	0.086	9.58	9.58	1.12
487	n1024	9.66	9.66	8.54	0.086	0.129	8.55	8.55	1.12
488	n1026	11.22	11.22	8.41	0.129	0.172	8.42	8.42	2.81
489	n1027	12.68	12.68	8.29	0.172	0.215	8.3	8.3	4.39

490	n1029	12.99	12.99	8.27	0.215	0.258	8.28	8.28	4.73
491	n1031	12.01	12.01	8.15	0.258	0.301	8.17	8.17	3.86
492	n1032	9.23	9.23	8.03	0.301	0.344	8.05	8.05	1.2
494	n1036	7.61	7.61	6.49	0.43	0.473	6.51	6.51	1.12
495	n1038	7.4	7.4	6.28	0.473	0.516	6.3	6.3	1.12
496	n1040	6.43	6.43	5.31	0.516	0.559	5.33	5.33	1.12
498	n1044	5.16	5.16	4.04	0.559	0.602	4.06	4.06	1.12
499	n1045	4.66	4.66	3.54	0.602	0.645	3.56	3.56	1.12
500	n1047	4.57	4.57	3.42	0.645	0.688	3.44	3.44	1.16
501	n1048	4.59	4.59	3.3	0.688	0.731	3.32	3.32	1.29
502	n1050	4.47	4.47	3.18	0.731	0.774	3.2	3.2	1.29
503	n1052	4.57	4.57	3.06	0.774	0.817	3.08	3.08	1.51
504	n1053	4.53	4.53	2.94	0.817	0.86	2.96	2.96	1.59
512	n1064	6.66	6.66	2.88	4.212	4.255	2.94	2.94	3.78
513	n1065	6.67	6.67	3	3.653	3.696	3.06	3.06	3.67
514	n1068	6.45	6.45	3.24	3.481	3.524	3.3	3.3	3.2
515	n1069	6.44	6.44	3.36	3.438	3.481	3.42	3.42	3.08
516	n1070	6.26	6.26	3.48	3.395	3.438	3.54	3.54	2.78
517	n1072	6.21	6.21	3.6	3.352	3.395	3.66	3.66	2.61
518	n1074	6.12	6.12	3.74	3.223	3.266	3.79	3.79	2.38
519	n1076	6.24	6.24	3.86	3.137	3.18	3.91	3.91	2.38
520	n1077	6.38	6.38	3.98	3.094	3.137	4.03	4.03	2.4
521	n1078	6.5	6.5	4.1	3.051	3.094	4.15	4.15	2.4
522	n1079	6.46	6.46	4.22	2.965	3.008	4.27	4.27	2.24
523	n1081	7.05	7.05	4.34	2.922	2.965	4.39	4.39	2.71
524	n1082	7.38	7.38	4.46	2.879	2.922	4.51	4.51	2.93
525	n1084	7.45	7.45	4.51	2.836	2.879	4.57	4.57	2.94
526	n1085	6.82	6.82	2.51	4.341	4.384	2.57	2.57	4.31
527	n1087	6.55	6.55	2.63	4.298	4.341	2.69	2.69	3.92
528	n1088	6.57	6.57	2.75	4.255	4.298	2.81	2.81	3.82
529	n1090	6.59	6.59	4.48	0.473	0.516	4.5	4.5	2.1
530	n1092	6.58	6.58	4.6	0.43	0.473	4.62	4.62	1.97
531	n1093	6.6	6.6	4.72	0.387	0.43	4.74	4.74	1.87
532	n1094	6.66	6.66	4.84	0.301	0.344	4.86	4.86	1.82
533	n1096	7.36	7.36	5.01	0.215	0.258	5.02	5.02	2.35
534	n1097	6.68	6.68	5.11	0.172	0.215	5.13	5.13	1.57
535	n1099	6.75	6.75	5.23	0.129	0.172	5.25	5.25	1.52
536	n1101	6.78	6.78	5.4	0.043	0.086	5.41	5.41	1.38
537	n1102	7.02	7.02	5.9	0	0.043	5.91	5.91	1.12
538	n1103	9.59	9.59	7.2	0.387	0.43	7.22	7.22	2.39
539	n1104	9.55	9.55	7.36	0.172	0.215	7.37	7.37	2.19
540	n1106	9.4	9.4	7.48	0.129	0.172	7.49	7.49	1.92
541	n1107	9.29	9.29	7.61	0.086	0.129	7.62	7.62	1.69
542	n1109	9.24	9.24	7.78	0.043	0.086	7.79	7.79	1.46
543	n1110	9.2	9.2	8.08	0	0.043	8.09	8.09	1.12
544	n1112	9.13	9.13	8.01	0	0.043	8.02	8.02	1.12
545	n1116	9.05	9.05	6.81	0.702	0.745	6.83	6.83	2.25

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546	n1117	8.6	8.6	6.69	0.645	0.948	6.72	6.72	1.91
547	n1119	8.18	8.18	6.57	0.731	1.034	6.6	6.6	1.61
548	n1121	8.12	8.12	6.45	1.034	1.077	6.48	6.48	1.67
549	n1122	8.26	8.26	6.33	1.077	1.12	6.36	6.36	1.93
550	n1123	8.49	8.49	6.21	1.12	1.163	6.24	6.24	2.28
551	n1124	8.44	8.44	6.09	1.163	1.206	6.12	6.12	2.35
552	n1126	8.44	8.44	5.29	2.32	2.363	5.34	5.34	3.15
553	n1127	8.48	8.48	5.2	2.363	2.406	5.24	5.24	3.28
554	n1129	8.45	8.45	5.08	2.406	2.449	5.13	5.13	3.37
555	n1131	8.36	8.36	4.96	2.449	2.492	5.01	5.01	3.4
556	n1132	8.12	8.12	4.84	2.492	2.535	4.89	4.89	3.28
557	n1133	7.86	7.86	4.74	2.707	2.75	4.79	4.79	3.12
558	n1135	7.81	7.81	4.72	2.75	2.793	4.77	4.77	3.09
559	n1136	7.6	7.6	4.6	2.793	2.836	4.65	4.65	3
560	n1138	7.46	7.46	6.35	0	0.043	6.35	6.35	1.12
561	n1139	7.3	7.10	6.04	0.043	0.086	6.05	6.05	1.26
562	n1141	7.15	7.15	5.87	0.086	0.129	5.88	5.88	1.28
563	n1142	7.07	7.07	5.77	0.43	0.473	5.79	5.79	1.3
564	n1144	6.98	6.98	5.7	0.473	0.516	5.72	5.72	1.27
565	n1146	6.87	6.87	5.6	0.731	0.774	5.63	5.63	1.27
567	n1149	6.76	6.76	5.48	0.774	0.817	5.51	5.51	1.28
568	n1151	6.73	6.73	5.61	0	0.043	5.62	5.62	1.12
569	n1151	6.53	6.53	5.31	0.043	0.086	5.31	5.31	1.22
570	n1153	6.41	6.41	5.13	0.086	0.129	5.14	5.14	1.27
571	n1154	6.31	6.31	5.01	0.129	0.172	5.02	5.02	1.3
572	n1155	6.22	6.22	4.89	0.172	0.215	4.9	4.9	1.33
573	n1157	6.17	6.17	4.77	0.215	0.258	4.78	4.78	1.41
574	n1158	6.24	6.24	4.65	0.258	0.301	4.66	4.66	1.59
575	n1160	6.2	6.2	4.53	0.301	0.344	4.54	4.54	1.67
576	n1161	6.19	6.19	1.34	3.244	3.287	1.4	1.4	4.84
577	n1163	6.14	6.14	1.41	2.857	2.9	1.46	1.46	4.73
578	n1165	5.96	5.96	1.53	2.814	2.857	1.58	1.58	4.43
579	n1167	5.86	5.86	1.57	2.771	2.814	1.62	1.62	4.29
580	n1169	6.11	6.11	3.86	1.352	1.395	3.89	3.89	2.25
581	n1170	6.11	6.11	3.98	1.266	1.309	4.02	4.02	2.13
582	n1171	6.38	6.38	4.1	1.223	1.266	4.14	4.14	2.28
583	n1172	7.5	7.5	4.22	1.18	1.223	4.26	4.26	3.28
584	n1174	8.15	8.15	4.28	1.137	1.18	4.31	4.31	3.87
585	n1175	6.33	6.33	4.34	0.129	0.172	4.35	4.35	1.99
586	n1176	6.03	6.03	4.47	0.086	0.129	4.48	4.48	1.57
587	n1177	6.14	6.14	4.64	0.043	0.086	4.65	4.65	1.5
588	n1179	6.06	6.06	4.94	0	0.043	4.95	4.95	1.12
624	n1228	7.33	7.33	4.1	1.72	1.763	4.14	4.14	3.23
625	n1232	7.34	7.34	4.45	1.591	1.634	4.49	4.49	2.89
626	n1234	7.54	7.54	4.57	1.548	1.591	4.61	4.61	2.97
627	n1236	7.68	7.68	4.69	1.505	1.548	4.73	4.73	2.99
628	n1238	8.04	8.04	4.81	1.462	1.505	4.85	4.85	3.24

629	n1239	8.1	8.1	4.93	1.419	1.462	4.97	4.97	3.18
630	n1240	8.16	8.16	5.05	1.333	1.376	5.08	5.08	3.11
631	n1241	8.26	8.26	5.17	1.29	1.333	5.2	5.2	3.09
632	n1242	8.34	8.34	5.29	1.204	1.247	5.32	5.32	3.05
633	n1244	8.43	8.43	5.41	1.161	1.204	5.44	5.44	3.02
634	n1246	8.59	8.59	5.53	1.118	1.161	5.56	5.56	3.06
635	n1247	8.72	8.72	5.65	1.075	1.118	5.68	5.68	3.07
636	n1248	8.93	8.93	5.77	0.989	1.032	5.8	5.8	3.16
637	n1250	9.22	9.22	6.01	0.817	0.86	6.03	6.03	3.21
638	n1251	9.41	9.41	6.13	0.774	0.817	6.15	6.15	3.29
639	n1252	9.6	9.6	6.25	0.731	0.774	6.27	6.27	3.35
640	n1253	9.7	9.7	6.37	0.688	0.731	6.39	6.39	3.33
641	n1254	9.65	9.65	6.49	0.645	0.688	6.51	6.51	3.16
642	n1254	8.67	8.67	6.61	0.602	0.645	6.63	6.63	2.06
643	n1258	10.03	10.03	6.73	0.559	0.602	6.75	6.75	3.3
644	n1260	10.03	10.03	6.85	0.539	0.559	6.87	6.87	3.31
645	n1261	10.15	10.13	6.97	0.316	0.539	6.99	6.99	3.09
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646	n1262	9.96	9.96	7.09	0.43	0.473		7.11	2.88
647	n1264	9.54	9.54	7.32	0.129	0.172	7.34	7.34	2.22
648	n1265	9.57	9.57	7.45	0.086	0.129	7.46	7.46	2.12
649	n1266	9.41	9.41	7.62	0.043	0.086	7.63	7.63	1.79
650	n1267	9.19	9.19	8.07	0	0.043	8.08	8.08	1.12
651	n1268	8.5	8.5	7.39	0.512	0.555	7.41	7.41	1.12
652	n1269	8.3	8.3	7.18	0.555	0.598	7.21	7.21	1.12
653	n1270	9.44	9.44	8.32	0.469	0.512	8.34	8.34	1.12
654	n1271	11	11	9.88	0.383	0.426	9.9	9.9	1.12
655	n1272	13.97	13.97	12.86	0.34	0.383	12.87	12.87	1.12
656	n1273	15.99	15.99	14.87	0.297	0.34	14.89	14.89	1.12
657	n1274	16.68	16.68	15.56	0.129	0.211	15.58	15.58	1.12
658	n1276	19.14	19.14	18.02	0.086	0.129	18.03	18.03	1.12
659	n1277	20.93	20.93	19.64	0.043	0.086	19.65	19.65	1.29
660	n1279	21.06	21.06	19.95	0	0.043	19.95	19.95	1.12
661	n1281	19.52	19.52	18.4	0	0.043	18.41	18.41	1.12
662	n1283	18.34	18.34	17.22	0.043	0.086	17.23	17.23	1.12
663	n1284	17.01	17.01	15.89	0.172	0.215	15.9	15.9	1.12
665	n1287	11.32	11.32	10.2	0.301	0.344	10.21	10.21	1.12
666	n1289	9	9	7.88	0.387	0.43	7.9	7.9	1.12
667	n1291	7.93	7.93	6.81	0.43	0.473	6.83	6.83	1.12
668	n1293	7.16	7.16	6.04	0.473	0.516	6.06	6.06	1.12
669	n1296	6.19	6.19	5.08	0.602	0.645	5.1	5.1	1.12
670	n1297	5.96	5.96	4.84	0.688	0.731	4.87	4.87	1.12
671	n1298	5.69	5.69	4.57	0.731	0.774	4.6	4.6	1.12
672	n1299	6.62	6.62	4.45	0.774	0.817	4.48	4.48	2.17
673	n1300	5.28	5.28	4.16	0.86	0.903	4.19	4.19	1.12
674	n1301	5.18	5.18	4.04	0.946	0.989	4.07	4.07	1.13
675	n1303	5.26	5.26	3.92	1.032	1.075	3.96	3.96	1.34
676	n1305	5.28	5.28	3.8	1.075	1.118	3.84	3.84	1.47
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677	n1307	5.35	5.35	3.68	1.118	1.161	3.72	3.72	1.67
678	n1309	5.49	5.49	3.56	1.161	1.204	3.6	3.6	1.92
679	n1311	5.51	5.51	3.44	1.204	1.247	3.48	3.48	2.06
680	n1313	5.31	5.31	3.32	1.247	1.29	3.36	3.36	1.98
681	n1314	5.31	5.31	3.2	1.29	1.333	3.24	3.24	2.11
682	n1315	7.81	7.81	6.69	0.129	0.172	6.7	6.7	1.12
683	n1316	8.5	8.5	7.38	0.086	0.129	7.39	7.39	1.12
684	n1318	10.47	10.47	9.35	0.043	0.086	9.36	9.36	1.12
685	n1319	13.21	13.21	12.09	0	0.043	12.09	12.09	1.12
686	n1320	9.02	9.02	6.84	0.616	0.659	6.86	6.86	2.18
687	n1321	8.53	8.53	6.96	0.573	0.616	6.98	6.98	1.57
688	n1323	8.55	8.55	7.08	0.53	0.573	7.1	7.1	1.47
689	n1325	8.46	8.46	7.2	0.444	0.487	7.22	7.22	1.26
690	n1326	8.44	8.44	7.32	0.401	0.444	7.34	7.34	1.12
691	n1328	8.62	8.62	7.5	0.358	0.401	7.51	7.51	1.12
692	n1329	8.91	8.91	7.79	0.315	0.358	7.81	7.81	1.12
693	n1331	10.08	10.08	8.96	0.272	0.315	8.97	8.97	1.12
694	n1332	11.39	11.39	10.27	0.229	0.272	10.29	10.29	1.12
695	n1334	14.65	14.65	13.53	0.043	0.186	13.54	13.54	1.12
696	n1337	7.19	7.19	6.07	0.129	0.172	6.09	6.09	1.12
697	n1338	7.97	7.97	6.85	0.086	0.129	6.86	6.86	1.12
698	n1339	9.32	9.32	8.2	0.043	0.086	8.21	8.21	1.12
699	n1340	11.84	11.84	10.73	0.043	0.043	10.73	10.73	1.12
700	n1341	6.46	6.46	4.76	1.032	1.075	4.79	4.79	1.7
701	n1342	6.44	6.44	4.88	0.989	1.032	4.91	4.91	1.56
702	n1344	6.43	6.43	5	0.946	0.989	5.03	5.03	1.43
703	n1345	6.54	6.54	5.12	0.903	0.946	5.15	5.15	1.42
704	n1346	6.6	6.6	5.24	0.86	0.903	5.27	5.27	1.35
705	n1348	6.61	6.61	5.36	0.817	0.86	5.39	5.39	1.25
706	n1351	6.37	6.37	5.25	0	0.043	5.25	5.25	1.12
707	n1352	7.49	7.49	6.37	0	0.043	6.38	6.38	1.12
708	n1353	6.09	6.09	4.97	0.043	0.086	4.98	4.98	1.12
709	n1354	6.09	6.09	4.79	0.086	0.129	4.81	4.81	1.29
711	n1357	5.57	5.57	4.45	0.172	0.215	4.47	4.47	1.12
712	n1359	5.43	5.43	4.32	0.258	0.301	4.33	4.33	1.12
713	n1360	5.3	5.3	4.18	0.301	0.344	4.2	4.2	1.12
714	n1362	5.47	5.47	4.06	0.344	0.387	4.08	4.08	1.4
715	n1364	5.46	5.46	3.94	0.387	0.43	3.96	3.96	1.52
716	n1366	5.38	5.38	3.83	0.516	0.559	3.85	3.85	1.55
717	n1368	5.38	5.38	3.71	0.559	0.602	3.73	3.73	1.67
718	n1370	5.55	5.55	3.59	0.602	0.645	3.61	3.61	1.96
719	n1371	5.82	5.82	3.47	0.645	0.688	3.49	3.49	2.35
720	n1374	7.66	7.66	5.41	0.473	0.516	5.43	5.43	2.25
721	n1376	7.51	7.51	5.53	0.387	0.43	5.55	5.55	1.99
722	n1377	7.5	7.5	5.65	0.344	0.387	5.66	5.66	1.85
723	n1379	8.06	8.06	5.76	0.301	0.344	5.78	5.78	2.29
724	n1380	7.38	7.38	5.88	0.258	0.301	5.9	5.9	1.49
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725	n1382	7.3	7.3	6	0.215	0.258	6.02	6.02	1.29
726	n1383	7.43	7.43	6.12	0.172	0.215	6.14	6.14	1.31
727	n1384	7.56	7.56	6.24	0.129	0.172	6.26	6.26	1.31
728	n1386	7.59	7.59	6.37	0.086	0.129	6.38	6.38	1.22
729	n1387	7.66	7.66	6.54	0.043	0.086	6.55	6.55	1.12
730	n1388	8.48	8.48	7.36	0	0.043	7.37	7.37	1.12
731	n1389	7.45	7.45	3.98	2.107	2.15	4.02	4.02	3.48
732	n1390	7.89	7.89	6.7	0.258	0.301	6.71	6.71	1.19
733	n1391	7.94	7.94	6.82	0.215	0.258	6.83	6.83	1.12
734	n1393	8.12	8.12	7	0.172	0.215	7.01	7.01	1.12
735	n1394	8.29	8.29	7.17	0.129	0.172	7.18	7.18	1.12
737	n1394	8.84	8.84	7.73	0.123	0.043	7.73	7.73	1.12
738	n1397	8.89	8.89	7.77	0	0.043	7.78	7.78	1.12
739	n1399	8.63	8.63	7.47	0.043	0.045	7.78	7.78	1.17
740	n1400	8.29	8.29	7.47	0.129	0.080	7.48	7.48	1.12
740	n1400	8.25	8.25	7.17	0.123	0.172	7.18	7.18	1.12
741	n1401	8.13	8.13	6.93	0.172	0.213	6.95	6.95	1.2
742	n1402	7.99	7.99	6.81	0.213	0.301	6.83	6.83	1.18
743	n1405	7.81	7.81	6.69	0.301	0.344	6.71	6.71	1.12
744	n1403	7.81	7.81	6.57	0.344	0.344	6.59	6.59	1.12
745	n1407	7.56	7.56	6.45	0.344	0.387	6.47	6.47	1.13
747	n1410	7.5	7.5		0.387	0.43			1.17
747	n1410	7.31	7.31	6.33 5.59	0.43	0.473	6.34 5.62	6.34 5.62	1.77
750	n1411	7.31	7.31	5.74	0.088	0.731	5.75	5.75	1.71
751	n1414	6.98	6.98	5.86	0.172	0.213	5.87	5.87	1.12
752	n1415	7.21	7.21	6.09	0.129	0.172	6.1	6.1	1.12
753	n1417	7.21	7.21	6.37	0.043	0.123	6.38	6.38	1.43
754	n1417	7.79	7.79	6.67	0.043	0.043	6.68	6.68	1.12
755	n1413	7.73	7.73	5.92	0	0.043	5.92	5.92	1.12
756	n1420	6.85	6.85	5.61	0.043	0.045	5.62	5.62	1.24
757	n1422	6.91	6.91	5.44	0.086	0.129	5.45	5.45	1.47
758	n1423	6.66	6.66	5.32	0.129	0.172	5.33	5.33	1.34
759	n1425	6.75	6.75	5.2	0.172	0.215	5.21	5.21	1.55
760	n1426	6.55	6.55	5.08	0.172	0.213	5.09	5.09	1.48
762	n1429	7.16	7.16	4.84	0.301	0.236	4.85	4.85	2.32
763	n1431	6.76	6.76	4.72	0.43	0.473	4.74	4.74	2.05
764	n1432	7.27	7.27	4.6	0.473	0.516	4.62	4.62	2.67
765	n1434	7.18	7.18	4.48	0.516	0.559	4.5	4.5	2.71
766	n1435	6.96	6.96	4.36	0.602	0.645	4.38	4.38	2.61
768	n1438	6.99	6.99	4.12	0.688	0.731	4.15	4.15	2.87
769	n1440	6.84	6.84	4	0.774	0.817	4.03	4.03	2.84
771	n1443	6.72	6.72	3.76	0.946	0.989	3.79	3.79	2.96
772	n1444	6.7	6.7	3.64	1.032	1.075	3.67	3.67	3.06
774	n1447	7.07	7.07	3.4	1.247	1.29	3.44	3.44	3.66
775	n1448	6.73	6.73	3.28	1.29	1.333	3.32	3.32	3.44
776	n1449	6.74	6.74	3.16	1.333	1.376	3.2	3.2	3.58
777	n1451	6.84	6.84	3.04	1.376	1.419	3.08	3.08	3.79
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778	n1453	6.75	6.75	2.92	1.419	1.462	2.96	2.96	3.83
779	n1454	6.56	6.56	2.8	2.926	2.969	2.85	2.85	3.76
780	n1456	6.23	6.23	2.68	2.969	3.012	2.73	2.73	3.55
781	n1458	6.13	6.13	2.56	3.012	3.055	2.61	2.61	3.57
782	n1460	6.16	6.16	2.44	3.055	3.098	2.5	2.5	3.72
783	n1462	6.26	6.26	2.32	3.098	3.141	2.38	2.38	3.94
784	n1463	6.95	6.95	2.2	3.141	3.184	2.26	2.26	4.75
785	n1465	6.48	6.48	2.14	3.227	3.27	2.19	2.19	4.34
786	n1466	7.55	7.55	3.86	2.15	2.193	3.91	3.91	3.69
787	n1467	7.44	7.44	3.74	2.193	2.236	3.79	3.79	3.69
790	n1472	7.22	7.22	3.47	3.096	3.139	3.52	3.52	3.75
791	n1474	7.42	7.42	3.39	3.139	3.182	3.45	3.45	4.02
792	n1476	7.61	7.61	3.27	3.225	3.268	3.33	3.33	4.33
793	n1477	8.36	8.36	3.15	3.268	3.311	3.21	3.21	5.21
795	n1480	11.64	11.64	10.52	0	3.354	10.57	10.57	1.12
796	n1481	10.55	10.55	9.43	3.354	3.397	9.48	9.48	1.12
797	n1483	8.61	8.61	7.49	3.397	3.44	7.54	7.54	1.12
798	n1485	8	8	6.29	4.988	5.031	6.36	6.36	1.71
799	n1487	7.86	7.86	6.23	5.031	5.074	6.3	6.3	1.62
800	n1489	7.38	7.38	6.11	5.074	5.117	6.18	6.18	1.27
801	n1491	7.28	7.38	5.99	5.117	5.16	6.06	6.06	1.29
802	n1493	7.22	7.22	5.87	5.16	5.203	5.94	5.94	1.35
803	n1495	7.22	7.22	5.75	5.203	5.246	5.82	5.82	1.29
805	n1498	6.37	6.37	4.58	6.407	6.45	4.66	4.66	1.79
806	n1499	6.74	6.74	5.53	5.289	5.332	5.59	5.59	1.21
807	n1501	7.29	7.29	5.47	0.731	0.774	5.5	5.5	1.82
808	n1501	7.43	7.43	5.35	0.774	0.817	5.38	5.38	2.08
810	n1505	9.79	9.79	5.11	0.86	0.903	5.14	5.14	4.68
812	n1509	6.95	6.95	4.91	0.946	0.989	4.94	4.94	2.04
813	n1510	6.76	6.76	4.79	0.989	1.032	4.82	4.82	1.97
814	n1510	6.6	6.6	4.67	1.032	1.075	4.7	4.7	1.93
816	n1515	6.14	6.14	4.43	6.45	6.493	4.51	4.51	1.71
817	n1516	6.06	6.06	4.31	6.493	6.536	4.39	4.39	1.75
818	n1518	5.99	5.99	4.19	6.536	6.579	4.27	4.27	1.8
819	n1520	6.06	6.06	4.07	6.579	6.622	4.15	4.15	1.99
820	n1521	5.98	5.98	3.95	6.622	6.665	4.03	4.03	2.02
821	n1521	6.01	6.01	3.83	6.665	6.708	3.91	3.91	2.17
822	n1524	5.83	5.83	3.71	6.708	6.751	3.79	3.79	2.12
823	n1525	5.73	5.73	3.59	6.751	6.794	3.67	3.67	2.14
824	n1526	5.97	5.97	3.47	6.794	6.837	3.55	3.55	2.5
825	n1528	5.91	5.91	3.35	6.837	6.88	3.43	3.43	2.56
826	n1530	5.83	5.83	3.23	6.88	6.923	3.31	3.31	2.59
827	n1530	5.76	5.76	3.11	6.923	6.966	3.2	3.2	2.65
828	n1533	5.66	5.66	2.99	6.966	7.009	3.08	3.08	2.67
829	n1534	5.57	5.57	2.88	7.138	7.181	2.96	2.96	2.69
830	n1536	5.35	5.35	2.75	7.224	7.267	2.84	2.84	2.6
831	n1537	5.19	5.19	2.63	7.267	7.31	2.72	2.72	2.55
	111337	J.13	ال ال	2.03	,.207		2.12	2.72	در.2

832	n1538	5.01	5.01	2.51	7.31	7.353	2.6	2.6	2.49
833	n1540	4.82	4.82	2.39	7.353	7.396	2.48	2.48	2.43
835	n1542	4.55	4.55	2.23	7.783	7.826	2.32	2.32	2.32
836	n1544	4.28	4.28	2.16	7.826	7.869	2.25	2.25	2.12
837	n1546	4.22	4.22	2.04	7.869	7.912	2.13	2.13	2.18
838	n1547	4.32	4.32	1.92	7.912	7.955	2.01	2.01	2.4
839	n1549	4.37	4.37	1.8	7.955	7.998	1.89	1.89	2.57
840	n1550	4.36	4.36	1.69	7.998	8.041	1.78	1.78	2.67
841	n1551	4.39	4.39	1.57	8.041	8.084	1.66	1.66	2.82
842	n1552	4.3	4.3	1.45	8.084	8.127	1.54	1.54	2.85
843	n1554	4.18	4.18	1.33	8.127	8.17	1.42	1.42	2.85
844	n1555	4.28	4.28	1.21	8.17	8.213	1.3	1.3	3.06
845	n1556	4.49	4.49	1.09	8.213	8.256	1.18	1.18	3.4
846	n1557	4.19	4.19	0.97	8.256	8.299	1.06	1.06	3.22
848	n1559	4.22	4.22	0.73	9.073	9.116	0.83	0.83	3.49
850	n1562	4.09	4.09	0.73	9.159	9.202	0.67	0.67	3.52
851	n1564	3.95	3.95	0.45	9.202	9.245	0.55	0.55	3.52
852	n1565	3.97	3.97	0.43	9.245	9.243	0.43	0.43	3.64
853	n1567	4.05	4.05	0.33	9.243	9.331	0.43	0.43	3.84
855	n1569	4.14	4.14	-2.09	17.171	17.214	-1.95	-1.95	6.23
857	n1571	3.86	3.86	2.7	0	18.618	2.82	2.82	1.16
858	n1571	3.69	3.69	2.53	18.618	18.661	2.66	2.66	1.16
859	n1574	3.62	3.62	2.33	18.661	18.704	2.54	2.54	1.10
860	n1574	3.02	3.02	2.34	18.704	18.747	2.48	2.48	1.36
861	n1576	3.7	3.7	2.28	18.747	18.747	2.42	2.48	1.42
862	n1578	3.69	3.69	2.22	18.747	18.833	2.42	2.42	1.42
863	n1578	3.72	3.72	2.16	18.833	18.876	2.30	2.30	1.56
864	n1573	3.64	3.64	2.10	18.833	18.919	2.24	2.24	1.54
865	n1581	3.6	3.6	2.04	18.919	18.962	2.18	2.18	1.56
866	n1583	3.56	3.56	1.98	18.962	19.005	2.10	2.10	1.58
867	n1584	3.53	3.53	1.92	19.005	19.003	2.06	2.12	1.61
868	n1585	3.5	3.5	1.86	19.003	19.048	2.00	2.00	1.64
869	n1585	3.51	3.51	1.80	19.048	19.134	1.94	1.94	1.71
870	n1588	3.48	3.48	1.74	19.031	19.134	1.88	1.88	1.74
870	n1590	3.48	3.38	1.68	19.134	19.177	1.82	1.82	1.74
872	n1590	3.3	3.3	1.62	19.177	19.22	1.76	1.76	1.68
873	n1592	3.35	3.35	1.56	19.22	19.306	1.76	1.76	1.79
874	n1593	3.23	3.23	1.56	19.263	19.306	1.64	1.64	
	n1594				19.306				1.73
875	n1595 n1597	3.11	3.11	1.44	19.349	19.392 19.435	1.58	1.58	1.67 1.74
876		3.12	3.12	1.38			1.52	1.52	
877	n1599	3.13	3.13	1.32	19.435	19.478	1.46	1.46	1.81
878	n1600	2.98	2.98	1.26	19.478	19.521	1.4	1.4	1.72
879	n1602	2.91	2.91	1.2	19.521	19.564	1.34	1.34	1.71
880	n1603	2.88	2.88	1.14	19.564	19.607	1.28	1.28	1.74
881	n1604	2.89	2.89	1.08	19.607	19.65	1.23	1.23	1.81
882	n1605	2.97	2.97	1.02	19.65	19.693	1.17	1.17	1.95
883	n1607	3.07	3.07	0.96	19.693	19.736	1.13	1.13	2.11

885         n1609         2.8         2.8         0.9         36.712         36.755         1.1         1.1           886         n1610         6.64         6.64         5.52         0.774         0.817         5.55         5.55           887         n1611         7.59         7.59         6.47         0.688         0.731         6.5         6.5	1.9
	1.12
887   n1611   7.59   7.59   6.47   0.688   0.731   6.5   6.5	
	1.12
888 n1613 9.62 9.62 7.38 0.645 0.688 7.4 7.4	2.25
889 n1615 8.61 8.61 7.49 0.602 0.645 7.52 7.52	1.12
890 n1617 10.4 10.4 9.28 0.559 0.602 9.3 9.3	1.12
892 n1619 15.75 15.75 14.63 0.473 0.516 14.65 14.65	1.12
893 n1621 18.78 18.78 17.66 0.43 0.473 17.68 17.68	1.12
895 n1624 27.22 27.22 26.1 0.344 0.387 26.11 26.11	1.12
896 n1626 31.6 31.6 30.49 0.258 0.301 30.5 30.5	1.12
897 n1627 34.39 34.39 33.2 0.172 0.215 33.21 33.21	1.2
898 n1628 36.2 36.2 33.32 0.086 0.129 33.33 33.33	2.88
899 n1629 35.87 35.87 33.49 0.043 0.086 33.5 33.5	2.37
900 n1631 34.97 34.97 33.85 0 0.043 33.86 33.86	1.12
901 n1632 9.73 9.73 6.7 0.559 0.922 6.73 6.73	3.03
902 n1633 10.18 10.18 6.73 0.516 1.029 6.76 6.76	3.45
903 n1635 11.07 11.07 9.81 0.043 0.406 9.83 9.83	1.26
904 n1636 11.05 11.05 9.93 0 0.363 9.95 9.95	1.12
905 n1637 10.19 10.19 9.07 0 0.043 9.08 9.08	1.12
906 n1639 8.85 8.85 7.73 0.043 0.086 7.74 7.74	1.12
907 n1641 7.77 7.77 6.65 0.086 0.129 6.66 6.66	1.12
908 n1643 7.2 7.2 6.08 0.129 0.172 6.09 6.09	1.12
909 n1644 7.09 7.09 5.97 1.423 1.466 6.01 6.01	1.12
911 n1648 6.39 6.39 1.66 1.122 1.165 1.69 1.69	4.73
912 n1650 6.45 6.45 1.77 0.993 1.036 1.8 1.8	4.68
913 n1651 6.4 6.4 1.89 0.95 0.993 1.92 1.92	4.51
914 n1652 6.27 6.27 2.01 0.907 0.95 2.04 2.04	4.26
915 n1653 6.37 6.37 2.13 0.864 0.907 2.16 2.16	4.24
	4.05
	3.8
918 n1659 6.05 6.05 2.45 0.735 0.778 2.47 2.47	3.6
919 n1660 6.01 6.01 4.89 0 0.043 4.89 4.89	1.12
920 n1662 6 6 4.58 0.043 0.086 4.59 4.59	1.41
921 n1664 5.86 5.86 4.41 0.086 0.129 4.42 4.42	1.45
922 n1666 5.35 5.35 1.93 1.892 1.935 1.97 1.97	3.43
923 n1668 5.49 5.49 1.98 1.72 1.763 2.02 2.02	3.51
924 n1670 5.34 5.34 2.1 1.677 1.72 2.14 2.14	3.24
925 n1672 5.31 5.31 2.18 1.634 1.677 2.22 2.22	3.12
926 n1674 5.29 5.29 2.3 1.591 1.634 2.34 2.34	2.99
927 n1675 5.29 5.29 2.42 1.548 1.591 2.46 2.46	2.86
928 n1677 5.27 5.27 2.52 1.505 1.548 2.55 2.55	2.75
929 n1682 5.43 5.43 2.78 1.376 1.419 2.82 2.82	2.65
931 n1686 5.34 5.34 3.02 1.29 1.333 3.05 3.05	2.33
932 n1688 5.31 5.31 3.1 1.247 1.29 3.14 3.14	2.21
933 n1690 5.28 5.28 3.22 1.204 1.247 3.26 3.26	2.06
934 n1692 5.32 5.32 3.34 1.161 1.204 3.37 3.37	1.98
935   n1694   5.42   5.42   3.46   1.075   1.118   3.49   3.49	1.96

936										
938         n1699         5.57         5.57         3.82         0.946         0.989         3.85         3.85         1.75           939         n1701         5.48         3.94         0.930         0.906         3.97         3.97         1.53           941         n1708         5.45         5.45         4.06         0.86         0.903         4.09         4.09         1.38           941         n1708         6.01         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           942         n1716         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           943         n1711         6.43         6.43         5.31         0.645         0.688         5.33         5.33         1.12           944         n1717         7.73         6.61         0.559         0.602         6.63         6.63         1.12           944         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         12.29         10.24         0.43	936	n1695	5.56	5.56	3.58	1.032	1.075	3.61	3.61	1.98
939         n1701         5.48         5.48         3.94         0.903         0.946         3.97         3.97         1.53           940         n1703         5.45         5.45         4.06         0.86         0.903         4.09         4.09         1.38           941         n1706         5.42         5.42         4.43         0.774         0.817         4.32         4.32         1.12           942         n1708         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           943         n1711         6.43         6.43         5.31         0.645         0.688         5.33         5.33         1.12           944         n1712         6.78         6.66         0.602         0.645         5.68         5.68         1.12           944         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         10.24         0.43         0.43         10.38         10.38         1.12           948         n1717         11.77         11.77         10.65         0.301         0.344<	937	n1697	5.66	5.66	3.7	0.989	1.032	3.73	3.73	1.96
940         n1703         5.45         5.45         4.06         0.86         0.903         4.09         4.09         1.38           941         n1706         5.42         5.42         4.3         0.774         0.817         4.32         4.32         1.12           942         n1708         6.01         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           943         n1711         6.43         6.43         5.31         0.645         0.668         5.33         5.33         1.12           944         n1712         6.78         5.66         0.602         0.645         5.68         5.68         1.12           945         n1714         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         12.29         10.26         0.33         0.43         10.38         13.3           950         n1720         11.77         11.75         10.65         0.301         0.344 </td <td>938</td> <td>n1699</td> <td>5.57</td> <td>5.57</td> <td>3.82</td> <td>0.946</td> <td>0.989</td> <td>3.85</td> <td>3.85</td> <td>1.75</td>	938	n1699	5.57	5.57	3.82	0.946	0.989	3.85	3.85	1.75
941         n1706         5.42         5.42         4.3         0.774         0.817         4.32         4.32         1.12           942         n1708         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           943         n1711         6.43         6.43         5.31         0.645         0.688         5.33         5.33         1.12           944         n1712         6.78         6.78         5.66         0.602         0.645         5.68         5.68         1.12           945         n1714         7.73         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1716         12.29         10.20         10.36         0.387         0.43         10.38         10.38         1.12           947         n1716         12.29         12.07         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         10.75         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77	939	n1701	5.48	5.48	3.94	0.903	0.946	3.97	3.97	1.53
942         n1708         6.01         6.01         4.89         0.731         0.774         4.91         4.91         1.12           943         n1711         6.43         5.31         0.645         0.688         5.33         5.33         1.12           944         n1712         6.78         6.78         5.66         0.602         0.645         5.68         5.68         1.12           945         n1714         7.73         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         10.24         0.43         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         10.65         0.301         0.344         10.67         10.67         1.12           950         n1728         16.48         16.43         15.31         0.215         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         15.31         0.215	940	n1703	5.45	5.45	4.06	0.86	0.903	4.09	4.09	1.38
943         n1711         6.43         6.43         5.31         0.645         0.688         5.33         5.33         1.12           944         n1712         6.78         6.68         5.66         0.602         0.645         5.68         5.68         1.12           945         n1714         7.73         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         12.29         10.24         0.43         0.473         10.26         10.26         2.05           948         n1717         12.07         10.36         0.387         0.43         10.38         10.38         11.72           950         n1720         11.77         11.77         10.65         0.301         13.76         13.76         1.12           956         n1731         17.17         17.77         16.05         0.172         0.215         16.06         16.06         1.12           957         n1733         18.12         18.74         10.029         0.172	941	n1706	5.42	5.42	4.3	0.774	0.817	4.32	4.32	1.12
944         n1712         6.78         6.78         5.66         0.602         0.645         5.68         5.68         1.12           945         n1714         7.73         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         10.20         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         10.65         0.301         0.344         10.67         10.67         11.2           956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         13.76         13.72           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         11.12           957         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         11.12           958         n1731         17.17         17.17 <td>942</td> <td>n1708</td> <td>6.01</td> <td>6.01</td> <td>4.89</td> <td>0.731</td> <td>0.774</td> <td>4.91</td> <td>4.91</td> <td>1.12</td>	942	n1708	6.01	6.01	4.89	0.731	0.774	4.91	4.91	1.12
945         n1714         7.73         7.73         6.61         0.559         0.602         6.63         6.63         1.12           946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         10.24         0.43         0.473         10.26         10.26         2.05           948         n1717         12.07         12.07         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         10.65         0.301         0.344         10.67         10.67         1.12           956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         11.12           958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         11.12           959         n1733         18.12         18.12         17         0.129         0.172<	943	n1711	6.43	6.43	5.31	0.645	0.688	5.33	5.33	1.12
946         n1715         9.5         9.5         8.38         0.516         0.559         8.4         8.4         1.12           947         n1716         12.29         12.29         10.24         0.43         0.473         10.36         10.26         2.05           948         n1771         12.07         12.07         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         11.75         0.05         0.301         0.344         10.67         10.67         1.12           956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         17.04         17.44         17.44         11.44         <	944	n1712	6.78	6.78	5.66	0.602	0.645	5.68	5.68	1.12
947         n1716         12.29         12.29         10.24         0.43         0.473         10.26         10.26         2.05           948         n1717         12.07         12.07         10.36         0.387         0.43         10.38         10.38         1.7           950         n1728         14.87         14.87         14.87         13.75         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.72         17.01         17.01         1.12           960         n1736         19.57         18.45         0.043         0.086         18.46         18.46         1.12           961         n1736         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         17.02	945	n1714	7.73	7.73	6.61	0.559	0.602	6.63	6.63	1.12
948         n1717         12.07         12.07         10.36         0.387         0.43         10.38         10.38         1.7           950         n1720         11.77         11.77         10.65         0.301         0.344         10.67         10.67         1.12           956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         11.12           960         n1735         18.55         18.55         18.55         17.44         0.086         0.129         17.44         17.44         1.12           961         n1739         19.03         19.03         17.91         0         0.043         18.46         18.46         18.46         11.12           962         n1741	946	n1715	9.5	9.5	8.38	0.516	0.559	8.4	8.4	1.12
950         n1720         11.77         11.77         10.65         0.301         0.344         10.67         10.67         1.12           956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         16.05         0.172         0.215         16.06         16.06         11.12           959         n1733         18.12         18.7         0.129         0.172         17.01         17.01         1.12           960         n1736         19.57         19.57         18.45         0.043         0.086         18.46         18.46         1.12           961         n1730         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           961         n1740         17.64         17.64         16.5         0.086         0.129         16.51         1.64           963         n1740         17.64         17.64         16.6         0.0.043	947	n1716	12.29	12.29	10.24	0.43	0.473	10.26	10.26	2.05
956         n1728         14.87         14.87         13.75         0.258         0.301         13.76         13.76         1.12           957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         1.12           960         n1736         19.57         18.55         18.55         18.55         18.46         18.46         18.46         1.12           961         n1736         19.57         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         16.5         0.086         0.129         16.51         16.51         1.12           964         n1741         17.72         17.72         0	948	n1717	12.07	12.07	10.36	0.387	0.43	10.38	10.38	1.7
957         n1729         16.43         16.43         15.31         0.215         0.258         15.32         15.32         1.12           958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         1.12           960         n1735         18.55         18.55         17.44         0.086         0.129         17.44         17.44         1.12           961         n1736         19.57         19.52         18.44         1.12         0.043         0.086         18.46         18.46         11.12         196         16.51         1.12         196         16.51         1.12         19.12	950	n1720	11.77	11.77	10.65	0.301	0.344	10.67	10.67	1.12
958         n1731         17.17         17.17         16.05         0.172         0.215         16.06         16.06         1.12           959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         1.12           960         n1735         18.55         18.55         17.44         0.086         0.129         17.44         17.44         1.12           961         n1736         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         17.64         16.5         0.086         0.129         16.51         16.61         1.12           963         n1741         17.72         16.6         0         0.043         16.61         16.61         1.12           964         n1741         17.72         16.6         0         0.043         17.13         17.13         1.12           965         n1742         18.24         18.24         17.12         0         0.043	956	n1728	14.87	14.87	13.75	0.258	0.301	13.76	13.76	1.12
959         n1733         18.12         18.12         17         0.129         0.172         17.01         17.01         1.12           960         n1735         18.55         18.55         17.44         0.086         0.129         17.44         17.44         1.12           961         n1736         19.57         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         17.64         16.5         0.086         0.129         16.51         16.51         1.12           964         n1741         17.72         17.72         16.6         0         0.043         16.61         16.51         1.12           965         n1742         18.24         18.24         17.12         0         0.043         16.61         16.61         11.2           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         16.83         16.83         16.93         1.12         968         n	957	n1729	16.43	16.43	15.31	0.215	0.258	15.32	15.32	1.12
960         n1735         18.55         18.55         17.44         0.086         0.129         17.44         17.44         1.12           961         n1736         19.57         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         16.5         0.086         0.129         16.51         16.51         1.14           964         n1741         17.72         17.62         16.6         0         0.043         17.13         17.13         1.12           965         n1742         18.24         18.24         17.12         0         0.043         16.61         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.3	958	n1731	17.17	17.17	16.05	0.172	0.215	16.06	16.06	1.12
961         n1736         19.57         19.57         18.45         0.043         0.086         18.46         18.46         1.12           962         n1739         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         17.64         16.5         0.086         0.129         16.51         16.51         1.14           964         n1741         17.72         17.72         16.6         0         0.043         16.61         16.61         1.12           965         n1742         18.24         18.24         17.12         0         0.043         17.13         17.13         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35 </td <td>959</td> <td>n1733</td> <td>18.12</td> <td>18.12</td> <td>17</td> <td>0.129</td> <td>0.172</td> <td>17.01</td> <td>17.01</td> <td>1.12</td>	959	n1733	18.12	18.12	17	0.129	0.172	17.01	17.01	1.12
962         n1739         19.03         19.03         17.91         0         0.043         17.92         17.92         1.12           963         n1740         17.64         17.64         16.5         0.086         0.129         16.51         16.51         1.14           964         n1741         17.72         17.72         16.6         0         0.043         16.61         16.61         1.12           965         n1742         18.24         18.24         17.12         0         0.043         17.13         17.13         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         5.57         0.878	960	n1735	18.55	18.55	17.44	0.086	0.129	17.44	17.44	1.12
963         n1740         17.64         17.64         16.5         0.086         0.129         16.51         16.51         1.14           964         n1741         17.72         17.72         16.6         0         0.043         16.61         16.61         1.12           965         n1742         18.24         18.24         17.12         0         0.043         17.13         17.13         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46	961	n1736	19.57	19.57	18.45	0.043	0.086	18.46	18.46	1.12
964         n1741         17.72         17.72         16.6         0         0.043         16.61         16.61         1.12           965         n1742         18.24         18.24         17.12         0         0.043         17.13         17.13         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91	962	n1739	19.03	19.03	17.91	0	0.043	17.92	17.92	1.12
965         n1742         18.24         18.24         17.12         0         0.043         17.13         17.13         1.12           966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03	963	n1740	17.64	17.64	16.5	0.086	0.129	16.51	16.51	1.14
966         n1743         19.01         19.01         16.82         0.043         0.086         16.83         16.83         2.19           967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86 <t< td=""><td>964</td><td>n1741</td><td>17.72</td><td>17.72</td><td>16.6</td><td>0</td><td>0.043</td><td>16.61</td><td>16.61</td><td>1.12</td></t<>	964	n1741	17.72	17.72	16.6	0	0.043	16.61	16.61	1.12
967         n1746         14.53         14.53         13.41         0.129         0.362         13.43         13.43         1.12           968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56	965	n1742	18.24	18.24	17.12	0	0.043	17.13	17.13	1.12
968         n1747         10.26         10.26         9.14         0.362         0.405         9.16         9.16         1.12           969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97 <td>966</td> <td>n1743</td> <td>19.01</td> <td>19.01</td> <td>16.82</td> <td>0.043</td> <td>0.086</td> <td>16.83</td> <td>16.83</td> <td>2.19</td>	966	n1743	19.01	19.01	16.82	0.043	0.086	16.83	16.83	2.19
969         n1748         7.35         7.35         6.23         0.835         0.878         6.26         6.26         1.12           970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76 </td <td>967</td> <td>n1746</td> <td>14.53</td> <td>14.53</td> <td>13.41</td> <td>0.129</td> <td>0.362</td> <td>13.43</td> <td>13.43</td> <td>1.12</td>	967	n1746	14.53	14.53	13.41	0.129	0.362	13.43	13.43	1.12
970         n1749         6.69         6.69         5.57         0.878         0.921         5.6         5.6         1.12           971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11	968	n1747	10.26	10.26	9.14	0.362	0.405	9.16	9.16	1.12
971         n1751         9.13         9.13         5.46         0.921         0.964         5.48         5.48         3.68           972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08	969	n1748	7.35	7.35	6.23	0.835	0.878	6.26	6.26	1.12
972         n1752         6.91         6.91         5.34         0.964         1.007         5.37         5.37         1.57           973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41	970	n1749	6.69	6.69	5.57	0.878	0.921	5.6	5.6	1.12
973         n1755         5.03         5.03         3.91         1.05         1.093         3.94         3.94         1.12           974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84	971	n1751	9.13	9.13	5.46	0.921	0.964	5.48	5.48	3.68
974         n1756         7.86         7.86         6.74         0.387         0.43         6.76         6.76         1.12           975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           983         n1771         5.78         5.78	972	n1752	6.91	6.91	5.34	0.964	1.007	5.37	5.37	1.57
975         n1757         8.68         8.68         7.56         0.344         0.387         7.58         7.58         1.12           976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78	973	n1755	5.03	5.03	3.91	1.05	1.093	3.94	3.94	1.12
976         n1758         10.09         10.09         8.97         0.301         0.344         8.99         8.99         1.12           977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11	974	n1756	7.86	7.86	6.74	0.387	0.43	6.76	6.76	1.12
977         n1759         11.88         11.88         10.76         0.258         0.301         10.78         10.78         1.12           978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51	975	n1757	8.68	8.68	7.56	0.344	0.387	7.58	7.58	1.12
978         n1761         12.48         12.48         11.36         0.215         0.258         11.37         11.37         1.12           979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83	976	n1758	10.09	10.09	8.97	0.301	0.344	8.99	8.99	1.12
979         n1763         14.08         14.08         12.96         0.172         0.215         12.97         12.97         1.12           980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57<										
980         n1766         15.41         15.41         14.29         0.129         0.172         14.3         14.3         1.12           981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65	978	n1761		12.48	11.36	0.215	0.258	11.37	11.37	1.12
981         n1769         5.84         5.84         0.98         2.279         2.322         1.02         1.02         4.87           982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65	979	n1763	14.08	14.08	12.96	0.172	0.215	12.97	12.97	1.12
982         n1770         5.73         5.73         0.86         2.322         2.365         0.9         0.9         4.87           983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65	-							14.3	14.3	1.12
983         n1771         5.78         5.78         1.09         2.193         2.236         1.13         1.13         4.7           984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65										
984         n1772         6.11         6.11         1.21         2.15         2.193         1.25         1.25         4.9           985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65										4.87
985         n1773         8.51         8.51         1.33         2.107         2.15         1.37         1.37         7.18           986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65										
986         n1774         6.83         6.83         1.45         2.064         2.107         1.49         1.49         5.38           987         n1776         6.22         6.22         1.57         2.021         2.064         1.61         1.61         4.65										
987 n1776 6.22 6.22 1.57 2.021 2.064 1.61 1.61 4.65										
988   n1778   5.96   5.96   1.69   1.978   2.021   1.73   1.73   4.27										
	988	n1778	5.96	5.96	1.69	1.978	2.021	1.73	1.73	4.27

989	n1780	5.82	5.82	1.81	1.935	1.978	1.85	1.85	4.01
990	n1782	5.65	5.65	0.74	2.494	2.537	0.79	0.79	4.91
991	n1784	5.64	5.64	0.72	2.752	2.795	0.77	0.77	4.93
992	n1786	5.61	5.61	0.62	2.838	2.881	0.67	0.67	4.99
993	n1788	5.57	5.57	0.52	2.881	2.924	0.57	0.57	5.05
1021	n1827	5.63	5.63	4.51	3.784	3.827	4.56	4.56	1.12
1022	n1828	5.43	5.43	4.31	3.827	3.87	4.37	4.37	1.12
1024	n1832	5.53	5.53	4.01	4.085	4.128	4.07	4.07	1.52
1025	n1833	5.48	5.48	3.89	4.214	4.257	3.95	3.95	1.59
1026	n1834	5.73	5.73	3.77	4.3	4.343	3.83	3.83	1.96
1027	n1835	5.59	5.59	3.65	0.688	3.784	3.7	3.7	1.94
1031	n1841	5.1	5.1	0.4	2.924	2.967	0.45	0.45	4.7
1032	n1842	5.8	5.8	4.68	0.086	0.129	4.69	4.69	1.12
1032	n1844	6.16	6.16	5.05	0.043	0.086	5.05	5.05	1.12
1033	n1846	5.39	5.39	3.66	0.043	0.086	3.67	3.67	1.74
1034	n1848	5.36	5.36	3.78	0.172	0.213	3.79	3.79	1.74
1035	n1849	5.38	5.38	3.78	0.129	0.172	3.79	3.91	1.38
1036	n1851	5.42	5.42	4.08	0.086	0.129	4.08	4.08	1.46
1037	n1853	5.42	5.38	4.08	0.043	0.086	4.08	4.08	1.34
1038	n1854	5.56	5.56	4.20	0	0.043	4.27	4.45	1.12
	n1857								4.21
1042 1043		5.43	5.43	1.22	3.287	3.33	1.28	1.28	4.21
	n1858	5.38 5.35	5.38 5.35	1.1	3.33	3.373	1.16	1.16 0.92	4.28
1044	n1861			0.87	3.459	3.502	0.92		
1045	n1863	5.24	5.24	0.75 0.63	3.182	3.525	0.8	0.8	4.49
1046 1047	n1864 n1865	5.31 5.22	5.31 5.22	0.65	3.525 3.611	3.568 3.654	0.68 0.56	0.68 0.56	4.69 4.72
1047	n1867	5.23	5.23	0.38	3.654	3.697	0.30	0.30	4.72
1048	n1869	5.09	5.09	0.38	3.697	3.74	0.44	0.44	4.83
1049	n1871	5.17	5.17	0.28	3.74	3.783	0.32	0.32	5.03
1050	n1872	5.32	5.32	0.14	3.783	3.826	0.2	0.2	5.03
1051	n1874	5.23	5.23	-0.08	3.826	3.869		2 22	5.31
1052	n1877	5.4	5.4	4.28	0	3.912	-0.02 4.34	-0.02 4.34	1.12
1053			5.41	4.28	3.912	3.955			
1054	n1879 n1881	5.41 5.32	5.32	4.16	3.955	3.998	4.23 4.11	4.23 4.11	1.24 1.28
1056	n1882	5.49	5.49	3.92	3.998	4.041	3.99	3.99	1.57
1056	n1884	5.49	5.49	3.8	4.041	4.041	3.87	3.87	1.66
1057	n1885	5.31	5.31	3.74	4.041	4.084	3.8	3.8	1.58
1058	n1887	5.46	5.46	4.34	0	0.043	4.34	4.34	1.12
1060	n1888	5.55			0.043	0.043			1.12
1060	n1891	4.97	5.55 4.97	4.03 3.77	0.043	0.086	4.04 3.78	4.04 3.78	1.52
1062	n1891	5.49	5.49		0.129	0.172	3.78	3.78	1.84
1063	n1892	5.49	5.71	3.65 3.53	0.172	0.213	3.54	3.54	2.18
1064	n1893	5.71	5.71	3.38	4.213	4.256			
	-	-					3.43	3.43	2.01
1066	n1895	5.03	5.03	3.5	4.17	4.213	3.56	3.56	1.54
1067	n1896	5.07	5.07	3.62	4.127	4.17	3.68	3.68	1.45
1068	n1897	7.97	7.97	6.85	0.344	0.387	6.87	6.87	1.12
1069	n1898	11.12	11.12	9.37	0.215	0.258	9.38	9.38	1.75

1070	n1900	11.26	11.26	9.49	0.172	0.215	9.5	9.5	1.77
1071	n1902	11.51	11.51	9.61	0.129	0.172	9.62	9.62	1.9
1072	n1903	11.61	11.61	9.73	0.086	0.129	9.74	9.74	1.88
1073	n1904	11.41	11.41	9.91	0.043	0.086	9.92	9.92	1.5
1074	n1906	11.23	11.23	10.11	0	0.043	10.12	10.12	1.12
1075	n1908	7.01	7.01	5.84	1.509	1.552	5.88	5.88	1.17
1076	n1910	6.99	6.99	5.72	1.638	1.681	5.76	5.76	1.27
1077	n1912	6.8	6.8	5.6	1.724	1.767	5.64	5.64	1.2
1078	n1913	6.86	6.86	5.48	1.767	1.81	5.52	5.52	1.38
1079	n1914	6.96	6.96	5.36	1.81	1.853	5.4	5.4	1.59
1080	n1915	6.99	6.99	5.28	2.068	2.111	5.32	5.32	1.71
1082	n1919	6.86	6.86	5.1	2.111	2.154	5.15	5.15	1.75
1083	n1920	6.83	6.83	4.98	2.154	2.197	5.02	5.02	1.85
1084	n1922	6.79	6.79	3.93	2.455	2.498	3.97	3.97	2.86
1084	n1925	6.63	6.63	3.77	2.498	2.541	3.82	3.82	2.86
1087	n1926	6.6	6.6	3.65	2.541	2.541	3.7	3.7	2.94
1087	n1928	6.61	6.61	3.53	2.584	2.627	3.58	3.58	3.08
1088	n1930	6.5	6.5	3.41	2.627	2.67	3.46	3.46	3.08
1090	n1931	6.36	6.36	3.29	1.462	1.655	3.33	3.33	3.07
1091	n1932	6.31	6.31	3.17	1.655	1.698	3.21	3.21	3.14
1093	n1936	6.37	6.37	3.02	2.343	2.386	3.06	3.06	3.35
1093	n1938	6.31	6.31	3.63	0.602	0.645	3.65	3.65	2.68
1094	n1939	6.19	6.19	3.75	0.559	0.602	3.78	3.78	2.44
1095	n1940	5.95	5.95	3.87	0.516	0.559	3.89	3.89	2.44
1090	n1940	5.69	5.69	3.99	0.473	0.516	4.01	4.01	1.69
1097	n1941	5.62	5.62	4.11	0.473	0.473	4.13	4.01	1.51
1099	n1943	5.49	5.49	4.23	0.43	0.473	4.25	4.25	1.26
1100	n1945	5.54	5.54	4.35	0.344	0.43	4.23	4.23	1.19
1101	n1946	5.68	5.68	4.47	0.301	0.344	4.49	4.49	1.21
1101	n1948	5.79	5.79	4.59	0.258	0.344	4.61	4.49	1.21
1102	n1949	5.83	5.83	4.71	0.215	0.258	4	4	4 4 9
1103	n1949	5.95	5.95	4.71	0.213	0.215	4.73 4.85	4.73 4.85	1.12 1.12
1104	n1951	6.15	6.15	5.03	0.172	0.213	5.05	5.05	1.12
1105	n1953	6.34	6.34	5.22	0.129	0.172	5.23	5.23	1.12
1107	n1954	6.63	6.63	5.51	0.080	0.129	5.52	5.52	1.12
1107	n1956	6.99	6.99	5.87	0.043	0.080	5.87	5.87	1.12
1108	n1957	5.4	5.4	2.9	2.386	2.429	2.95	2.95	2.5
11109	n1957	5.16	5.16	2.78	2.429	2.429	2.83	2.93	2.38
1111	n1958		5.05		2.429				2.38
1111	n1960	5.05 4.95	4.95	2.66 2.54	2.472	2.515 2.558	2.71 2.59	2.71 2.59	2.41
1113	n1961	4.95		2.54	2.515	2.558	2.59		
1113			4.82	2.42		2.644		2.47	2.4
	n1965 n1966	4.68	4.68		2.601		2.35	2.35	
1115	-	4.57	4.57	2.18	2.644	2.687	2.23	2.23	2.4
1116	n1967	4.42	4.42	2.06	2.687	2.73	2.11	2.11	2.36
1117	n1968	4.17	4.17	1.94	2.73	2.773	1.99	1.99	2.23
1118	n1969	4.11	4.11	1.82	2.773	2.816	1.87	1.87	2.29
1119	n1971	3.97	3.97	1.7	2.816	2.859	1.75	1.75	2.27

1120	n1972	3.78	3.78	1.58	2.859	2.902	1.63	1.63	2.2
1121	n1973	3.6	3.6	1.46	2.902	2.945	1.51	1.51	2.14
1122	n1974	3.51	3.51	1.34	2.945	2.988	1.39	1.39	2.17
1123	n1975	3.29	3.29	1.22	2.988	3.031	1.27	1.27	2.08
1124	n1976	3.18	3.18	0.63	4.45	4.493	0.7	0.7	2.55
1125	n1977	2.99	2.99	0.47	4.493	4.536	0.54	0.54	2.51
1126	n1979	2.94	2.94	0.35	4.536	4.579	0.42	0.42	2.58
1127	n1980	2.92	2.92	0.23	4.579	4.622	0.29	0.29	2.68
1128	n1981	2.91	2.91	-0.11	5.353	5.396	-0.03	-0.03	3.01
1130	n1985	2.84	2.84	-0.25	5.396	5.439	-0.17	-0.17	3.09
1131	n1986	2.67	2.67	-0.37	5.439	5.482	-0.29	-0.29	3.04
1132	n1988	2.78	2.78	-0.49	5.482	5.525	-0.41	-0.41	3.27
1133	n1989	3.17	3.17	-0.61	5.525	5.568	-0.53	-0.53	3.78
1134	n1991	3.13	3.13	-0.73	5.568	5.611	-0.65	-0.65	3.86
1134	n1991	3.06	3.06	-0.75	5.611	5.654	-0.03	-0.03	3.9
1136	n1993	3.11	3.11	-0.83	5.654	5.697	-0.77	-0.77	4.08
1137	n1993	3.06	3.06	-0.97	5.697	5.74	-1.01	-1.01	4.08
1137	n1994	2.9	2.9	-1.09	5.74	5.783	-1.01	-1.01	4.13
1138	n1995	2.83	2.83	-1.21	5.783	5.826	-1.13	-1.13	4.11
1140	n1997	2.86	2.86	-1.45	5.826	5.869	-1.23	-1.23	4.10
1141	n1998	2.83	2.83	-1.57	5.869	5.912	-1.49	-1.49	4.39
1142	n2000	2.87	2.87 3	-1.69	5.912	5.955	-1.61	-1.61	4.56 4.8
1143	n2002			-1.81	5.955	5.998	-1.73	-1.73	
1144	n2003	3.1	3.1	-1.93 -2.05	5.998	6.041	-1.85	-1.85	5.03 5.17
1145 1146	n2004 n2006	3.13 3.04	3.13 3.04	-2.03	6.041 6.084	6.084 6.127	-1.97 -2.09	-1.97 -2.09	5.17
1140	n2008	2.85	2.85	-2.17	6.127	6.127	-2.09	-2.09	5.14
1147	n2009	2.58	2.58	-2.29	6.17	6.213	-2.21	-2.21	4.99
1149	n2011	2.36	2.46	-2.41	6.213	6.256	-2.35	-2.35	4.99
1150	n2011	2.40	2.40	-2.65	6.256	6.299	-2.43	-2.43	4.98
1150	n2012	2.28	2.28	-2.03	6.299	6.342	-2.69	-2.69	
1151	n2013	2.13	2.13	-2.77	6.342	6.385	-2.81	-2.81	4.92
1153	n2014	2.42	2.42	-3.01	6.385	6.428	-2.93	-2.93	5.43
1154	n2017	2.42	2.42	-3.13	6.428	6.471	-3.05	-3.05	5.28
1154	n2017	2.22	2.22	-3.15	6.471	6.514	-3.03	-3.03	5.47
1156	n2020	2.24	2.24	-3.23	6.514	6.557	-3.24	-3.17	5.61
1157	n2021	2.31	2.31	-3.49	43.957	44	-3.24	-3.24	5.8
1158	n2021	2.69	2.69	0.26	37.357	37.4	0.46	0.46	2.43
1159	n2024	2.51	2.51	0.20	37.337	37.357	0.40	0.40	2.43
1160	n2024	2.51	2.51	0.35	37.314	37.337	0.55	0.55	2.16
1161	n2028	2.31	2.32	0.39	37.271	37.314	0.59	0.59	1.93
1162	n2030	2.36	2.36	0.39	37.228	37.271	0.63	0.63	1.94
1163	n2032	3.5	3.5	0.42	37.183	37.228	0.67	0.67	3.04
1165	n2035	2.35	2.35	0.54	37.142	37.183	0.75	0.07	1.81
1169	n2041	2.33	2.16	0.71	36.927	36.97	0.73	0.73	1.45
1170	n2041	2.22	2.22	0.75	36.884	36.927	0.91	0.91	1.47
1170	n2042	2.34	2.34	0.79	36.841	36.884	1	1	1.55
	112044	2.34	2.34	0.79	JU.041	JU.004	_ т		1.33

1172	n2045	2.5	2.5	0.83	36.798	36.841	1.04	1.04	1.66
1173	n2047	2.88	2.88	0.88	36.755	36.798	1.08	1.08	2
1174	n2051	3.1	3.1	1	16.933	16.976	1.14	1.14	2.1
1175	n2053	3.22	3.22	1.09	16.89	16.933	1.23	1.23	2.13
1178	n2058	3.94	3.94	1.32	16.804	16.847	1.46	1.46	2.62
1179	n2059	4.32	4.32	1.41	16.761	16.804	1.55	1.55	2.92
1181	n2062	4.76	4.76	1.53	16.718	16.761	1.67	1.67	3.23
1182	n2063	5.16	5.16	1.62	16.675	16.718	1.76	1.76	3.54
1183	n2065	5.22	5.22	1.7	16.632	16.675	1.84	1.84	3.52
1184	n2067	5.51	5.51	1.77	16.589	16.632	1.91	1.91	3.73
1186	n2069	5.67	5.67	3.24	15.447	15.49	3.34	3.34	2.44
1187	n2071	6.48	6.48	3.32	15.404	15.447	3.45	3.45	3.16
1188	n2072	7.99	7.99	3.41	15.361	15.404	3.54	3.54	4.58
1189	n2074	7.54	7.54	3.49	15.318	15.361	3.62	3.62	4.05
1190	n2075	6.93	6.93	3.57	15.275	15.318	3.7	3.7	3.36
1191	n2076	6.71	6.71	3.66	15.232	15.275	3.79	3.79	3.06
1191	n2077	6.73	6.73	3.74	15.189	15.232	3.79	3.73	2.99
1193	n2078	6.78	6.78	3.82	15.146	15.189	3.95	3.95	2.96
1194	n2079	6.71	6.71	3.91	15.140	15.146	4.04	4.04	2.30
1195	n2080	6.62	6.62	3.99	15.103	15.140	4.12	4.12	2.62
1196	n2082	6.36	6.36	4.08	15.017	15.103	4.12	4.12	2.02
1197	n2083	6.26	6.26	4.08	14.974	15.00	4.21	4.21	2.28
1200	n2088	5.89	5.89	4.17	14.888	14.931	4.54	4.54	1.48
1200	n2089	7.57	7.57	4.49	14.845	14.888	4.62	4.62	3.07
1201	n2090	5.74	5.74	4.58	14.843	14.845	4.71	4.71	1.16
1202	n2092	5.93	5.93	4.77	14.759	14.802	4.87	4.87	1.16
1205	n2094	6.36	6.36	5.24	0	0.043	5.25	5.25	1.12
1206	n2095	5.99	5.99	2.02	3.27	3.313	2.08	2.08	3.97
1207	n2096	5.83	5.83	1.9	3.313	3.356	1.96	1.96	3.93
1208	n2097	5.73	5.73	1.78	3.356	3.399	1.84	1.84	3.95
1209	n2099	5.63	5.63	1.66	3.139	3.239	1.72	1.72	3.96
1210	n2101	5.51	5.51	1.54	3.239	3.282	1.6	1.6	3.96
1211	n2102	5.55	5.55	1.45	5.991	6.034	1.52	1.52	4.1
1213	n2106	5.65	5.65	1.98	2.666	2.709	2.02	2.02	3.67
1214	n2108	5.59	5.59	2.03	2.107	2.15	2.07	2.07	3.56
1215	n2110	5.45	5.45	2.15	2.064	2.107	2.19	2.19	3.31
1216	n2112	5.45	5.45	2.27	2.021	2.064	2.31	2.31	3.18
1217	n2113	5.58	5.58	2.39	1.978	2.021	2.43	2.43	3.19
1218	n2115	5.65	5.65	2.51	1.935	1.978	2.55	2.55	3.14
1219	n2116	5.61	5.61	2.63	1.892	1.935	2.67	2.67	2.99
1220	n2118	5.59	5.59	2.75	1.849	1.892	2.79	2.79	2.85
1221	n2120	5.77	5.77	2.87	1.806	1.849	2.91	2.91	2.9
1222	n2121	5.84	5.84	2.99	1.763	1.806	3.03	3.03	2.85
1223	n2123	6.01	6.01	3.11	1.72	1.763	3.15	3.15	2.91
1224	n2124	6	6	3.14	1.677	1.72	3.18	3.18	2.87
1225	n2126	6.4	6.4	5.28	0.129	0.172	5.29	5.29	1.12
1226	n2128	7.64	7.64	6.52	0.129	0.172	6.54	6.54	1.12
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1227	n2129	7.89	7.89	6.77	0.086	0.129	6.78	6.78	1.12
1228	n2130	7.66	7.66	6.4	0.172	0.215	6.42	6.42	1.26
1229	n2132	7.46	7.46	6.29	0.215	0.258	6.3	6.3	1.17
1230	n2134	7.21	7.21	6.09	0.258	0.301	6.11	6.11	1.12
1231	n2135	7.12	7.12	3.3	0.903	0.946	3.33	3.33	3.82
1232	n2137	7.86	7.86	6.75	0.086	0.129	6.76	6.76	1.12
1233	n2139	9.36	9.36	8.24	0.043	0.086	8.25	8.25	1.12
1234	n2140	10.89	10.89	9.77	0	0.043	9.78	9.78	1.12
1235	n2142	10.11	10.11	8.99	0	0.043	9	9	1.12
1236	n2144	8.73	8.73	7.61	0.043	0.086	7.62	7.62	1.12
1237	n2148	7.08	7.08	3.17	0.946	0.989	3.2	3.2	3.92
1239	n2151	7.37	7.37	2.95	0.989	1.032	2.98	2.98	4.43
1241	n2151	7.35	7.35	2.74	13.985	14.028	2.86	2.86	4.43
1243	n2156	7.56	7.56	2.62	14.028	14.071	2.74	2.74	4.94
1244	n2157	7.48	7.48	2.54	14.071	14.114	2.66	2.66	4.94
1245	n2158	7.46	7.46	2.44	14.114	14.157	2.56	2.56	5.02
1246	n2159	7.54	7.54	2.37	14.157	14.2	2.49	2.49	5.17
1248	n2162	7.45	7.45	6.29	0	14.243	6.41	6.41	1.16
1249	n2163	7.43	7.43	6.2	14.243	14.286	6.33	6.33	1.23
1250	n2164	7.47	7.47	6.12	14.286	14.329	6.24	6.24	1.35
1251	n2166	7.44	7.44	6.04	14.329	14.372	6.16	6.16	1.41
1252	n2167	7.3	7.3	5.95	14.372	14.415	6.08	6.08	1.35
1253	n2169	7.16	7.16	5.87	14.415	14.458	5.99	5.99	1.29
1254	n2170	7.19	7.19	5.78	14.458	14.501	5.91	5.91	1.4
1255	n2172	7.12	7.12	5.7	14.501	14.544	5.83	5.83	1.42
1256	n2174	7.02	7.02	5.62	14.544	14.587	5.74	5.74	1.41
1257	n2175	6.86	6.86	5.53	14.587	14.63	5.65	5.65	1.32
1258	n2176	6.6	6.6	5.43	14.63	14.673	5.54	5.54	1.16
1260	n2181	6.75	6.75	3.38	0.559	0.602	3.41	3.41	3.37
1261	n2182	6.35	6.35	3.5	0.516	0.559	3.53	3.53	2.85
1262	n2184	6.11	6.11	3.62	0.473	0.516	3.64	3.64	2.48
1263	n2186	5.81	5.81	3.74	0.43	0.473	3.76	3.76	2.07
1264	n2187	5.59	5.59	3.86	0.387	0.43	3.88	3.88	1.73
1267	n2193	5.61	5.61	4.39	0.258	0.301	4.4	4.4	1.22
1268	n2195	6.15	6.15	4.51	0.215	0.258	4.53	4.53	1.64
1269	n2196	5.75	5.75	4.63	0.172	0.215	4.65	4.65	1.12
1272	n2201	6.18	6.18	5.06	0.043	0.086	5.07	5.07	1.12
1273	n2203	6.98	6.98	5.87	0	0.043	5.87	5.87	1.12
1274	n2204	8.31	8.31	7.2	0	0.043	7.2	7.2	1.12
1275	n2205	7.7	7.7	6.59	0.043	0.086	6.59	6.59	1.12
1276	n2207	6.32	6.32	5.21	0.086	0.129	5.22	5.22	1.12
1277	n2209	5.85	5.85	4.73	0.129	0.172	4.74	4.74	1.12
1278	n2210	5.52	5.52	4.4	0.172	0.215	4.41	4.41	1.12
1279	n2212	5.26	5.26	4.15	0.215	0.258	4.16	4.16	1.12
1282	n2216	4.92	4.92	3.63	0.344	0.387	3.65	3.65	1.29
1285	n2220	4.52	4.52	3.19	0.516	0.559	3.22	3.22	1.33
1286	n2221	4.49	4.49	3.07	0.559	0.602	3.1	3.1	1.42
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1287	n2222	4.31	4.31	2.97	0.602	0.645	2.99	2.99	1.34
1289	n2225	4.71	4.71	2.73	0.688	0.731	2.75	2.75	1.98
1290	n2226	4.94	4.94	2.61	0.731	0.774	2.63	2.63	2.33
1291	n2228	5.04	5.04	2.49	0.774	0.927	2.52	2.52	2.55
1292	n2229	5.28	5.28	2.37	0.927	0.97	2.4	2.4	2.91
1293	n2231	5.23	5.23	2.25	0.97	1.013	2.28	2.28	2.98
1294	n2233	5.57	5.57	2.13	1.013	1.056	2.16	2.16	3.44
1297	n2239	5.64	5.64	4.52	0.473	0.516	4.54	4.54	1.12
1299	n2242	7.87	7.87	6.75	0.344	0.387	6.77	6.77	1.12
1300	n2243	11.62	11.62	10.5	0.301	0.344	10.52	10.52	1.12
1301	n2244	16.53	16.53	15.41	0.258	0.301	15.42	15.42	1.12
1302	n2248	21.14	21.14	20.02	0.086	0.129	20.03	20.03	1.12
1305	n2254	22.71	22.71	21.59	0	0.043	21.6	21.6	1.12
1306	n2255	21.28	21.28	20.17	0.086	0.129	20.17	20.17	1.12
1307	n2257	20.72	20.72	19.61	0.129	0.172	19.62	19.62	1.12
1308	n2258	20.72	20.72	19.49	0.125	0.258	19.5	19.5	1.18
1309	n2259	19.56	19.56	18.44	0.301	0.236	18.46	18.46	1.12
1310	n2260	15.94	15.94	14.82	0.344	0.387	14.84	14.84	1.12
1311	n2262	11.81	11.81	10.69	0.387	0.43	10.71	10.71	1.12
1312	n2264	9.37	9.37	8.25	0.43	0.473	8.27	8.27	1.12
1313	n2265	8.17	8.17	7.05	0.473	0.516	7.07	7.07	1.12
1314	n2267	7.49	7.49	6.37	0.559	0.602	6.39	6.39	1.12
1315	n2269	7.47	7.47	6.25	0.602	0.645	6.27	6.27	1.22
1317	n2271	7.09	7.09	5.97	0.688	0.731	5.99	5.99	1.12
1318	n2272	6.92	6.92	5.8	0.731	0.774	5.83	5.83	1.12
1319	n2274	6.89	6.89	5.68	0.774	0.817	5.7	5.7	1.21
1320	n2275	6.21	6.21	5.09	0.817	0.86	5.11	5.11	1.12
1321	n2276	5.57	5.57	4.45	0.86	0.903	4.48	4.48	1.12
1322	n2277	6.63	6.63	4.33	0.903	0.946	4.36	4.36	2.3
1323	n2278	6.71	6.71	4.21	0.946	0.989	4.24	4.24	2.49
1324	n2280	6.66	6.66	4.09	0.989	1.032	4.13	4.13	2.56
1325	n2281	6.5	6.5	3.97	1.075	1.118	4.01	4.01	2.52
1326	n2282	6.16	6.16	3.85	1.204	1.247	3.89	3.89	2.31
1327	n2283	5.99	5.99	3.73	1.247	1.29	3.77	3.77	2.26
1328	n2285	5.57	5.57	3.61	1.29	1.333	3.65	3.65	1.96
1329	n2287	5.73	5.73	3.49	1.333	1.376	3.53	3.53	2.23
1330	n2288	5.85	5.85	3.37	1.376	1.419	3.41	3.41	2.48
1331	n2289	5.85	5.85	3.25	1.419	1.462	3.29	3.29	2.6
1332	n2291	5.43	5.43	1.39	6.034	6.077	1.47	1.47	4.03
1333	n2292	6.89	6.89	1.27	6.077	6.12	1.35	1.35	5.62
1334	n2294	5.49	5.49	1.16	6.12	6.163	1.23	1.23	4.33
1335	n2296	5.15	5.15	1.04	6.206	6.249	1.11	1.11	4.12
1336	n2298	5.13	5.13	0.92	6.249	6.292	0.99	0.99	4.22
1337	n2299	5.03	5.03	0.8	6.292	6.335	0.87	0.87	4.24
1338	n2301	5.08	5.08	0.68	6.335	6.378	0.75	0.75	4.41
1339	n2303	5.03	5.03	0.56	6.378	6.421	0.63	0.63	4.47
1340	n2304	4.97	4.97	0.44	6.421	6.464	0.51	0.51	4.53
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1341	n2306	5.12	5.12	0.32	6.464	6.507	0.4	0.4	4.8
1342	n2308	4.64	4.64	0.2	6.507	6.55	0.28	0.28	4.45
1343	n2310	4.77	4.77	0.08	6.55	6.593	0.16	0.16	4.69
1344	n2311	4.96	4.96	-0.04	6.593	6.636	0.04	0.04	5
1345	n2312	4.93	4.93	-0.16	6.636	6.679	-0.08	-0.08	5.09
1346	n2314	4.86	4.86	-0.28	6.679	6.722	-0.2	-0.2	5.14
1347	n2315	4.72	4.72	-0.4	6.722	6.765	-0.32	-0.32	5.12
1348	n2316	4.53	4.53	-0.52	6.765	6.808	-0.44	-0.44	5.06
1349	n2317	4.64	4.64	-0.64	6.808	6.851	-0.56	-0.56	5.28
1350	n2319	4.63	4.63	-0.76	6.851	6.894	-0.68	-0.68	5.39
1351	n2320	4.43	4.43	-0.88	6.894	6.937	-0.8	-0.8	5.31
1352	n2322	4.46	4.46	-1	6.937	6.98	-0.92	-0.92	5.47
1353	n2323	4.29	4.29	-1.13	7.324	7.367	-1.04	-1.04	5.42
1354	n2325	4.19	4.19	-1.24	7.367	7.41	-1.16	-1.16	5.44
1355	n2327	4.17	4.17	-1.37	7.453	7.496	-1.28	-1.28	5.54
1356	n2328	4.17	4.17	-1.49	7.496	7.539	-1.4	-1.4	5.66
1357	n2330	3.92	3.92	-1.61	7.582	7.625	-1.52	-1.52	5.53
1358	n2332	3.87	3.87	-1.73	7.625	7.668	-1.64	-1.64	5.59
1359	n2334	3.53	3.53	-1.85	7.711	7.754	-1.76	-1.76	5.38
1360	n2336	3.74	3.74	-1.97	7.754	7.797	-1.88	-1.88	5.7
1361	n2338	4.58	4.58	2.66	0.301	0.344	2.68	2.68	1.92
1362	n2339	4.49	4.49	2.78	0.258	0.301	2.8	2.8	1.71
1363	n2340	4.6	4.6	2.9	0.215	0.258	2.92	2.92	1.7
1364	n2341	4.47	4.47	3.02	0.172	0.215	3.04	3.04	1.45
1366	n2344	4.68	4.68	3.29	0.043	0.086	3.3	3.3	1.39
1367	n2345	4.71	4.71	3.59	0	0.043	3.6	3.6	1.12
1368	n2347	4.55	4.55	3.44	0	0.043	3.44	3.44	1.12
1369	n2348	4.43	4.43	3.13	0.043	0.086	3.14	3.14	1.3
1370	n2350	4.33	4.33	2.96	0.086	0.129	2.97	2.97	1.37
1371	n2352	4.29	4.29	2.83	0.129	0.172	2.85	2.85	1.45
1372	n2354	4.37	4.37	2.71	0.172	0.215	2.73	2.73	1.65
1373	n2355	4.41	4.41	2.59	0.215	0.258	2.61	2.61	1.82
1374	n2356	4.64	4.64	2.47	0.258	0.301	2.49	2.49	2.17
1375	n2358	4.79	4.79	2.35	0.301	0.344	2.37	2.37	2.44
1376	n2359	7.17	7.17	6.05	1.378	1.421	6.08	6.08	1.12
1377	n2360	7.91	7.91	6.79	1.335	1.378	6.82	6.82	1.12
1378	n2362	9.15	9.15	8.03	1.249	1.292	8.06	8.06	1.12
1379	n2364	12.07	12.07	10.95	1.163	1.206	10.98	10.98	1.12
1380	n2366	15.24	15.24	14.12	1.12	1.163	14.15	14.15	1.12
1381	n2368	17.17	17.17	16.06	1.077	1.12	16.08	16.08	1.12
1383	n2370	19.23	19.23	18.11	0.991	1.034	18.14	18.14	1.12
1384	n2372	21.98	21.98	20.86	0.948	0.991	20.89	20.89	1.12
1385	n2373	24.99	24.99	23.87	0.905	0.948	23.9	23.9	1.12
1386	n2374	28.22	28.22	27.1	0.862	0.905	27.13	27.13	1.12
1387	n2376	31.73	31.73	30.61	0.819	0.862	30.63	30.63	1.12
1388	n2378	35.55	35.55	34.43	0.776	0.819	34.45	34.45	1.12
1389	n2379	38.67	38.67	37.55	0.733	0.776	37.57	37.57	1.12
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1390	n2381	42.46	42.46	41.34	0.387	0.69	41.36	41.36	1.12
1391	n2382	45.31	45.31	44.19	0.344	0.637	44.21	44.21	1.12
1392	n2384	46.23	46.23	45.11	0.258	0.551	45.13	45.13	1.12
1393	n2385	47.76	47.76	46.64	0.172	0.215	46.66	46.66	1.12
1414	n2415	52.84	52.84	51.72	0	0.043	51.72	51.72	1.12
1415	n2416	49.23	49.23	48.11	0.043	0.086	48.12	48.12	1.12
1416	n2418	48.47	48.47	47.08	0.129	0.172	47.1	47.1	1.38
1417	n2422	9.64	9.64	8.11	0.086	0.129	8.12	8.12	1.52
1418	n2424	9.39	9.39	8.28	0.043	0.086	8.28	8.28	1.12
1419	n2425	12.66	12.66	11.54	0.043	0.043	11.55	11.55	1.12
1431	n2442	8.2	8.2	6.41	1.462	1.505	6.45	6.45	1.79
1432	n2443	7.65	7.65	6.53	0	1.462	6.57	6.57	1.12
1434	n2446	6.92	6.92	1.42	1.376	1.419	1.46	1.46	5.49
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1435	n2448	6.3	6.3	1.54	1.29	1.333	1.58	1.58	4.75
1437	n2450	6.08	6.08	1.78	1.204	1.247	1.81	1.81	4.29
1438	n2452	5.93	5.93	1.9	1.118	1.161	1.93	1.93	4.03
1439	n2454	6.65	6.65	2.02	1.075	1.118	2.05	2.05	4.63
1440	n2456	5.3	5.3	2.14	0.989	1.032	2.17	2.17	3.16
1441	n2458	4.97	4.97	2.26	0.946	0.989	2.29	2.29	2.71
1442	n2459	7.46	7.46	2.38	0.903	0.946	2.41	2.41	5.09
1443	n2461	4.73	4.73	2.5	0.86	0.903	2.53	2.53	2.23
1444	n2463	4.68	4.68	2.62	0.817	0.86	2.64	2.64	2.06
1445	n2464	4.64	4.64	2.74	0.774	0.817	2.76	2.76	1.9
1446	n2466	4.68	4.68	2.86	0.731	0.774	2.88	2.88	1.82
1447	n2468	4.82	4.82	2.98	0.688	0.731	3	3	1.85
1448	n2469	4.83	4.83	3.1	0.559	0.602	3.12	3.12	1.73
1449	n2471	4.7	4.7	3.22	0.516	0.559	3.24	3.24	1.49
1450	n2472	4.61	4.61	3.34	0.473	0.516	3.36	3.36	1.27
1451	n2473	4.75	4.75	3.46	0.43	0.473	3.48	3.48	1.29
1452	n2474	4.77	4.77	3.58	0.387	0.43	3.6	3.6	1.2
1453	n2476	4.81	4.81	3.7	0.301	0.344	3.71	3.71	1.12
1454	n2477	5.15	5.15	4.03	0.258	0.301	4.04	4.04	1.12
1455	n2478	5.57	5.57	4.45	0.215	0.258	4.46	4.46	1.12
1456	n2480	6.05	6.05	4.93	0.172	0.215	4.95	4.95	1.12
1457	n2481	6.57	6.57	5.45	0.129	0.172	5.46	5.46	1.12
1458	n2483	8.43	8.43	7.31	0.086	0.129	7.32	7.32	1.12
1460	n2487	12.73	12.73	11.5	0.043	0.086	11.51	11.51	1.23
1461	n2488	12.92	12.92	11.81	0	0.043	11.81	11.81	1.12
1462	n2489	12.92	12.92	11.8	0	0.043	11.8	11.8	1.12
1463	n2490	12.87	12.87	11.6	0.129	0.172	11.61	11.61	1.27
1464	n2491	9	9	7.88	0.172	0.215	7.89	7.89	1.12
1465	n2493	6.32	6.32	5.2	0.215	0.258	5.21	5.21	1.12
1466	n2495	5.53	5.53	4.41	0.258	0.301	4.43	4.43	1.12
1467	n2496	4.68	4.68	3.56	0.301	0.344	3.58	3.58	1.12
1468	n2497	4.56	4.56	3.44	0.387	0.43	3.46	3.46	1.12
1469	n2499	4.38	4.38	3.26	0.473	0.516	3.28	3.28	1.12
1470	n2500	3.92	3.92	2.8	0.516	0.559	2.82	2.82	1.12
	112300		3.52		0.510	0.555	2.02	2.02	1.14

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1471	n2502	3.82	3.82	2.68	0.602	0.645	2.7	2.7	1.14
1473	n2504	3.51	3.51	2.39	0.731	0.774	2.42	2.42	1.12
1474	n2506	3.45	3.45	2.27	0.774	0.817	2.3	2.3	1.17
1476	n2508	3.24	3.24	1.67	0.946	0.989	1.7	1.7	1.57
1477	n2509	3.28	3.28	1.59	0.989	1.032	1.63	1.63	1.69
1478	n2511	3.43	3.43	1.47	1.032	1.075	1.51	1.51	1.95
1480	n2514	3.43	3.43	1.23	1.204	1.247	1.27	1.27	2.19
1481	n2516	3.25	3.25	1.11	1.247	1.29	1.15	1.15	2.13
1482	n2517	3.25	3.25	1	1.29	1.333	1.03	1.03	2.25
1483	n2518	3.23	3.23	0.88	1.333	1.376	0.91	0.91	2.35
1484	n2519	3.31	3.31	0.76	1.376	1.419	0.79	0.79	2.55
1485	n2521	3.18	3.18	1.8	0.086	0.129	1.81	1.81	1.39
1486	n2522	3.12	3.12	2	0	0.043	2	2	1.12
1488	n2525	3.36	3.36	1.66	0.043	0.086	1.67	1.67	1.69
1489	n2526	3.23	3.23	1.49	0.086	0.129	1.5	1.5	1.74
1490	n2527	3.28	3.28	1.36	0.080	0.123	1.38	1.38	1.92
1491	n2528	3.27	3.27	1.24	0.123	0.172	1.26	1.26	2.02
1492	n2529	3.09	3.09	1.12	0.215	0.213	1.14	1.14	1.96
1493	n2530	3.14	3.14	0.99	0.301	0.236	1	1	2.15
1494	n2531	3.26	3.26	0.83	0.344	0.387	0.84	0.84	2.44
1495	n2532	3.27	3.27	0.71	0.387	0.43	0.73	0.73	2.56
1496	n2534	3.29	3.29	0.59	0.43	0.473	0.61	0.61	2.71
1497	n2535	3.43	3.43	0.33	0.43	0.473	0.49	0.49	2.96
1501	n2539	3.28	3.28	-0.04	0.473	0.731	-0.01	-0.01	3.32
1502	n2542	5.02	5.02	3.9	0.688	0.731	3.93	3.93	1.12
1503	n2544	6.21	6.21	5.09	0.645	0.688	5.11	5.11	1.12
1504	n2546	7.83	7.83	6.72	0.602	0.645	6.74	6.74	1.12
1505	n2548	11.16	11.16	10.04	0.559	0.602	10.06	10.06	1.12
1506	n2549	12.51	12.51	11.39	0.516	0.559	11.41	11.41	1.12
1507	n2551	16.93	16.93	15.81	0.473	0.516	15.83	15.83	1.12
1509	n2553	21.89	21.89	20.77	0.387	0.43	20.78	20.78	1.12
1510	n2555	22.77	22.77	21.65	0.344	0.387	21.67	21.67	1.12
1511	n2556	24.02	24.02	22.9	0.301	0.344	22.92	22.92	1.12
1512	n2557	26.98	26.98	25.86	0.258	0.301	25.87	25.87	1.12
1513	n2559	30.06	30.06	28.94	0.172	0.215	28.95	28.95	1.12
1514	n2561	36.12	36.12	35	0.172	0.213	35.01	35.01	1.12
1515	n2562	40.22	40.22	39.1	0.086	0.172	39.11	39.11	1.12
1516	n2563	41.48	41.48	39.7	0.043	0.086	39.71	39.71	1.78
1517	n2564	41.03	41.03	39.91	0.043	0.043	39.91	39.91	1.12
1517	n2566	7.48	7.48	3.93	12.91	12.953	4.03	4.03	3.55
1521	n2569	7.51	7.51	4.09	12.609	12.652	4.21	4.21	3.43
1522	n2570	7.54	7.54	4.21	12.566	12.609	4.33	4.33	3.33
1524	n2573	7.28	7.28	4.21	12.523	12.566	4.51	4.51	2.9
1525	n2575	7.28	7.28	4.41	12.323	12.300	4.53	4.51	2.89
1527	n2578	7.55	7.55	6.05	11.792	11.835	6.15	6.15	1.5
1528	n2580	7.55	7.55	6.17	11.792	11.792	6.29	6.29	1.43
1528	n2581	7.55	7.55	6.29	11.706	11.749	6.41	6.41	1.25
1323	112301	7.35	1.33	0.29	11./00	11./49	0.41	0.41	1.23

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1530	n2582	7.53	7.53	6.41	0	11.706	6.53	6.53	1.12
1531	n2584	7.57	7.57	1.24	11.62	11.663	1.35	1.35	6.33
1533	n2588	7.59	7.59	2.13	9.384	9.427	2.23	2.23	5.46
1534	n2590	7.64	7.64	2.25	9.341	9.384	2.35	2.35	5.39
1535	n2592	7.76	7.76	2.37	9.298	9.341	2.47	2.47	5.39
1536	n2594	7.87	7.87	2.46	9.255	9.298	2.56	2.56	5.41
1538	n2597	7.96	7.96	2.61	2.151	2.194	2.65	2.65	5.35
1539	n2599	8.07	8.07	2.73	2.108	2.151	2.77	2.77	5.34
1540	n2600	8.14	8.14	2.85	2.065	2.108	2.89	2.89	5.29
1541	n2602	8.19	8.19	2.97	2.022	2.065	3.01	3.01	5.22
1542	n2603	8.17	8.17	3.09	1.979	2.022	3.13	3.13	5.08
1543	n2605	8.1	8.1	3.21	1.893	1.936	3.25	3.25	4.89
1544	n2607	<b>-</b>	8.13	3.33	1.85	1.893	3.23	3.23	4.83
		8.13							
1545	n2609	7.98	7.98	3.45	1.764	1.807	3.49	3.49	4.53
1546	n2610	7.94	7.94	3.57	1.721	1.764	3.61	3.61	4.37
1547	n2611	7.67	7.67	3.69	1.678	1.721	3.73	3.73	3.98
1548	n2612	7.63	7.63	3.81	1.635	1.678	3.85	3.85	3.82
1549	n2613	7.6	7.6	3.93	1.592	1.635	3.97	3.97	3.67
1550	n2615	7.51	7.51	4.05	1.549	1.592	4.09	4.09	3.46
1551	n2617	7.43	7.43	4.17	1.506	1.549	4.21	4.21	3.26
1552	n2619	7.44	7.44	4.29	1.463	1.506	4.33	4.33	3.16
1553	n2620	7.45	7.45	4.41	1.42	1.463	4.44	4.44	3.04
1554	n2621	7.36	7.36	4.53	1.377	1.42	4.56	4.56	2.83
1555	n2622	7.18	7.18	4.65	1.334	1.377	4.68	4.68	2.53
1556	n2623	7.1	7.1	4.7	1.291	1.334	4.73	4.73	2.4
1557	n2624	7.26	7.26	1.36	2.107	2.15	1.4	1.4	5.9
1558	n2625	6.99	6.99	1.48	2.064	2.107	1.52	1.52	5.51
1559	n2626	6.84	6.84	1.6	2.021	2.064	1.64	1.64	5.24
1560	n2628	6.86	6.86	1.72	1.978	2.021	1.76	1.76	5.14
1561	n2629	6.87	6.87	1.84	1.935	1.978	1.88	1.88	5.04
1562	n2631	6.94	6.94	1.96	1.849	1.892	2	2	4.98
1563	n2633	6.95	6.95	2.08	1.763	1.806	2.12	2.12	4.88
1564	n2635	6.85	6.85	2.2	1.677	1.72	2.24	2.24	4.66
1565	n2637	6.88	6.88	2.32	1.634	1.677	2.36	2.36	4.57
1566	n2639	6.83	6.83	2.44	1.548	1.591	2.47	2.47	4.39
1568	n2641	6.7	6.7	2.68	1.462	1.505	2.71	2.71	4.02
1569	n2643	6.79	6.79	2.8	1.376	1.419	2.83	2.83	4
1571	n2646	7.29	7.29	3.03	1.29	1.333	3.06	3.06	4.26
1573	n2649	7.63	7.63	3.27	1.204	1.247	3.3	3.3	4.36
1574	n2651	7.58	7.58	3.51	1.161	1.204	3.54	3.54	4.08
1575	n2653	7.6	7.6	3.63	1.118	1.161	3.66	3.66	3.97
1576	n2655	7.68	7.68	3.75	1.075	1.118	3.78	3.78	3.93
1577	n2657	7.72	7.72	3.87	1.032	1.075	3.9	3.9	3.85
1578	n2659	7.63	7.63	3.99	0.989	1.032	4.02	4.02	3.64
1579	n2661	7.69	7.69	4.11	0.946	0.989	4.14	4.14	3.58
1580	n2663	8.07	8.07	4.23	0.86	0.903	4.26	4.26	3.84
1581	n2665	7.71	7.71	4.35	0.817	0.86	4.38	4.38	3.37
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1582	n2666	7.72	7.72	4.47	0.774	0.817	4.5	4.5	3.25
1583	n2667	7.78	7.78	4.59	0.731	0.774	4.62	4.62	3.19
1584	n2669	7.76	7.76	4.71	0.688	0.731	4.73	4.73	3.05
1585	n2671	7.77	7.77	4.83	0.645	0.688	4.85	4.85	2.94
1586	n2673	7.82	7.82	4.95	0.602	0.645	4.97	4.97	2.87
1587	n2674	7.68	7.68	5.07	0.559	0.602	5.09	5.09	2.61
1588	n2675	7.65	7.65	5.11	0.516	0.559	5.13	5.13	2.54
1589	n2677	7.42	7.42	5.19	0.301	0.344	5.21	5.21	2.23
1590	n2678	7.23	7.23	5.31	0.258	0.301	5.33	5.33	1.92
1591	n2680	7.19	7.19	5.43	0.215	0.258	5.44	5.44	1.76
1592	n2682	7.06	7.06	5.55	0.172	0.215	5.56	5.56	1.51
1593	n2684	7.34	7.34	5.67	0.129	0.172	5.68	5.68	1.67
1594	n2685	7.05	7.05	5.79	0.086	0.129	5.8	5.8	1.25
1595	n2687	7.09	7.09	5.97	0.043	0.086	5.98	5.98	1.12
1596	n2689	7.65	7.65	6.53	0.043	0.043	6.54	6.54	1.12
1597	n2690	7.77	7.77	6.15	0.129	0.172	6.16	6.16	1.62
1598	n2691	7.77	7.77	6.27	0.129	0.172	6.29	6.29	1.55
1599	n2693	7.82	7.82	6.45	0.043	0.129	6.46	6.46	1.42
1600	n2695	7.87	7.87	6.75	0.043	0.043	6.76	6.76	1.12
1601	n2696	8.03	8.03	6.79	6.201	6.244	6.87	6.87	1.24
1603	n2700	7.98	7.98	6.64	6.244	6.287	6.72	6.72	1.34
1604	n2700	7.89	7.89	6.52	6.287	6.33	6.6	6.6	1.38
1605	n2701	7.89	7.89	6.4	6.33	6.373	6.48	6.48	1.49
1606	n2702	7.88	7.88	6.28	6.373	6.416	6.36	6.36	1.49
1607	n2704	7.88	7.88	6.16	6.416	6.459	6.24	6.24	1.65
1608	n2706	7.31	7.31	6.04	6.459	6.502	6.12	6.12	1.27
1609	n2707	7.31	7.31	5.92	6.545	6.588	6	6	1.78
1610	n2707	7.62	7.62	5.8	6.631	6.674	5.88	5.88	1.82
1611	n2710	7.73	7.73	5.68	6.717	6.76	5.76	5.76	2.05
1612	n2710	7.69	7.69	5.56	6.803	6.846	5.64	5.64	2.03
1613	n2711	7.03	7.03	5.44	6.846	6.889	5.52	5.52	2.14
1614	n2713	7.68	7.68	5.32	6.889	6.932	5.4	5.4	2.36
1615	n2714	7.68	7.68	5.2	6.932	6.975	5.28	5.28	2.48
1616	n2717	7.58	7.58	5.08	6.975	7.018	5.16	5.16	2.51
1617	n2717	7.63	7.63	4.96	7.018	7.018	5.03	5.03	2.67
1619	n2721	8.03	8.03	6.91	6.158	6.201	6.99	6.99	1.12
1620	n2721	8.2	8.2	7.08	6.115	6.158	7.15	7.15	1.12
1621	n2724	8.38	8.38	7.08	6.072	6.115	7.13	7.13	1.12
1621	n2725	8.69	8.69	7.26	6.029	6.072	7.55	7.53	1.12
1623	n2726	10.42	10.42	9.3	0.029	5.986	9.37	9.37	1.12
1628	n2733	9.58	9.58	8.46	0	0.043	8.47	8.47	1.12
1629	n2735	9.38	9.38	8.03	0.043	0.043	8.04	8.04	1.12
1630	n2737	9.15	9.15	7.86	0.043	0.086	7.87	7.87	
	-	-							1.34
1631	n2739	7.71	7.71	6.59	0.172	0.215	6.6	6.6	1.12
1632	n2740	7.74	7.74	6.47	0.215	0.258	6.48	6.48	1.28
1634	n2744	6.22	6.22	5.1	0.301	0.344	5.11	5.11	1.12
1635	n2745	5.4	5.4	4.29	0.387	0.43	4.3	4.3	1.12

1636	n2746	5.01	5.01	3.89	0.43	0.473	3.91	3.91	1.12
1637	n2748	4.92	4.92	3.77	0.473	0.516	3.79	3.79	1.15
1638	n2750	4.8	4.8	3.65	0.516	0.559	3.67	3.67	1.15
1639	n2752	4.71	4.71	3.54	0.559	0.602	3.56	3.56	1.16
1641	n2755	4.71	4.71	2.47	5.126	5.169	2.54	2.54	2.24
1642	n2757	4.79	4.79	2.54	4.481	4.524	2.6	2.6	2.25
1643	n2758	4.79	4.79	2.66	4.438	4.481	2.72	2.72	2.13
1644	n2760	4.8	4.8	2.78	4.395	4.438	2.84	2.84	2.02
1645	n2762	5.1	5.1	2.9	4.352	4.395	2.96	2.96	2.21
1646	n2763	5.59	5.59	3.02	4.309	4.352	3.09	3.09	2.56
1647	n2765	5.85	5.85	3.15	4.266	4.309	3.21	3.21	2.71
1648	n2767	5.43	5.43	3.26	0.817	0.86	3.28	3.28	2.18
1649	n2769	5.6	5.6	3.37	0.774	0.817	3.4	3.4	2.23
1650	n2771	5.4	5.4	3.49	0.731	0.774	3.52	3.52	1.91
1652	n2775	5.44	5.44	3.73	0.731	0.688	3.75	3.75	1.72
1653	n2776	5.53	5.53	3.85	0.602	0.645	3.87	3.87	1.68
1654	n2778	5.67	5.67	3.97	0.559	0.602	3.99	3.99	1.7
1655	n2780	5.8	5.8	4.09	0.516	0.559	4.11	4.11	1.71
1656	n2782	6.1	6.1	4.21	0.473	0.516	4.23	4.23	1.89
1658	n2785	6.41	6.41	4.45	0.344	0.387	4.47	4.47	1.96
1659	n2787	6.44	6.44	4.56	0.301	0.344	4.58	4.58	1.88
1661	n2790	6.52	6.52	4.8	0.172	0.215	4.81	4.81	1.72
1662	n2792	6.41	6.41	4.92	0.172	0.213	4.93	4.93	1.49
1663	n2794	6.52	6.52	5.04	0.086	0.172	5.05	5.05	1.48
1664	n2795	6.7	6.7	5.21	0.043	0.086	5.22	5.22	1.5
1665	n2796	6.59	6.59	5.47	0.043	0.043	5.47	5.47	1.12
1667	n2800	6.72	6.72	4.74	1.248	1.291	4.78	4.78	1.97
1669	n2804	7.07	7.07	4.93	1.205	1.248	4.96	4.96	2.14
1671	n2808	7.05	7.05	5.16	1.076	1.119	5.2	5.2	1.89
1672	n2809	7.29	7.29	5.28	1.033	1.076	5.31	5.31	2.01
1674	n2811	7.32	7.32	5.53	0.904	0.947	5.56	5.56	1.79
1675	n2812	7.44	7.44	5.65	0.861	0.904	5.68	5.68	1.79
1676	n2813	7.43	7.43	5.77	0.818	0.861	5.8	5.8	1.66
1677	n2815	7.48	7.48	5.89	0.775	0.818	5.92	5.92	1.59
1678	n2817	7.14	7.14	6.01	0.732	0.775	6.03	6.03	1.14
1679	n2818	7.44	7.44	6.13	0.559	0.732	6.15	6.15	1.31
1680	n2820	7.4	7.4	6.25	0.516	0.689	6.27	6.27	1.16
1681	n2821	7.94	7.94	6.37	0.512	0.555	6.39	6.39	1.57
1682	n2823	7.93	7.93	6.49	0.469	0.512	6.51	6.51	1.44
1683	n2825	7.94	7.94	6.61	0.426	0.469	6.63	6.63	1.33
1684	n2826	7.87	7.87	6.73	0.383	0.426	6.75	6.75	1.14
1686	n2829	8.35	8.35	7.23	0.297	0.34	7.25	7.25	1.12
1687	n2830	9.09	9.09	7.98	0.254	0.297	7.99	7.99	1.12
1689	n2832	9.77	9.77	8.62	0.211	0.254	8.63	8.63	1.15
1690	n2833	9.98	9.98	8.86	0	0.043	8.87	8.87	1.12
1696	n2840	7.77	7.77	6.65	0.301	0.344	6.67	6.67	1.12
1697	n2842	8.67	8.67	7.55	0.258	0.301	7.56	7.56	1.12

1698	n2844	9.42	9.42	8.31	0.215	0.258	8.32	8.32	1.12
1699	n2846	11.07	11.07	9.95	0.172	0.215	9.96	9.96	1.12
1700	n2848	13.55	13.55	12.43	0.129	0.172	12.44	12.44	1.12
1701	n2850	16.18	16.18	15.06	0.086	0.129	15.07	15.07	1.12
1702	n2852	17.9	17.9	16.6	0.043	0.086	16.6	16.6	1.3
1705	n2856	13.47	13.47	12.35	0.043	0.086	12.36	12.36	1.12
1706	n2858	10.97	10.97	9.86	0.086	0.168	9.87	9.87	1.12
1734	n2901	4.48	4.48	2.19	5.169	5.212	2.26	2.26	2.29
1735	n2903	4.38	4.38	2.07	5.212	5.255	2.14	2.14	2.32
1736	n2905	4.35	4.35	1.95	5.255	5.298	2.02	2.02	2.4
1737	n2907	4.3	4.3	1.83	5.298	5.341	1.9	1.9	2.47
1738	n2909	4.38	4.38	1.71	5.341	5.384	1.78	1.78	2.67
1739	n2910	4.46	4.46	1.59	5.384	5.427	1.66	1.66	2.87
1740	n2912	4.2	4.2	1.47	5.427	5.47	1.54	1.54	2.73
1741	n2913	3.95	3.95	1.35	5.47	5.513	1.42	1.42	2.6
1742	n2915	4.04	4.04	1.23	5.513	5.556	1.3	1.3	2.81
1742	n2916	4.04	4.03	1.11	5.556	5.599	1.18	1.18	2.92
1744	n2917	3.96	3.96	0.99	5.599	5.642	1.06	1.06	2.97
1745	n2919	3.87	3.87	0.87	5.642	5.685	0.94	0.94	3
1746	n2921	3.81	3.81	0.75	5.685	5.728	0.82	0.82	3.06
1747	n2922	3.78	3.78	0.63	5.728	5.771	0.02	0.02	3.15
1748	n2924	3.72	3.72	0.51	5.9	5.943	0.59	0.59	3.22
1751	n2930	3.64	3.64	1.99	0.043	0.086	2	2	1.65
1752	n2931	3.46	3.46	2.34	0.043	0.043	2.35	2.35	1.12
1765	n2950	7.19	7.19	6.08	0	0.043	6.08	6.08	1.12
1766	n2952	7.23	7.13	5.77	0.043	0.476	5.79	5.79	1.46
1768	n2955	7.09	7.09	5.59	0.476	0.519	5.61	5.61	1.5
1769	n2957	7.09	7.09	5.97	0.470	0.043	5.98	5.98	1.12
1770	n2959	6.98	6.98	5.67	0.043	0.086	5.68	5.68	1.31
1772	n2962	5.81	5.81	4.69	0.129	0.172	4.7	4.7	1.12
1775	n2965	5.23	5.23	4.11	0.215	0.258	4.13	4.13	1.12
1776	n2967	5.09	5.09	3.97	0.258	0.301	3.99	3.99	1.12
1777	n2968	5.12	5.12	3.85	0.301	0.344	3.87	3.87	1.26
1778	n2969	4.96	4.96	3.76	0.344	0.387	3.78	3.78	1.2
1780	n2971	4.56	4.56	3.44	0.43	0.473	3.46	3.46	1.12
1781	n2972	4.63	4.63	3.32	0.473	0.516	3.34	3.34	1.3
1782	n2973	4.78	4.78	3.2	0.516	0.559	3.23	3.23	1.57
1783	n2974	4.58	4.58	3.08	0.559	0.602	3.1	3.1	1.5
1785	n2977	5.01	5.01	2.97	0.602	0.645	2.99	2.99	2.04
1786	n2978	5.25	5.25	2.85	0.645	0.688	2.87	2.87	2.4
1787	n2980	5.41	5.41	2.77	1.981	2.024	2.81	2.81	2.64
1789	n2982	5.06	5.06	2.61	2.024	2.067	2.65	2.65	2.46
1792	n2987	4.89	4.89	2.25	2.11	2.153	2.29	2.29	2.64
1794	n2991	4.71	4.71	2.03	2.196	2.239	2.07	2.07	2.68
1795	n2992	4.76	4.76	1.9	2.239	2.282	1.94	1.94	2.86
1797	n2995	4.42	4.42	1.66	2.368	2.411	1.7	1.7	2.77
1798	n2997	4.37	4.37	1.54	2.411	2.454	1.58	1.58	2.84
	112331	7.57	7.57	1.54	<b>∠.</b> ¬⊥⊥	2.774	1.50	1.50	2.07

1799	n2998	4.32	4.32	1.42	2.454	2.497	1.47	1.47	2.9
1800	n2999	4.25	4.25	1.3	2.497	2.54	1.34	1.34	2.96
1801	n3000	4.31	4.31	1.2	2.54	2.583	1.25	1.25	3.11
1802	n3001	5.63	5.63	4.22	3.363	3.406	4.27	4.27	1.4
1803	n3003	5.46	5.46	4.34	0	3.363	4.4	4.4	1.12
1805	n3006	5.25	5.25	0.17	2.97	3.013	0.22	0.22	5.09
1806	n3007	5.24	5.24	0.29	2.927	2.97	0.34	0.34	4.95
1807	n3008	5.28	5.28	0.41	2.841	2.884	0.46	0.46	4.88
1808	n3010	4.88	4.88	0.53	2.798	2.841	0.58	0.58	4.35
1809	n3011	4.91	4.91	0.65	2.755	2.798	0.7	0.7	4.27
1810	n3013	4.85	4.85	0.77	2.712	2.755	0.82	0.82	4.08
1811	n3015	4.62	4.62	0.89	2.669	2.712	0.93	0.93	3.73
1812	n3017	4.56	4.56	1.01	2.626	2.669	1.05	1.05	3.56
1813	n3017	4.58	4.58	1.13	2.583	2.626	1.17	1.17	3.45
1880	n3117	8.71	8.71	6.88	0.215	0.258	6.9	6.9	1.82
1881	n3117	8.12	8.12	7	0.213	0.238	7.02	7.02	1.12
1882	n3119	8.42	8.42	7.3	0.172	0.213	7.02	7.02	1.12
1886	n3126	10.47	10.47	9.35	0.086	0.172	9.36	9.36	1.12
1887	n3128	14.41	14.41	13.3	0.043	0.086	13.3	13.3	1.12
1888	n3129	15.95	15.95	14.83	0.043	0.043	14.83	14.83	1.12
1889	n3130	6.94	6.94	4.53	0.258	0.301	4.54	4.54	2.41
1890	n3132	6.92	6.92	4.65	0.235	0.258	4.66	4.66	2.27
1891	n3134	6.66	6.66	4.77	0.213	0.238	4.78	4.78	1.89
1893	n3137	6.35	6.35	5.06	0.043	0.086	5.07	5.07	1.29
1894	n3138	6.58	6.58	5.46	0.043	0.043	5.46	5.46	1.12
1895	n3139	5.89	5.89	4.77	0.215	0.258	4.78	4.78	1.12
1896	n3140	5.92	5.92	4.67	0.258	0.301	4.69	4.69	1.25
1897	n3141	5.78	5.78	4.55	0.301	0.344	4.57	4.57	1.22
1898	n3143	5.64	5.64	4.43	0.344	0.387	4.45	4.45	1.21
1899	n3145	5.67	5.67	4.31	0.387	0.43	4.33	4.33	1.36
1900	n3146	5.68	5.68	4.21	0.559	0.602	4.23	4.23	1.47
1901	n3148	5.58	5.58	4.09	0.645	0.688	4.12	4.12	1.49
1902	n3149	5.44	5.44	3.96	0.688	0.731	3.99	3.99	1.48
1903	n3150	5.39	5.39	3.84	0.731	0.774	3.87	3.87	1.55
1904	n3151	5.34	5.34	3.73	0.774	0.817	3.75	3.75	1.62
1905	n3153	5.33	5.33	3.6	0.774	0.86	3.63	3.63	1.73
1906	n3154	5.21	5.21	3.48	0.86	0.903	3.51	3.51	1.73
1907	n3155	5.08	5.08	3.37	0.903	0.946	3.4	3.4	1.71
1908	n3157	5.75	5.75	4.64	0.344	0.387	4.65	4.65	1.12
1909	n3158	6.78	6.78	5.66	0.301	0.344	5.68	5.68	1.12
1910	n3160	8.24	8.24	7.12	0.258	0.301	7.14	7.14	1.12
1911	n3161	9.65	9.65	8.53	0.215	0.258	8.54	8.54	1.12
1912	n3163	11.08	11.08	9.96	0.172	0.215	9.98	9.98	1.12
1913	n3166	5.2	5.2	3.25	0.946	0.989	3.28	3.28	1.95
1914	n3167	5.19	5.19	3.13	0.989	1.032	3.16	3.16	2.06
1915	n3168	5.2	5.2	3	1.032	1.075	3.03	3.03	2.2
1916	n3169	5.14	5.14	2.89	1.075	1.308	2.92	2.92	2.25
1310	113103		J. 14	2.03	1.073	1.500	2.52	2.32	۷.۷

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1917	n3170	5.08	5.08	2.77	1.308	1.351	2.8	2.8	2.31
1918	n3171	5.04	5.04	2.65	1.351	1.394	2.68	2.68	2.39
1919	n3172	5	5	2.53	1.394	1.437	2.57	2.57	2.47
1920	n3173	4.93	4.93	2.4	1.437	1.48	2.44	2.44	2.52
1921	n3174	4.85	4.85	2.29	1.48	1.523	2.33	2.33	2.56
1922	n3176	4.92	4.92	2.05	1.652	1.695	2.09	2.09	2.87
1923	n3177	4.93	4.93	1.94	1.695	1.738	1.98	1.98	2.99
1924	n3178	4.91	4.91	1.8	1.738	1.781	1.84	1.84	3.11
1925	n3179	4.81	4.81	1.68	1.781	1.824	1.72	1.72	3.13
1926	n3180	4.77	4.77	1.59	1.867	1.91	1.63	1.63	3.18
1927	n3181	4.77	4.77	1.45	1.953	1.996	1.49	1.49	3.32
1928	n3182	4.76	4.76	1.33	1.996	2.039	1.37	1.37	3.44
1929	n3183	4.84	4.84	1.2	2.039	2.082	1.25	1.25	3.64
1930	n3184	4.92	4.92	1.08	2.125	2.168	1.13	1.13	3.84
1931	n3185	5.03	5.03	0.96	2.168	2.211	1	1	4.07
1932	n3186	5.08	5.08	0.85	2.211	2.254	0.89	0.89	4.23
1933	n3187	5.07	5.07	0.83	2.211	2.234	0.89	0.83	4.25
1934	n3189	5.31	5.31	0.61	2.383	2.426	0.66	0.66	4.7
1935	n3191	6.03	6.03	2.54	0.692	0.735	2.57	2.57	3.49
1936	n3192	6.02	6.02	2.66	0.649	0.692	2.69	2.69	3.35
1937	n3193	5.91	5.91	2.78	0.606	0.649	2.81	2.81	3.13
1938	n3195	5.86	5.86	2.70	0.563	0.606	2.93	2.93	2.95
1939	n3197	5.97	5.97	3.02	0.52	0.563	3.05	3.05	2.94
1940	n3199	5.93	5.93	3.14	0.477	0.52	3.17	3.17	2.78
1941	n3200	5.97	5.97	3.21	0.434	0.477	3.23	3.23	2.76
1942	n3202	8.19	8.19	3.26	0.391	0.434	3.28	3.28	4.92
1943	n3204	5.43	5.43	3.37	0.305	0.348	3.39	3.39	2.05
1944	n3205	5.46	5.46	3.5	0.129	0.272	3.51	3.51	1.96
1946	n3210	5.24	5.24	4.12	0.123	0.043	4.13	4.13	1.12
1956	n3234	6.73	6.73	5.47	0.519	0.562	5.49	5.49	1.25
1958	n3238	6.66	6.66	5.23	0.648	0.691	5.26	5.26	1.43
1959	n3240	6.09	6.09	4.97	0.691	0.734	4.99	4.99	1.12
1962	n3245	5.83	5.83	4.57	0.82	0.863	4.6	4.6	1.26
1964	n3249	5.86	5.86	4.34	0.906	0.949	4.36	4.36	1.53
1965	n3250	5.82	5.82	4.22	0.949	0.992	4.25	4.25	1.6
1967	n3252	5.51	5.51	4.07	1.121	1.164	4.1	4.1	1.45
1968	n3253	5.53	5.53	3.78	1.25	1.293	3.81	3.81	1.76
1969	n3255	5.68	5.68	3.9	1.207	1.25	3.93	3.93	1.78
1971	n3258	5.55	5.55	4.22	0.086	0.129	4.23	4.23	1.33
1972	n3259	5.56	5.56	4.4	0.043	0.086	4.41	4.41	1.16
1973	n3261	5.71	5.71	4.59	0	0.043	4.59	4.59	1.12
1980	n3269	7.81	7.81	6.69	0	0.043	6.7	6.7	1.12
1981	n3270	6.59	6.59	5.47	0.043	0.086	5.48	5.48	1.12
1982	n3272	5.99	5.99	4.87	0.086	0.129	4.88	4.88	1.12
1983	n3275	7.22	7.22	6.1	0.172	0.215	6.12	6.12	1.12
1984	n3277	7.59	7.59	6.48	0.129	0.172	6.49	6.49	1.12
1985	n3278	8.36	8.36	7.25	0.086	0.129	7.26	7.26	1.12
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1986	n3279	10.72	10.72	9.6	0.043	0.086	9.61	9.61	1.12
1987	n3281	11.28	11.28	10.16	0	0.043	10.17	10.17	1.12
1988	n3282	5.75	5.75	4.63	0	0.043	4.64	4.64	1.12
1989	n3283	5.67	5.67	4.33	0.043	0.086	4.34	4.34	1.34
1990	n3285	5.74	5.74	4.15	0.086	0.129	4.17	4.17	1.59
1991	n3287	5.89	5.89	4.05	0.172	0.215	4.06	4.06	1.85
1992	n3288	6.9	6.9	5.78	0.172	0.215	5.79	5.79	1.12
1993	n3289	7.21	7.21	6.1	0.129	0.172	6.11	6.11	1.12
1994	n3291	7.77	7.77	6.65	0.086	0.129	6.66	6.66	1.12
1995	n3293	9.71	9.71	8.59	0.043	0.086	8.6	8.6	1.12
1996	n3295	10.78	10.78	9.66	0	0.043	9.67	9.67	1.12
1998	MH-2	3.78	3.78	1.72	0.086	0.129	1.73	1.73	2.06
2007	MH-12	4.65	4.65	1.81	2.282	2.325	1.85	1.85	2.84
2008	MH-14	4.9	4.9	2.44	2.067	2.11	2.48	2.48	2.46
2010	MH-16	4.92	4.92	2.16	2.153	2.196	2.21	2.21	2.76
2040	MH-48	4.73	4.73	3.61	0.387	0.43	3.63	3.63	1.12
2045	MH-55	5.52	5.52	4.4	0.172	0.215	4.41	4.41	1.12
2047	MH-57	6.44	6.44	5.32	0.086	0.129	5.33	5.33	1.12
2048	MH-58	6.64	6.64	5.39	0.562	0.605	5.41	5.41	1.25
2049	MH-59	6.6	6.6	5.34	0.605	0.648	5.36	5.36	1.26
2051	MH-61	5.97	5.97	4.85	0.734	0.777	4.88	4.88	1.12
2052	MH-62	5.86	5.86	4.66	0.777	0.82	4.69	4.69	1.21
2054	MH-64	5.75	5.75	4.42	0.863	0.906	4.45	4.45	1.33
2057	MH-67	5.67	5.67	3.98	1.164	1.207	4.02	4.02	1.69
2065	MH-75	6.67	6.67	4.66	0.215	0.258	4.68	4.68	2.01
2066	MH-76	6.59	6.59	4.62	0.258	0.301	4.64	4.64	1.97
2069	MH-80	6.29	6.29	4.37	0.387	0.43	4.39	4.39	1.92
2070	MH-81	6.2	6.2	4.31	0.43	0.473	4.33	4.33	1.89
2071	MH-82	5.4	5.4	3.55	0.688	0.731	3.58	3.58	1.85
2076	MH-88	7.01	7.01	4.98	1.162	1.205	5.02	5.02	2.02
2078	MH-95	6.96	6.96	5.06	1.119	1.162	5.09	5.09	1.9
2079	MH-98	7.32	7.32	5.47	0.947	0.99	5.5	5.5	1.85
2086	MH-105	7.94	7.94	6.83	0.34	0.383	6.84	6.84	1.12
2089	MH-109	16.02	16.02	14.91	0	0.043	14.91	14.91	1.12
2090	MH-110	18.12	18.12	17	0	0.043	17	17	1.12
2097	MH-118	6.14	6.14	4.98	14.716	14.759	5.09	5.09	1.16
2098	MH-119	6.42	6.42	5.26	14.673	14.716	5.37	5.37	1.16
2099	MH-120	6.42	6.42	4.29	14.931	14.974	4.42	4.42	2.13
2106	MH-127	5.31	5.31	4.03	0.344	0.387	4.05	4.05	1.28
2107	MH-128	5.24	5.24	4.12	0.301	0.344	4.14	4.14	1.12
2109	MH-131	6	6	4.77	0.129	0.172	4.78	4.78	1.23
2111	MH-133	5.98	5.98	4.86	0.086	0.129	4.88	4.88	1.12
2115	MH-137	5.01	5.01	3.89	0.258	0.301	3.91	3.91	1.12
2118	MH-140	4.9	4.9	3.77	0.301	0.344	3.79	3.79	1.13
2119	MH-141	4.6	4.6	3.49	0.387	0.43	3.5	3.5	1.12
2122	MH-145	4.48	4.48	3.37	0.43	0.473	3.39	3.39	1.12
2123	MH-146	4.46	4.46	3.29	0.473	0.516	3.31	3.31	1.18
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2128	MH-151	4.6	4.6	2.81	0.645	0.688	2.83	2.83	1.79
2129	MH-152	5.71	5.71	1.96	1.056	1.099	1.99	1.99	3.75
2131	MH-154	3.38	3.38	1.19	16.847	16.89	1.33	1.33	2.18
2135	MH-158	3.69	3.69	-1.79	7.668	7.711	-1.7	-1.7	5.48
2136	MH-159	4.01	4.01	-1.56	7.539	7.582	-1.48	-1.48	5.58
2138	MH-161	4.18	4.18	-1.33	7.41	7.453	-1.24	-1.24	5.51
2140	MH-163	4.54	4.54	3.2	0.086	0.129	3.21	3.21	1.34
2141	MH-166	4.43	4.43	3.11	0.129	0.172	3.12	3.12	1.33
2143	MH-168	4.26	4.26	0.79	8.299	8.342	0.88	0.88	3.47
2144	MH-169	4.77	4.77	2.34	7.396	7.439	2.42	2.42	2.43
2145	MH-170	5.49	5.49	2.83	7.181	7.224	2.92	2.92	2.65
2149	MH-174	6.76	6.76	4.72	0.172	0.215	4.73	4.73	2.04
2151	MH-176	6.48	6.48	4.86	0.086	0.129	4.87	4.87	1.62
2155	MH-180	5.92	5.92	3.2	1.462	1.505	3.24	3.24	2.73
2156	MH-181	6.33	6.33	3.92	1.161	1.204	3.95	3.95	2.42
2157	MH-182	6.39	6.39	3.94	1.118	1.161	3.97	3.97	2.45
2158	MH-183	6.56	6.56	4.02	1.032	1.075	4.06	4.06	2.43
2159	MH-184	7.24	7.24	6.11	0.645	0.688	6.13	6.13	1.14
2160	MH-185	7.6	7.24	6.49	0.516	0.559	6.51	6.51	1.12
2161	MH-186	19.74	19.74	18.62	0.258	0.301	18.64	18.64	1.12
2162	MH-189	20.7	20.7	19.55	0.238	0.215	19.56	19.56	1.15
2163	MH-190	21.85	21.85	20.74	0.172	0.086	20.74	20.74	1.12
2164	MH-191	23.96	23.96	22.84	0.043	0.043	22.85	22.85	1.12
2165	MH-192	23.91	23.91	22.79	0.043	0.045	22.83	22.83	1.12
2166	MH-193	20.26	20.26	19.14	0.129	0.172	19.15	19.15	1.12
2167	MH-194	19.9	19.9	18.79	0.172	0.215	18.8	18.8	1.12
2168	MH-195	17.63	17.63	16.51	0.215	0.258	16.53	16.53	1.12
2169	MH-197	6.5	6.5	5.38	0.387	0.43	5.4	5.4	1.12
2171	MH-199	5.93	5.93	4.81	0.43	0.473	4.83	4.83	1.12
2173	MH-201	5.28	5.28	1.08	6.163	6.206	1.16	1.16	4.2
2182	MH-211	48.26	48.26	47.14	0.103	0.043	47.14	47.14	1.12
2183	MH-212	46.78	46.78	45.67	0.215	0.258	45.68	45.68	1.12
2185	MH-214	45.76	45.76	44.64	0.301	0.594	44.66	44.66	1.12
2187	MH-216	40.51	40.51	39.39	0.69	0.733	39.42	39.42	1.12
2188	MH-217	17.72	17.72	16.6	1.034	1.077	16.62	16.62	1.12
2189	MH-218	10.61	10.61	9.49	1.206	1.249	9.52	9.52	1.12
2190	MH-219	8.56	8.56	7.44	1.292	1.335	7.47	7.47	1.12
2193	MH-222	6.82	6.82	2.84	1.462	1.505	2.87	2.87	3.99
2194	MH-223	6.93	6.93	3.45	1.204	1.247	3.48	3.48	3.49
2195	MH-225	6.7	6.7	3.56	1.118	1.161	3.59	3.59	3.14
2196	MH-226	6.7	6.7	3.59	1.075	1.118	3.62	3.62	3.11
2197	MH-227	6.71	6.71	3.69	0.989	1.032	3.72	3.72	3.01
2198	MH-228	6.88	6.88	3.87	0.903	0.946	3.72	3.72	3.01
2199	MH-229	6.89	6.89	3.89	0.86	0.903	3.92	3.92	3.01
2200	MH-230	6.87	6.87	3.93	0.817	0.86	3.96	3.96	2.94
2202	MH-232	6.92	6.92	4.07	0.731	0.774	4.09	4.09	2.86
2204	MH-235	6.86	6.86	4.22	0.645	0.688	4.24	4.24	2.64
2204	10111-233	0.00	0.00	4.22	0.043	0.000	4.24	4.24	2.04

2205	MH-236	7.05	7.05	4.41	0.559	0.602	4.43	4.43	2.64
2207	MH-238	6.87	6.87	4.75	0.387	0.43	4.77	4.77	2.12
2208	MH-239	6.97	6.97	4.78	0.344	0.387	4.8	4.8	2.19
2209	MH-240	7.09	7.09	4.92	0.258	0.301	4.93	4.93	2.17
2211	MH-243	8.24	8.24	5.2	0.817	0.86	5.22	5.22	3.04
2212	MH-244	9.35	9.35	5	0.903	0.946	5.03	5.03	4.35
2213	MH-245	6.88	6.88	5.67	5.246	5.289	5.74	5.74	1.21
2214	MH-246	7.54	7.54	3.32	3.182	3.225	3.37	3.37	4.22
2217	MH-249	7.15	7.15	6.03	0.731	0.774	6.05	6.05	1.12
2218	MH-250	12.42	12.42	11.31	0.516	0.559	11.33	11.33	1.12
2220	MH-252	21.03	21.03	19.91	0.387	0.43	19.93	19.93	1.12
2221	MH-253	30.32	30.32	29.2	0.301	0.344	29.22	29.22	1.12
2222	MH-254	33.23	33.23	32.11	0.215	0.258	32.12	32.12	1.12
2223	MH-255	35.47	35.47	33.27	0.129	0.172	33.28	33.28	2.2
2225	MH-257	7.33	7.33	3.58	2.236	2.279	3.63	3.63	3.74
2227	MH-260	8.47	8.47	7.36	0.086	0.129	7.37	7.37	1.12
2228	MH-262	8.68	8.68	7.51	0.043	0.129	7.52	7.52	1.17
2229	MH-263	8.47	8.47	7.35	0.045	0.129	7.36	7.36	1.12
2230	MH-265	7.57	7.57	4.35	1.634	1.677	4.39	4.39	3.22
2231	MH-266	7.47	7.47	4.26	1.677	1.72	4.3	4.3	3.2
2232	MH-267	8.12	8.12	4.97	1.376	1.419	5.01	5.01	3.15
2232	MH-268	8.3	8.3	5.24	1.247	1.413	5.27	5.27	3.07
2234	MH-269	8.97	8.97	5.79	0.946	0.989	5.82	5.82	3.18
2235	MH-270	8.81	8.81	5.7	1.032	1.075	5.73	5.73	3.11
2236	MH-271	9.09	9.09	5.87	0.903	0.946	5.73	5.73	3.22
2237	MH-272	9.13	9.13	5.91	0.86	0.903	5.94	5.94	3.23
2238	MH-276	8.49	8.49	7.16	0.487	0.53	7.18	7.18	1.33
2239	MH-278	12.48	12.48	11.36	0.186	0.229	11.37	11.37	1.12
2240	MH-279	18.3	18.3	17.18	0.100	0.043	17.18	17.18	1.12
2241	MH-280	17.36	17.36	16.24	0.129	0.172	16.25	16.25	1.12
2242	MH-281	17.7	17.7	16.58	0.086	0.129	16.59	16.59	1.12
2243	MH-282	13.4	13.4	12.28	0.258	0.301	12.29	12.29	1.12
2244	MH-283	14.05	14.05	12.93	0.215	0.258	12.95	12.95	1.12
2245	MH-284	10.85	10.85	9.73	0.344	0.230	9.75	9.75	1.12
2246	MH-285	6.83	6.83	5.71	0.516	0.559	5.73	5.73	1.12
2247	MH-286	6.62	6.62	5.5	0.559	0.602	5.52	5.52	1.12
2249	MH-288	6.15	6.15	5.03	0.645	0.688	5.05	5.05	1.12
2250	MH-290	5.75	5.75	4.37	0.817	0.86	4.4	4.4	1.37
2252	MH-293	5.21	5.21	4.08	0.903	0.946	4.11	4.11	1.13
2253	MH-294	5.2	5.2	4.02	0.989	1.032	4.05	4.05	1.18
2254	MH-295	2.75	2.75	1.63	1.333	1.376	1.67	1.67	1.12
2263	MH-306	8.61	8.61	6.61	0.922	0.965	6.64	6.64	1.99
2264	MH-307	9.32	9.32	6.78	0.322	0.43	6.8	6.8	2.54
2265	MH-308	8.64	8.64	7.52	0.301	0.43	7.54	7.54	1.12
2266	MH-309	9.45	9.45	8.33	0.258	0.301	8.35	8.35	1.12
2267	MH-310	6.11	6.11	3.93	1.309	1.352	3.96	3.96	2.18
2277	MH-321	8.2	8.2	6.35	1.505	1.548	6.38	6.38	1.85
	I MILL-25T	0.2	0.2	0.55	1.505	1.540	0.36	0.30	1.00

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2278	MH-323	6.51	6.51	1.5	1.333	1.376	1.54	1.54	5.01
2279	MH-324	7.41	7.41	1.62	1.247	1.29	1.65	1.65	5.79
2280	MH-325	5.96	5.96	1.88	1.161	1.204	1.91	1.91	4.08
2281	MH-326	5.82	5.82	2.09	1.032	1.075	2.13	2.13	3.73
2282	MH-327	4.82	4.82	3	0.645	0.688	3.03	3.03	1.82
2283	MH-328	4.82	4.82	3.02	0.602	0.645	3.05	3.05	1.8
2284	MH-329	4.78	4.78	3.59	0.344	0.387	3.61	3.61	1.18
2285	MH-330	12.9	12.9	11.69	0.043	0.086	11.7	11.7	1.21
2286	MH-331	12.89	12.89	11.65	0.086	0.129	11.67	11.67	1.24
2287	MH-332	4.64	4.64	3.52	0.344	0.387	3.54	3.54	1.12
2288	MH-333	4.53	4.53	3.41	0.43	0.473	3.43	3.43	1.12
2289	MH-334	3.9	3.9	2.78	0.559	0.602	2.8	2.8	1.12
2290	MH-335	3.73	3.73	2.59	0.645	0.688	2.61	2.61	1.14
2292	MH-337	3.64	3.64	2.52	0.688	0.731	2.54	2.54	1.12
2293	MH-338	3.46	3.46	1.44	1.075	1.118	1.47	1.47	2.02
2294	MH-339	3.51	3.51	1.38	1.118	1.161	1.41	1.41	2.13
2295	MH-340	3.44	3.44	1.25	1.118	1.204	1.28	1.28	2.13
2299	MH-344	6.65	6.65	3.94	0.215	0.258	3.97	3.97	2.71
2300	MH-345	5.81	5.81	4.11	0.129	0.238	4.12	4.12	1.7
2302	MH-350	6.61	6.61	3.33	0.123	0.391	3.35	3.35	3.28
2302	MH-354	5.44	5.44	3.43	0.172	0.305	3.45	3.45	2.01
2303	MH-355	5.34	5.34	3.64	0.172	0.303	3.65	3.65	1.7
2304	MH-356	5.27	5.27	3.74	0.043	0.129	3.75	3.75	1.53
2303	MH-378	5.4	5.4	2.58	1.462	1.505	2.62	2.62	2.81
2317	MH-379	5.39	5.39	2.68	1.419	1.462	2.71	2.71	2.71
2319	MH-380	5.32	5.32	2.93	1.333	1.376	2.71	2.71	2.71
2320	MH-383	5.38	5.38	3.41	1.118	1.161	3.45	3.45	1.97
2321	MH-386	5.35	5.35	4.14	0.817	0.86	4.17	4.17	1.21
2321	MH-387	6.49	6.49	5.21	0.688	0.80	5.24	5.24	1.21
2322	MH-389	10.94	10.94	9.82	0.473	0.731	9.84	9.84	1.12
2323	MH-392	13.67	13.67	10.47	0.473	0.310	10.49	10.49	3.2
2324	MH-393	20.43	20.43	19.31	0.344	0.043	19.32	19.32	1.12
2325	MH-395	18.01	18.01	16.63	0.086	0.043	16.64	16.64	1.38
2327	MH-400	6.49	6.49	5.18	1.007	1.05	5.21	5.21	1.3
2343	MH-424	5.39	5.39	0.3	2.967	3.01	0.36	0.36	5.09
2344	MH-425	5.37	5.37	0.19	3.01	3.053	0.30	0.30	5.19
2344	MH-427	5.54	5.54	3.86	4.257	4.3	3.92	3.92	1.68
2347	MH-429	5.54	5.54	3.95	4.237	4.214	4.01	4.01	1.56
2347	MH-430			3.95	4.171	4.214		4.01	1.55
2348	MH-431	5.51 5.51	5.51 5.51	4.05	4.128	4.171	4.03 4.11	4.03	1.46
2349	MH-432	5.46	5.46	4.03	3.956	3.999	4.11	4.11	1.46
		5.46		4.11		4.042			
2351	MH-433		5.47		3.999		4.15	4.15	1.38
2352	MH-434	5.44	5.44	4.19	3.913	3.956	4.25	4.25	1.25
2353	MH-435	5.43	5.43	4.2	3.87	3.913	4.26	4.26	1.23
2355	MH-438	5.21	5.21	0.66	2.34	2.383	0.7	0.7	4.55
2356	MH-440	4.89	4.89	1.13	2.082	2.125	1.17	1.17	3.76
2357	MH-442	4.77	4.77	1.51	1.91	1.953	1.56	1.56	3.26

2358	MH-444	4.78	4.78	1.62	1.824	1.867	1.66	1.66	3.16
2359	MH-445	4.88	4.88	2.15	1.609	1.652	2.19	2.19	2.72
2360	MH-447	4.87	4.87	2.2	1.566	1.609	2.24	2.24	2.67
2361	MH-448	4.86	4.86	2.25	1.523	1.566	2.29	2.29	2.6
2362	MH-450	5.58	5.58	4.13	0.602	0.645	4.15	4.15	1.45
2363	MH-453	8.16	8.16	7.04	0.043	0.086	7.05	7.05	1.12
2367	MH-457	12.13	12.13	11.01	0.043	0.086	11.02	11.02	1.12
2372	MH-465	11.75	11.75	10.59	0.129	0.172	10.6	10.6	1.16
2378	MH-473	12.49	12.49	11.37	0.043	0.086	11.38	11.38	1.12
2379	MH-474	8.95	8.95	7.83	0.043	0.086	7.84	7.84	1.12
2381	MH-477	4.82	4.82	1.97	1.29	1.333	2.01	2.01	2.84
2383	MH-479	5.22	5.22	2.43	1.075	1.118	2.46	2.46	2.79
2385	MH-482	5.92	5.92	3.01	0.817	0.86	3.04	3.04	2.92
2386	MH-485	6	6	3.04	0.774	0.817	3.07	3.07	2.96
2387	MH-487	6.06	6.06	3.16	0.688	0.731	3.19	3.19	2.89
2388	MH-489	8.13	8.13	3.5	0.516	0.751	3.52	3.52	4.64
2389	MH-490	8.88	8.88	3.67	0.310	0.339	3.69	3.69	5.22
2390	MH-492	8.53	8.53	3.72	0.301	0.344	3.74	3.74	4.8
2391	MH-493	8.75	8.75	3.69	0.344	0.387	3.71	3.71	5.06
2392	MH-495	7.39	7.39	3.91	0.172	0.215	3.92	3.92	3.48
2393	MH-498	5.73	5.73	4.18	0.043	0.086	4.19	4.19	1.55
2394	MH-499	5.49	5.49	4.37	0.043	0.043	4.37	4.37	1.12
2395	MH-500	4.4	4.4	2.5	1.763	1.806	2.54	2.54	1.12
2396	MH-504	4.44	4.44	2.41	1.849	1.892	2.45	2.45	2.03
2398	MH-507	4.43	4.43	2.28	1.935	1.978	2.32	2.32	2.16
2399	MH-508	4.44	4.44	2.21	2.021	2.064	2.26	2.26	2.22
2400	MH-509	4.44	4.44	2.18	2.064	2.107	2.23	2.23	2.26
2401	MH-510	4.46	4.46	1.96	2.193	2.236	2.01	2.01	2.5
2402	MH-571	8.36	8.36	7.01	0.473	0.516	7.03	7.03	1.35
2403	MH-575	6.99	6.99	5.87	0.559	0.602	5.89	5.89	1.12
2404	MH-576	6.89	6.89	5.73	0.645	0.688	5.75	5.75	1.16
2405	MH-579	6.76	6.76	5.32	0.817	0.86	5.35	5.35	1.44
2406	MH-580	6.67	6.67	5.17	0.903	0.946	5.2	5.2	1.5
2407	MH-581	6.65	6.65	5.15	0.946	0.989	5.18	5.18	1.5
2408	MH-582	6.59	6.59	5.1	0.989	1.032	5.13	5.13	1.49
2409	MH-588	6.1	6.1	4.98	0.43	0.473	5.13	5.13	1.12
2412	MH-591	14.26	14.26	13.15	0.45	0.258	13.16	13.16	1.12
2413	MH-592	19.63	19.63	18.51	0.086	0.129	18.52	18.52	1.12
2416	MH-596	5.78	5.78	3.52	2.107	2.15	3.56	3.56	2.26
2417	MH-598	6.22	6.22	5.02	6.835	6.878	5.1	5.1	1.2
2418	MH-602	6.25	6.25	5.13	0	6.792	5.21	5.21	1.12
2419	MH-604	6.38	6.38	0.85	6.706	6.749	0.93	0.93	5.53
2420	MH-612	7.68	7.68	6.56	0.344	0.387	6.58	6.58	1.12
2421	MH-638	19.46	19.46	17.83	0.258	0.301	17.84	17.84	1.63
2422	MH-639	19.11	19.11	17.77	0.301	0.344	17.79	17.79	1.34
2438	MH-666	5.06	5.06	3.85	27.894	27.937	3.99	3.99	1.22
2439	MH-667	5.03	5.03	3.81	27.937	27.98	3.95	3.95	1.22
	14111 007	3.03	J.03	J.01	21.551	27.50	3.33	3.33	1.44

2441	MH-670	4.51	4.51	2.96	28.41	28.453	3.14	3.14	1.55
2447	MH-677	8.37	8.37	7.25	0.344	0.387	7.27	7.27	1.12
2448	MH-678	7.9	7.9	6.78	0.387	0.43	6.8	6.8	1.12
2451	MH-682	4.96	4.96	3.84	0.387	0.43	3.86	3.86	1.12
2452	MH-685	13.71	13.71	12.59	0	0.043	12.6	12.6	1.12
2453	MH-686	10.12	10.12	9	0.043	0.086	9.01	9.01	1.12
2454	MH-688	5.65	5.65	4.1	0.43	0.473	4.12	4.12	1.55
2455	MH-689	5.66	5.66	4.12	0.387	0.43	4.15	4.15	1.54
2456	MH-690	5.37	5.37	3.94	0.516	0.559	3.96	3.96	1.43
2457	MH-692	5.94	5.94	3.22	1.228	1.271	3.26	3.26	2.72
2458	MH-694	5.8	5.8	2.51	2.237	2.28	2.56	2.56	3.29
2459	MH-695	5.86	5.86	2.63	2.108	2.151	2.68	2.68	3.23
2460	MH-696	5.86	5.86	2.62	2.151	2.194	2.66	2.66	3.24
2461	MH-697	5.64	5.64	0.7	2.795	2.838	0.75	0.75	4.94
2462	MH-700	5.81	5.81	1.04	2.236	2.279	1.09	1.09	4.77
2463	MH-703	8.26	8.26	7.14	0	0.043	7.15	7.15	1.12
2465	MH-707	6.42	6.42	1.72	1.036	1.079	1.75	1.75	4.7
2466	MH-709	6.4	6.4	1.69	1.079	1.122	1.72	1.72	4.72
2467	MH-711	6.35	6.35	1.62	1.165	1.208	1.65	1.65	4.73
2468	MH-714	7.25	7.25	6.13	0	1.251	6.16	6.16	1.12
2470	MH-717	7.07	7.07	5.93	1.466	1.509	5.96	5.96	1.14
2471	MH-719	7	7	5.8	1.552	1.595	5.84	5.84	1.2
2472	MH-720	7	7	5.77	1.595	1.638	5.81	5.81	1.22
2473	MH-721	6.95	6.95	5.7	1.681	1.724	5.73	5.73	1.25
2477	MH-729	3.12	3.12	1.04	0.258	0.301	1.06	1.06	2.08
2478	MH-730	3.4	3.4	0.3	0.516	0.559	0.32	0.32	3.1
2480	MH-732	3.37	3.37	0.21	0.559	0.602	0.23	0.23	3.16
2483	MH-735	3.3	3.3	0.13	0.602	0.645	0.15	0.15	3.18
2486	MH-738	3.29	3.29	0.06	0.645	0.688	0.09	0.09	3.22
2490	MH-743	2.28	2.28	0.51	37.099	37.142	0.72	0.72	1.76
2493	MH-747	2.31	2.31	0.6	37.013	37.056	0.8	0.8	1.71
2495	MH-749	2.24	2.24	0.65	36.97	37.013	0.85	0.85	1.59
2496	MH-750	29.6	29.6	28.49	0.215	0.258	28.5	28.5	1.12
2497	MH-751	20.65	20.65	19.53	0.43	0.473	19.55	19.55	1.12
2500	MH-755	4.15	4.15	0.65	9.116	9.159	0.75	0.75	3.5
2501	MH-756	4.18	4.18	0.12	9.331	9.374	0.2	0.2	4.07
2506	MH-766	5.53	5.53	3.94	0.086	0.129	3.95	3.95	1.59
2507	MH-769	5.45	5.45	0.99	3.373	3.416	1.05	1.05	4.46
2508	MH-771	5.4	5.4	0.92	3.416	3.459	0.97	0.97	4.48
2509	MH-774	5.28	5.28	0.57	3.568	3.611	0.63	0.63	4.7
2512	MH-778	5.43	5.43	3.9	0.43	0.473	3.93	3.93	1.53
2513	MH-780	5.41	5.41	3.88	0.473	0.516	3.9	3.9	1.54
2514	MH-783	5.51	5.51	4.39	0.215	0.258	4.4	4.4	1.12
2515	MH-784	5.76	5.76	4.62	0.129	0.172	4.63	4.63	1.14
2516	MH-785	4.18	4.18	-0.06	5.369	5.412	0.01	0.01	4.24
2518	MH-791	6.55	6.55	3.09	3.61	3.653	3.15	3.15	3.46
2519	MH-792	6.5	6.5	3.15	3.567	3.61	3.21	3.21	3.35
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2520	MH-794	6.47	6.47	3.21	3.524	3.567	3.27	3.27	3.25
2521	MH-795	6.16	6.16	3.66	3.309	3.352	3.72	3.72	2.5
2522	MH-796	6.15	6.15	3.68	3.266	3.309	3.73	3.73	2.48
2523	MH-800	6.16	6.16	3.78	3.18	3.223	3.83	3.83	2.38
2524	MH-801	6.48	6.48	4.15	3.008	3.051	4.21	4.21	2.32
2525	MH-802	6.63	6.63	1.69	5.287	5.33	1.76	1.76	4.94
2526	MH-804	6.53	6.53	2.03	5.115	5.158	2.1	2.1	4.5
2527	MH-807	7.04	7.04	5.85	0.258	0.301	5.87	5.87	1.19
2528	MH-809	7.04	7.04	5.92	0.215	0.258	5.94	5.94	1.12
2529	MH-810	7.08	7.08	5.96	0.172	0.215	5.97	5.97	1.12
2530	MH-811	16.48	16.48	15.36	0.211	0.254	15.38	15.38	1.12
2531	MH-813	16.28	16.28	15.16	0.254	0.297	15.18	15.18	1.12
2532	MH-815	10.68	10.68	9.56	0.426	0.469	9.58	9.58	1.12
2532	MH-817	7.37	7.37	4.06	1.763	1.806	4.1	4.1	3.32
2534	MH-819	8.4	8.4	6.63	0.688	0.991	6.66	6.66	1.77
2534	MH-822	7.57	7.57	5.48	0.688	0.991	5.5	5.5	2.08
	MH-825								
2536		6.61 6.97	6.61 6.97	4.75	0.344	0.387	4.77	4.77	1.86
2537	MH-826			4.92	0.258	0.301	4.93	4.93	2.06
2538	MH-828	6.75	6.75	5.25	0.086	0.129	5.26	5.26	1.5
2539	MH-837	22.1	22.1	20.98	0.504	0.547	21	21	1.12
2540	MH-838	27.94	27.94	26.82	0.332	0.375	26.84	26.84	1.12
2541	MH-839	28.7	28.7	27.58	0.289	0.332	27.59	27.59	1.12
2542	MH-848	30.38	30.38	29.26	0.246	0.289	29.27	29.27	1.12
2543	MH-850	25.4	25.4	24.28	0.418	0.461	24.3	24.3	1.12
2544	MH-851	5.34	5.34	4.21	0.43	0.473	4.23	4.23	1.14
2545	MH-852	5.24	5.24	4.08	0.473	0.516	4.11	4.11	1.15
5182	MH-12	7.72	7.72	2.07	9.427	9.47	2.15	2.15	5.65
5429	MH-23	8.1	8.1	6.98	0.086	0.129	6.99	6.99	1.12
5433	MH-25	4.36	4.36	1.51	2.365	2.408	1.56	1.56	2.85
5437	MH-26	4.66	4.66	3.13	0.731	0.774	3.16	3.16	1.53
5440	MH-27	4.74	4.74	3.18	0.645	0.688	3.21	3.21	1.55
5445	MH-28	5.07	5.07	0.75	2.254	2.297	0.8	0.8	4.32
5454	MH-29	3.13	3.13	1.93	0.043	0.086	1.94	1.94	1.2
5457	MH-30	3.25	3.25	2.13	0	0.043	2.14	2.14	1.12
5461	MH-31	6.87	6.87	3.46	1.161	1.204	3.5	3.5	3.41
5465	MH-32	8.01	8.01	4.21	0.903	0.946	4.24	4.24	3.8
5494	MH-47	7.41	7.41	6.29	0.258	0.301	6.31	6.31	1.12
5499	MH-49	5.68	5.68	4.56	0.344	0.387	4.58	4.58	1.12
5502	MH-50	8.41	8.41	7.29	0.129	0.172	7.3	7.3	1.12
5505	MH-51	6.91	6.91	2.86	1.333	1.376	2.89	2.89	4.06
5508	MH-52	6.73	6.73	2.58	1.505	1.548	2.62	2.62	4.15
5511	MH-53	6.77	6.77	2.77	1.419	1.462	2.8	2.8	4
5516	MH-54	7.45	7.45	3.1	1.247	1.29	3.13	3.13	4.36
5520	MH-55	7.49	7.49	5.98	6.502	6.545	6.06	6.06	1.5
5523	MH-56	7.68	7.68	5.88	6.588	6.631	5.96	5.96	1.79
5526	MH-57	7.71	7.71	5.7	6.674	6.717	5.78	5.78	2
5529	MH-58	7.72	7.72	5.63	6.76	6.803	5.71	5.71	2.09
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5533	MH-60	9.67	9.67	8.55	5.986	6.029	8.62	8.62	1.12
5536	MH-61	8.13	8.13	3.15	1.936	1.979	3.19	3.19	4.98
5541	MH-64	8.07	8.07	3.38	1.807	1.85	3.42	3.42	4.7
5544	MH-65	7.31	7.31	5.39	0.99	1.033	5.42	5.42	1.93
5547	MH-66	5.26	5.26	0.35	2.884	2.927	0.4	0.4	4.91
5550	MH-67	4.57	4.57	1.75	2.325	2.368	1.79	1.79	2.82
5554	MH-68	6.92	6.92	1.92	1.892	1.935	1.96	1.96	5
5557	MH-69	6.95	6.95	2.01	1.806	1.849	2.06	2.06	4.93
5560	MH-70	6.89	6.89	2.15	1.72	1.763	2.19	2.19	4.74
5563	MH-71	6.86	6.86	2.36	1.591	1.634	2.4	2.4	4.5
5626	MH-73	4.71	4.71	2.35	5.169	5.169	2.42	2.42	2.36
5630	MH-74	7.13	7.13	6.01	3.784	3.784	6.07	6.07	1.12
5631	MH-75	5.38	5.38	-0.01	6.837	6.837	0.07	0.07	5.39

### കൊയിലാണ്ടി മുനിസിപ്പാലിറ്റി

### 25.08.2021 തീയതി നടന്ന അടിയന്തിരയോഗത്തിലെ 2 - നമ്പർ തീരുമാനം.

### അജണ്ട

2 : PW1/6202/21: കൊയിലാണ്ടി നഗരസഭയിൽ മലിന ജല ശുദ്ധീകരണ ശാല സ്ഥാപിക്കുന്നതിന് സ്ഥലം ഏറ്റെടുക്കുന്ന വിഷയം കൗൺസിൽ മുൻപാകെ. :-

### വിവരണം:

- 1. റെയിൽവേ ലൈനിന്റെ പാടിഞ്ഞാറ് ഭാഗത്ത് ഹൈവേക്കടുത്തുള്ള ഗുരുകുലം ബീച്ച് റോഡിൽ വശ്യത്ത് കണ്ടി പറമ്പിൽ കുഞ്ഞമ്മദ് എന്നയാളിന്റെ ഉടമസ്ഥതയിലുള്ള (സർവേ നമ്പർ 119/12, റീസർവേ നമ്പർ 8/4) 42 സെന്റ് സ്ഥലവും, കിഴക്ക് ഭാഗത്ത് പെരുവട്ടൂർ ദേശം പന്തലായനി വില്ലേജിലെ (സർവേ നമ്പർ 4/5) 126 സെന്റ് സ്ഥലവും പ്രസ്തുത പദ്ധതിയുടെ ട്രീറ്റ്മെന്റ് പ്ലാന്റ് സ്ഥാപിക്കുന്നതിനുള്ള ഉചിതമായ സ്ഥലങ്ങളായി കണ്ടെത്തിയിട്ടുണ്ട് എന്ന് KWA 29/07/2021 ന് കത്ത് മുഖേന അറിയിച്ചിട്ടുണ്ട്.
- 2. മേൽ സ്ഥലങ്ങൾ ഏറ്റെടുത്ത് നൽകുന്നതിന് 10/08/2021 തീയതിയിലെ മരാമത്ത് സ്റ്റാൻഡിംഗ് കമ്മറ്റിയുടെ 08-)ം നമ്പർ തീരുമാനമായി, വിഷയം കൗൺസിലിലേക്ക് ശുപാർശ ചെയ്തിട്ടുണ്ട്.

ഫയൽ നമ്പർ :

PW1/6202/21

തീരുമാന നമ്പർ :

2

തീയതി : 25.08.2021

### തീരുമാനം :

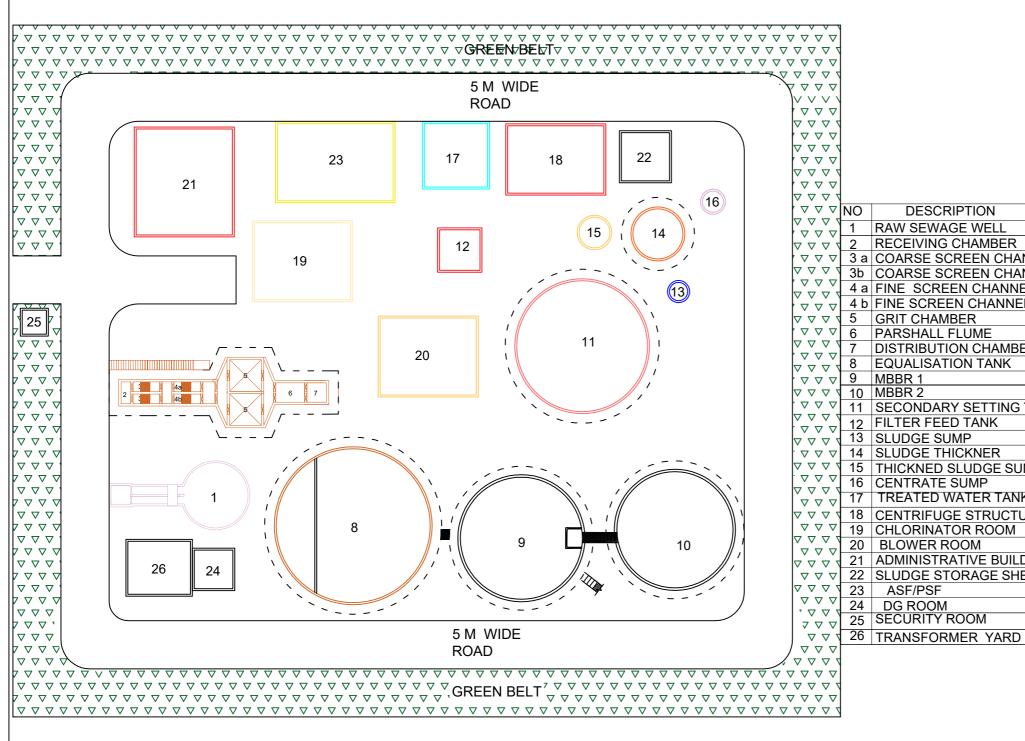
10/08/2021 തീയതിയിലെ മരാമത്ത് സ്റ്റാൻഡിംഗ് കമ്മറ്റിയുടെ 08-)ം നമ്പർ തീരുമാനപ്രകാരമുള്ള ശുപാർശയുടെ അടിസ്ഥാനത്തിൽ കേരള വാട്ടർ അതോറിറ്റി സൂപ്രണ്ടിങ് എഞ്ചിനീയറുടെ 29/7/21 ലെ NO.KWA/PPD/KKD/D3/SEWERAGE/2020 കത്ത് പ്രകാരം മലിന ജല ശുദ്ധീകരണ പ്ലാന്റ് സ്ഥാപിക്കുന്നതിനുള്ള ഉചിതമായ സ്ഥലങ്ങളായി കണ്ടെത്തിയ പന്തലായനി വില്ലേജ് പന്തലായനി ദേശത്ത് സർവേ നമ്പർ 119/12 (റീസർവേ നമ്പർ 8/4) ഉൾപ്പെട്ട 42 സെന്റ് സ്ഥലവും പന്തലായനി വില്ലേജ് പെരുവട്ടൂർ ദേശം സർവേ നമ്പർ 4/5 ൽ ഉൾപ്പെട്ട 126 സെന്റ് സ്ഥലവും കേന്ദ്രാവിഷ്കൃത പദ്ധതിയായ സ്വച്ഛ് ഭാരത് മിഷനിലുൾപ്പെടുത്തി ഏറ്റെടുക്കുന്നതിന് കൌൺസിൽ തീരുമാനിച്ചു.

ശരിപകർപ്പ് സെക്രട്ടറി



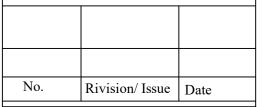
(ഒപ്പ്)

ചെയർമാൻ/ ചെയർപേർസൺ



7				
7	NO	DESCRIPTION	L/DIA	В
7	1	RAW SEWAGE WELL		
7	2	RECEIVING CHAMBER	2.25	1
7		COARSE SCREEN CHANNEL-MECHANICAL	2.75	1
7	3b	COARSE SCREEN CHANNEL-MANUAL	2.75	1
$\langle$	4 a	FINE SCREEN CHANNEL-MECHANICAL	2.75	1
7		FINE SCREEN CHANNEL-MANUAL	2.75	1
4	5	GRIT CHAMBER	3	3
7	6	PARSHALL FLUME	3	2
7	/	DISTRIBUTION CHAMBER	2	2
4		EQUALISATION TANK	16	DIA
7	9	MBBR 1	14.8	DIA
7		MBBR 2	13.8	DIA
7	11	SECONDARY SETTING TANK	13.6	DIA
7	12	FILTER FEED TANK	4.2	4.2
4		SLUDGE SUMP	1.9	DIA
7	14	SLUDGE THICKNER	5.2	DIA
7	10	THICKNED SLUDGE SUMP	3.2	DIA
A	16	CENTRATE SUMP	2.2	DIA
7	17	TREATED WATER TANK	6.6	6.6
4	18	CENTRIFUGE STRUCTURE	10	7
7	19	CHLORINATOR ROOM	10	8
,	20	BLOWER ROOM	10	8
4		ADMINISTRATIVE BUILDING	10	8
7	22	SLUDGE STORAGE SHED	5	5
7		ASF/PSF	12	8
7	24	DG ROOM	4	4
7	25	SECURITY ROOM	2.5	2.5
7	26	TRANSFORMER YARD	6.5	5.5

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

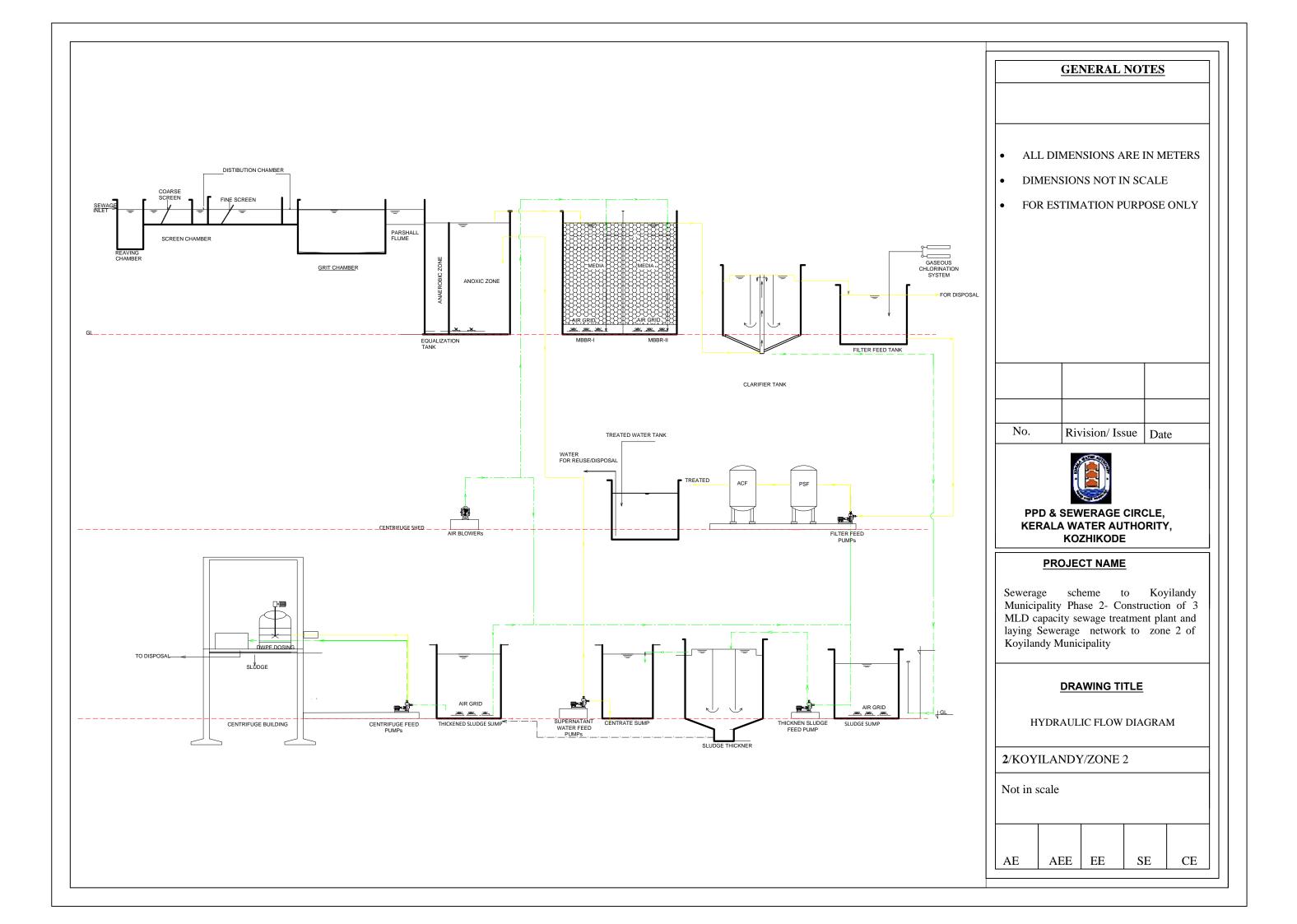
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

LAYOUT

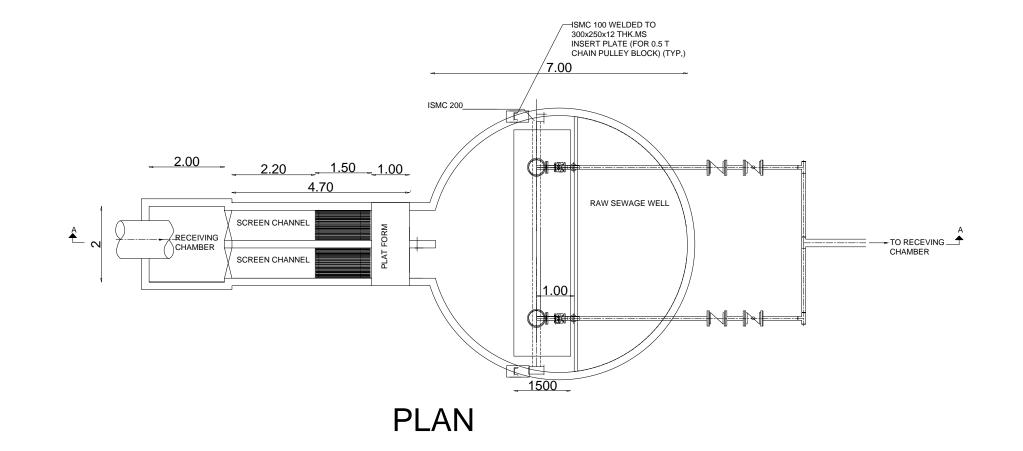
1/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE



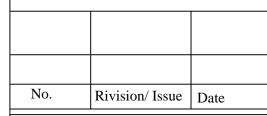
## M.S.GIRDER WITH CHAIN PULLING ARRANGEMENT -COLUMN 0.30 5.80 RECEIVING COARSE RAW SEWAGE SUMP CHAMBER SCREEN INCOMING SEWER 7.00 SUBMERSIBLE 2.00 4.70 .20

# **SECTION: A-A**



### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

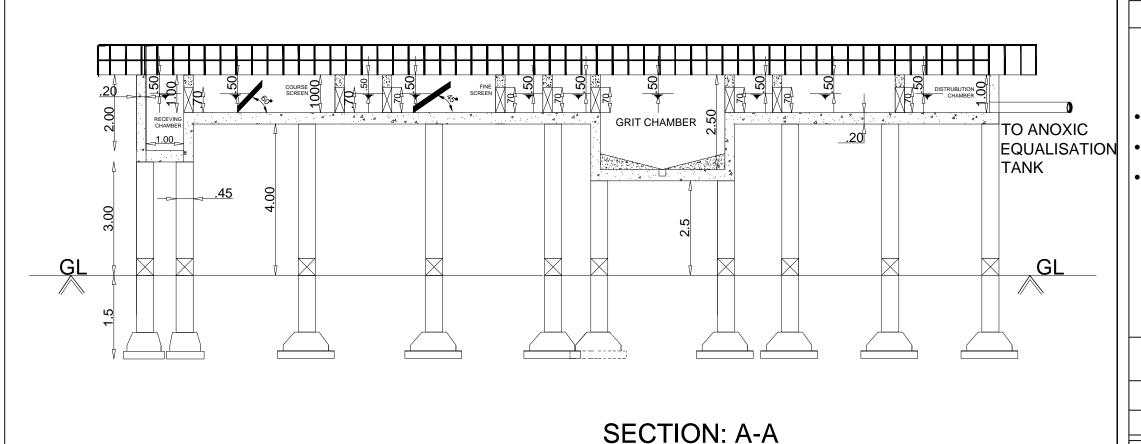
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

RAW SEWAGE PUMP WELL

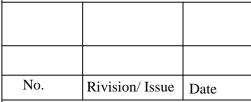
### **3**/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE





- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

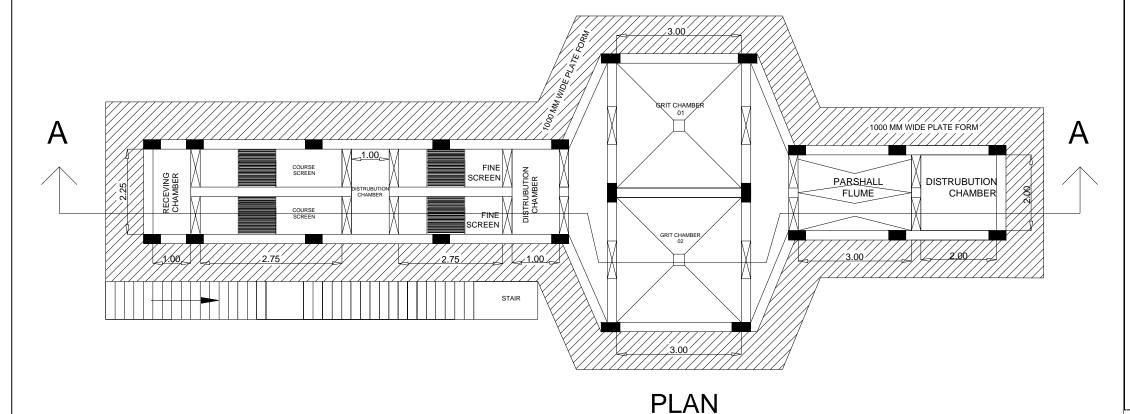
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

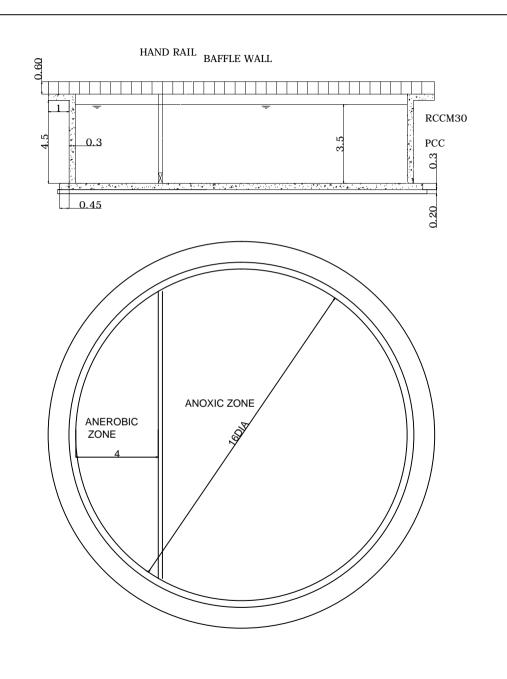
### **DRAWING TITLE**

DETAILS OF RECEIVING CHAMBER SCREEN RAW SEWAGE WELL

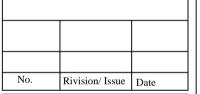
### **4**/KOYILANDY/ZONE 2

Not in scale





- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

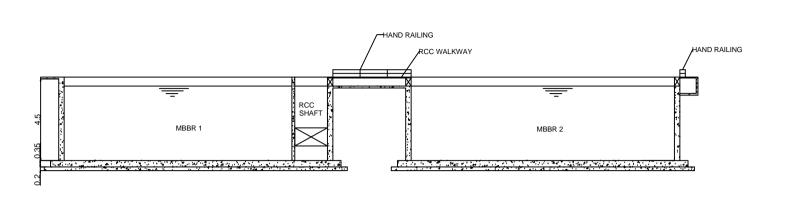
Sewerage scheme to Koyilandy Municipality Phase-2 Construction of 3MLD capacity sewage Treatment plant and laying sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

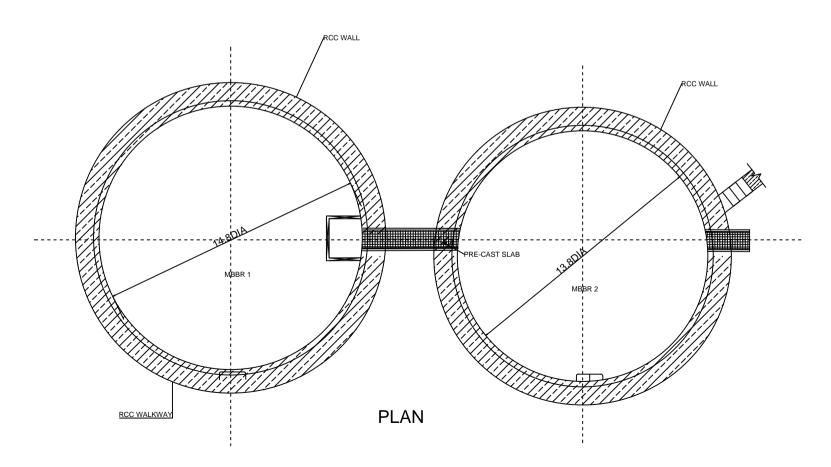
EQUALISATION TANK

5/KOYILANDI/ZONE2

AE.	AEE	EE	SE	CE
			~_	

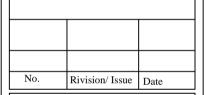


### **SECTION AA**



### GENERAL NOTES

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

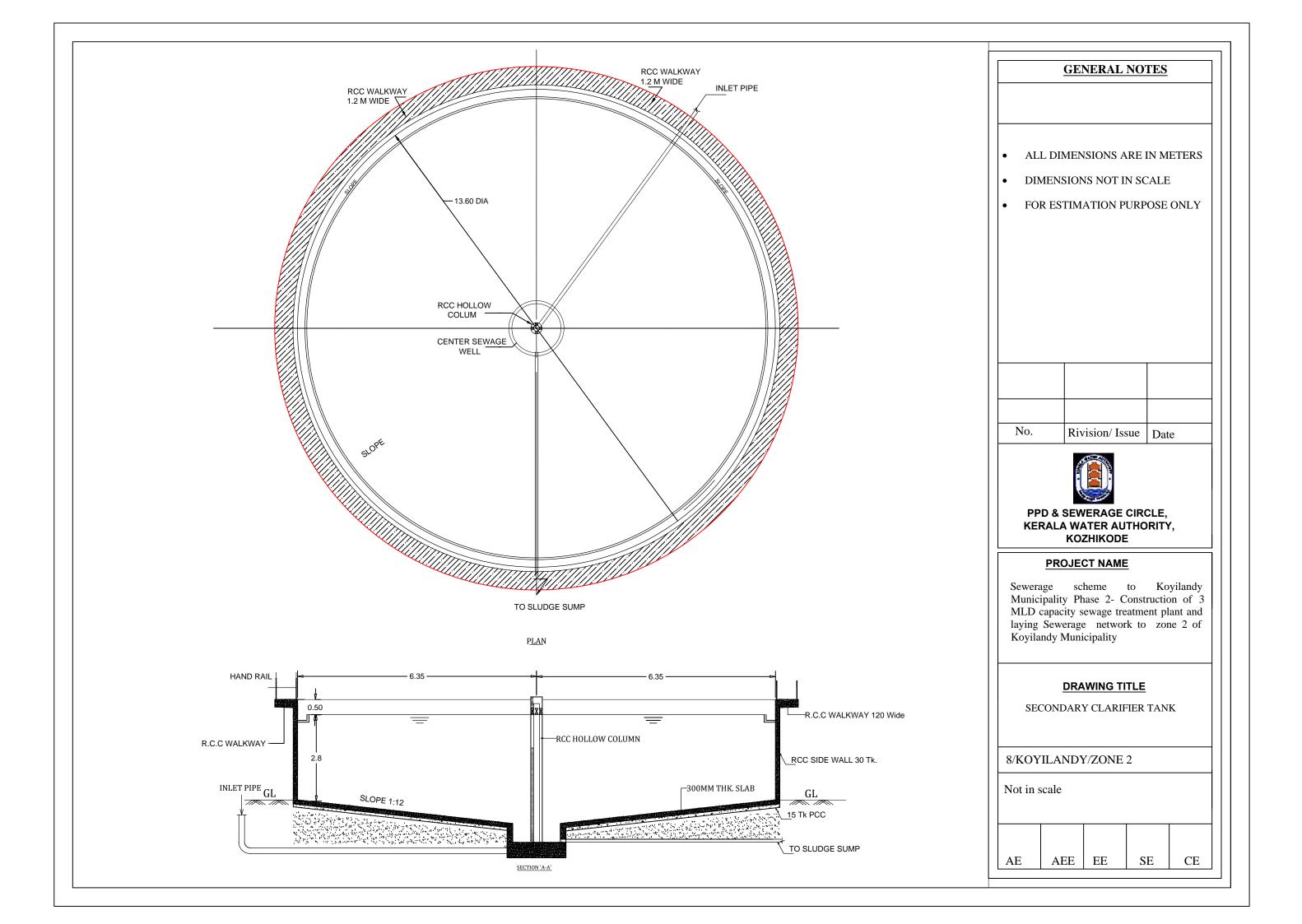
Sewerage scheme to Koyilandi Muncipality Phase 2- Construction of 3 MLD capacity sewage Treatment plant and laying sewerage network to zone 2 of Koyilandi Muncipality

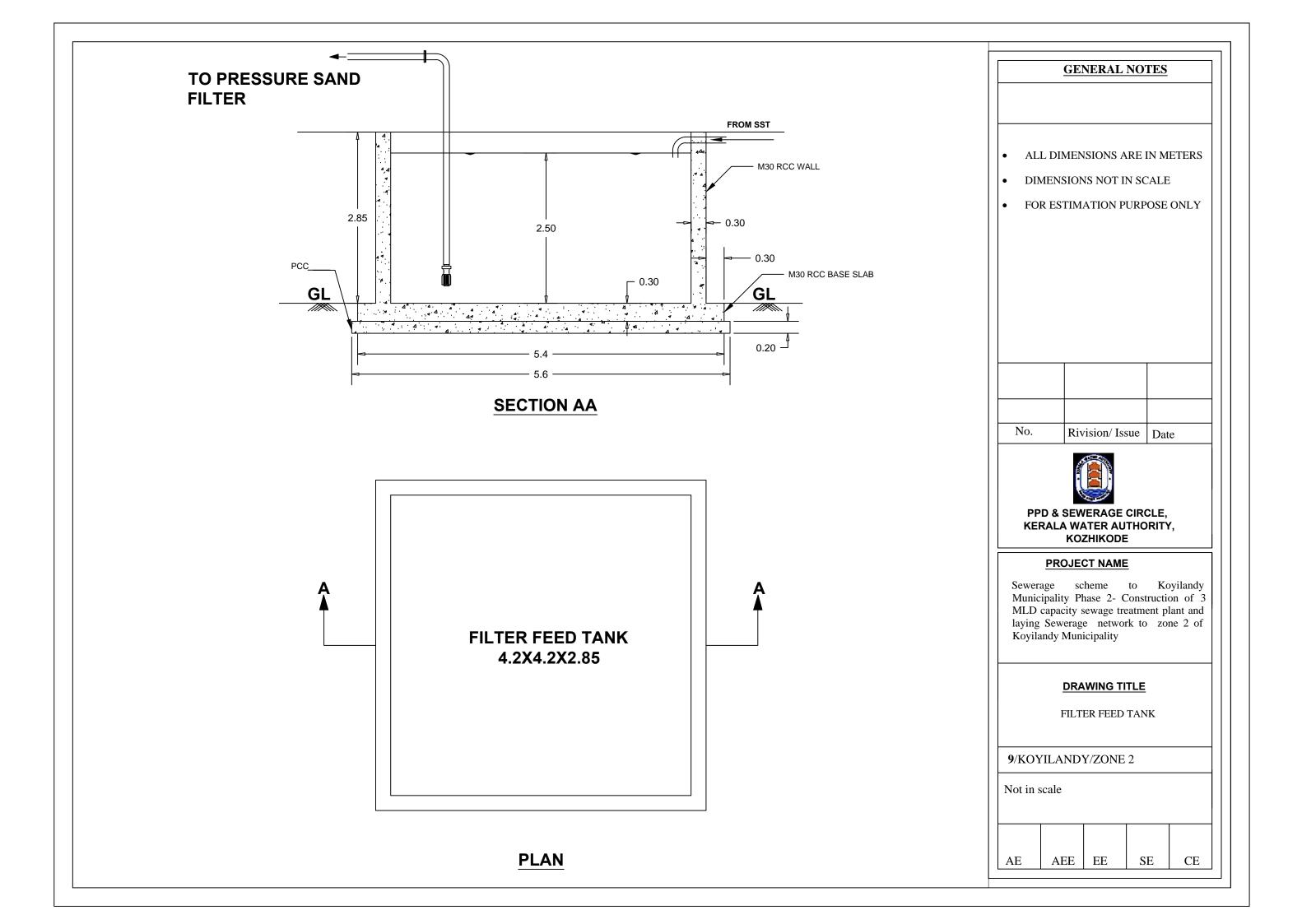
### **DRAWING TITLE**

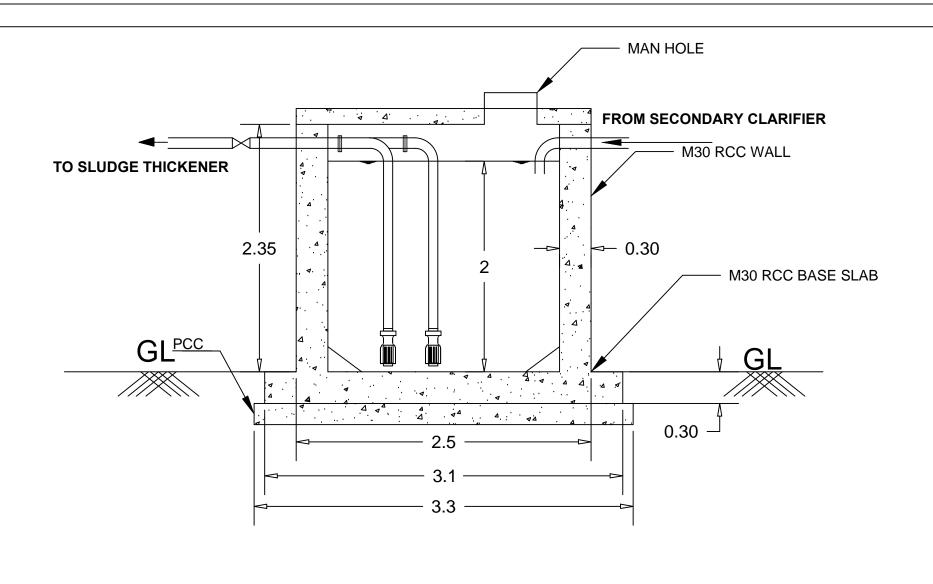
MBBR TANK

### **7** KOYILANDI ZONE2

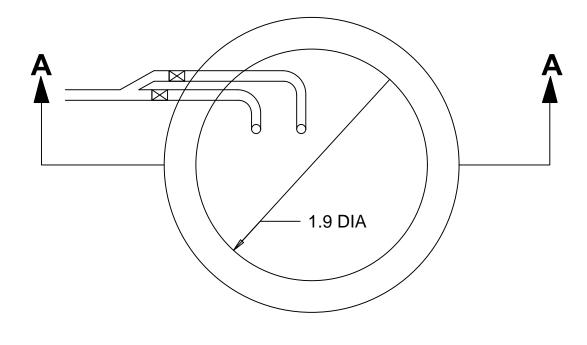
	AE	AEE	FF	SE	CE
	111	TILL		DL.	CL







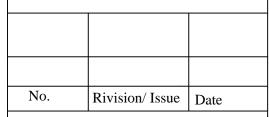
# **SECTION AA**



**PLAN** 

### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

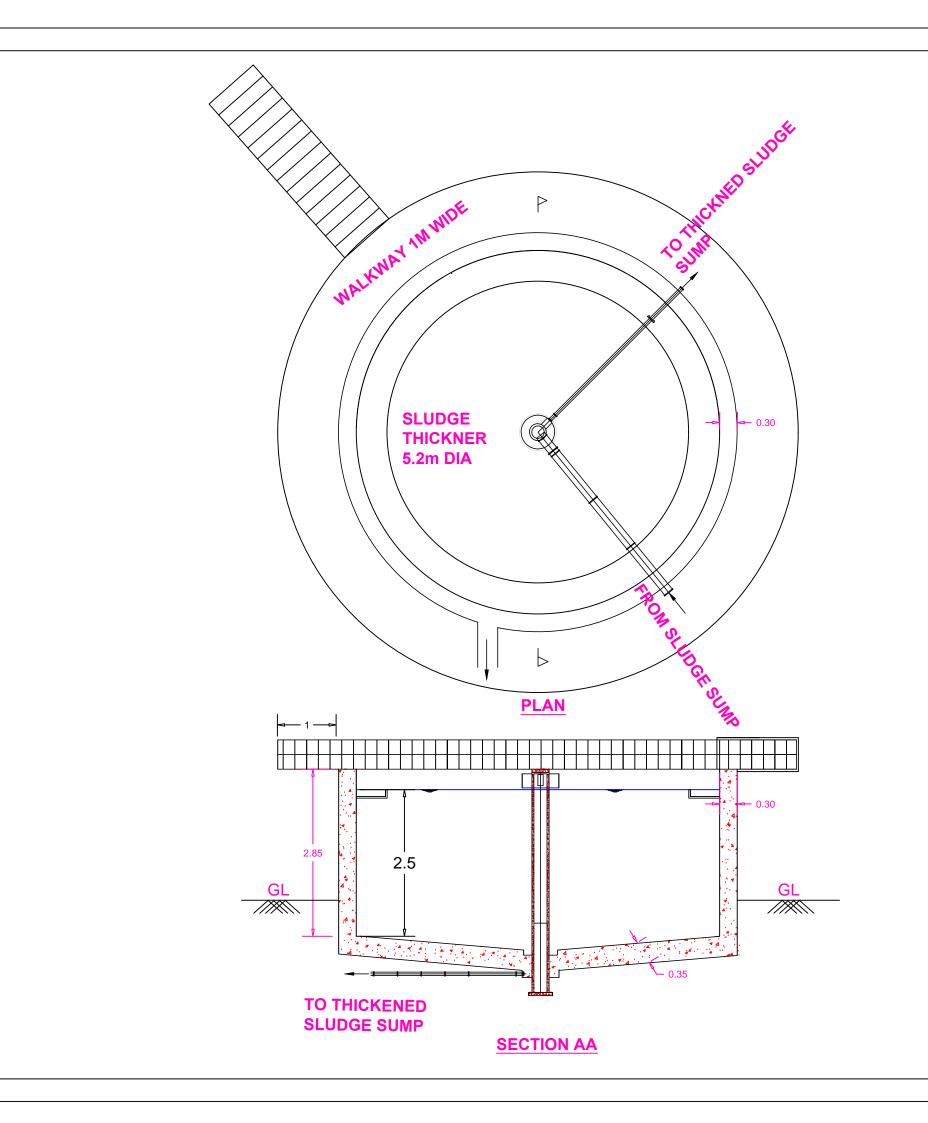
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

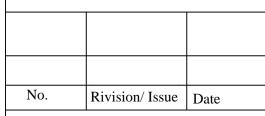
SLUDGE SUMP

**10**/KOYILANDY/ZONE 2

Not in scale



- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

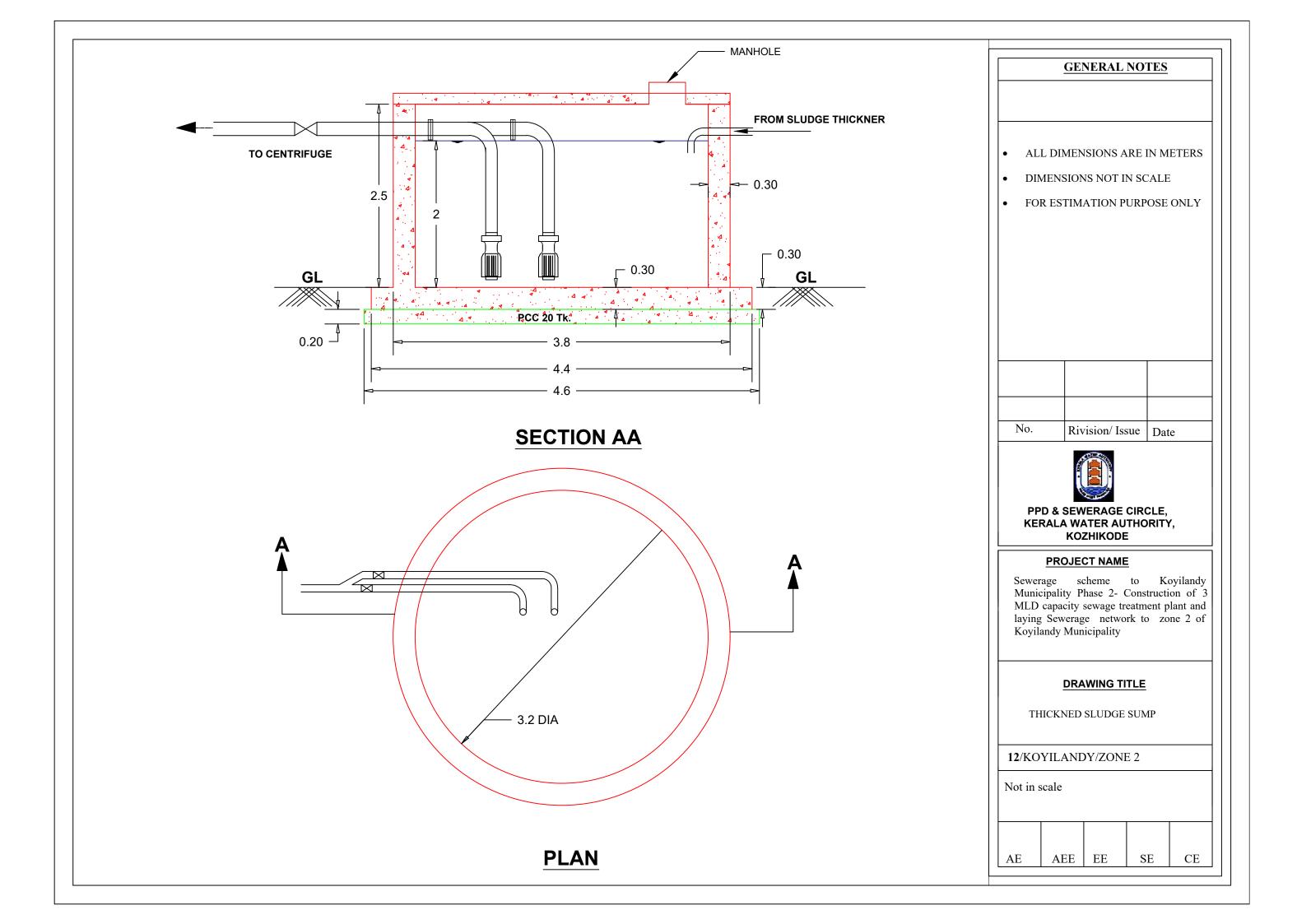
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

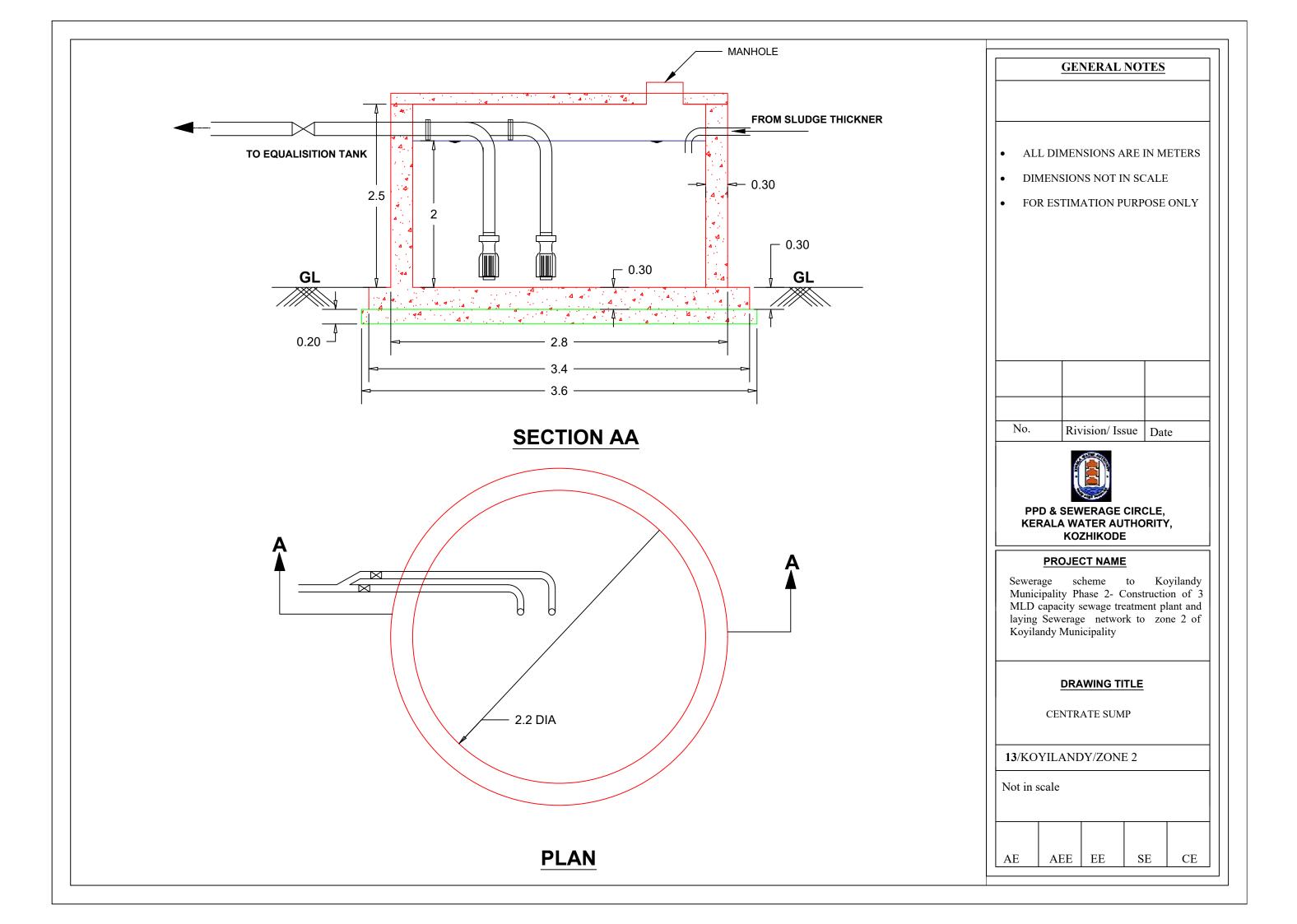
### **DRAWING TITLE**

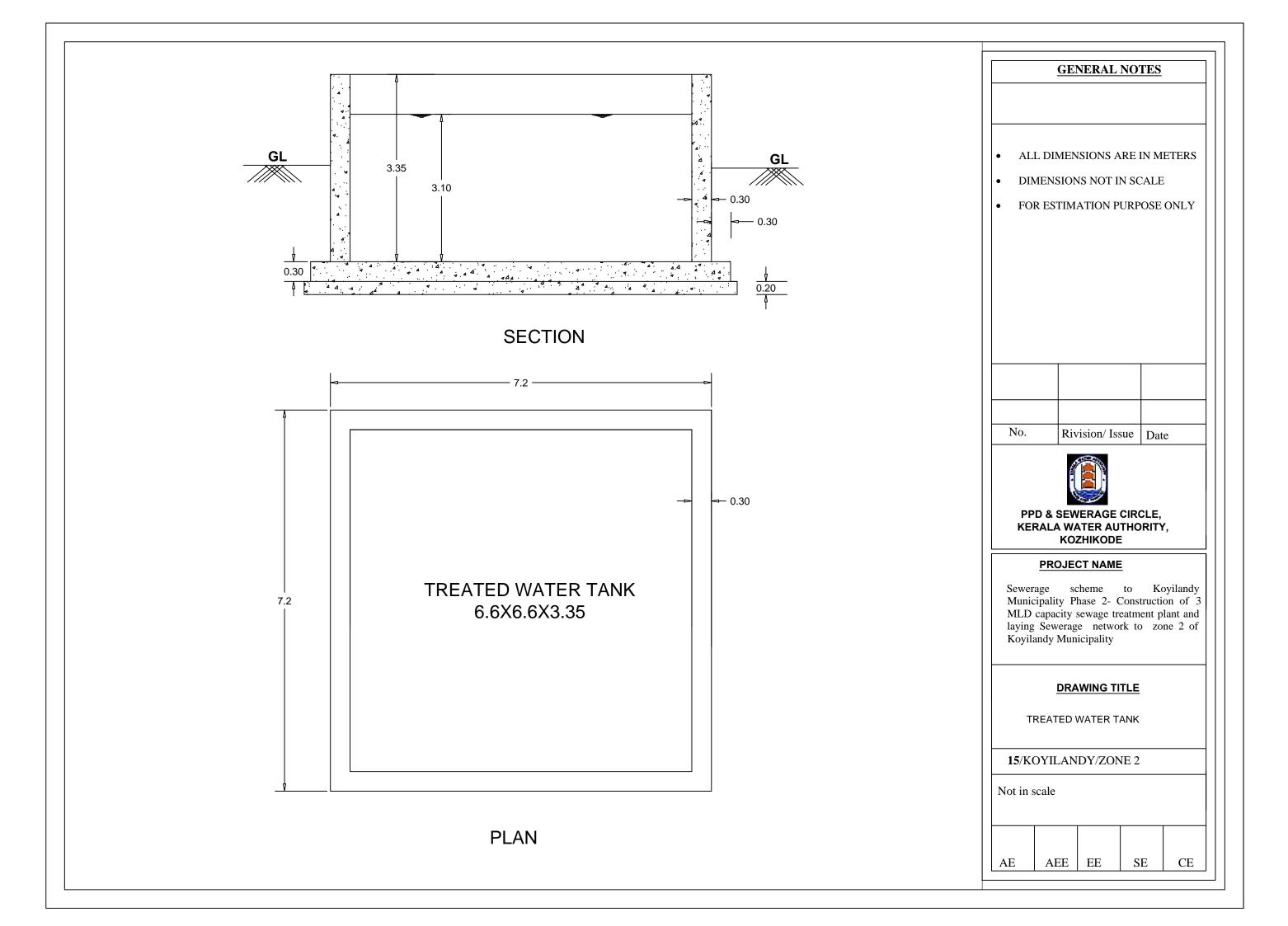
SLUDGE THICKNER

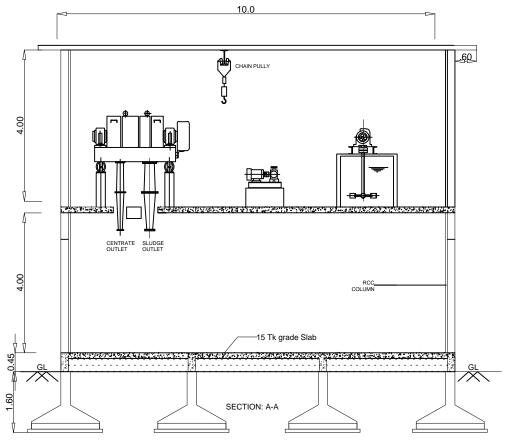
11/KOYILANDY/ZONE 2

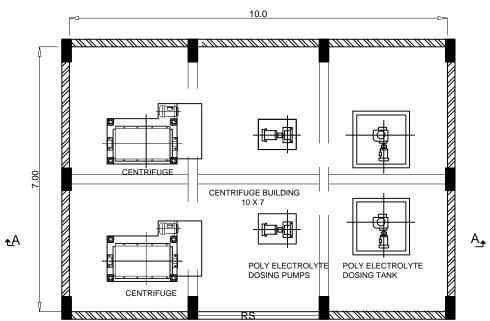
AE	AEE	EE	SE	CE





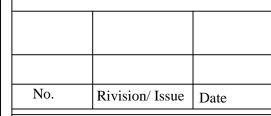






PLAN OF CENTRIFUGE BUILDING

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

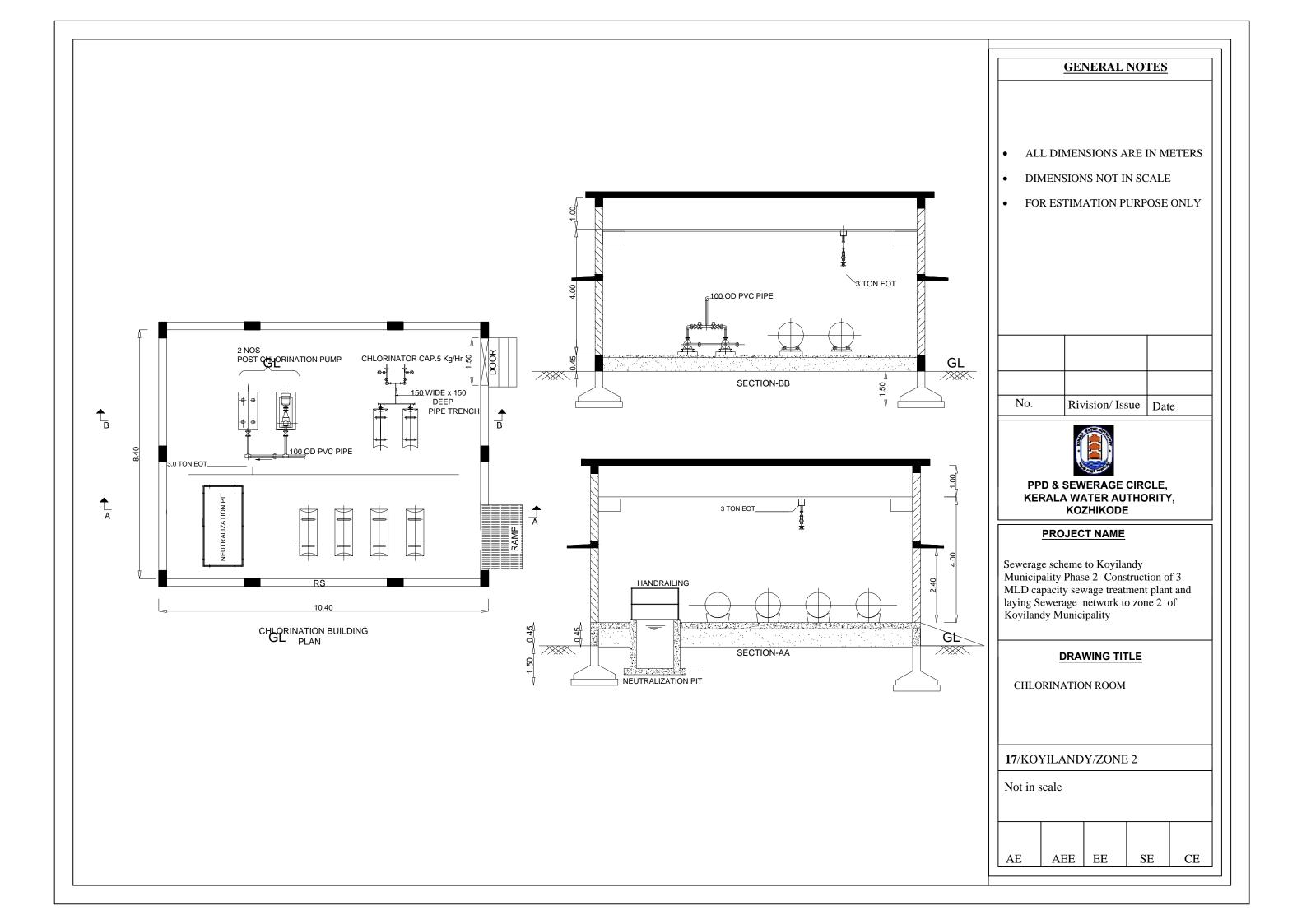
Sewerage scheme to Koyilandy
Municipality Phase 2- Construction of 3
MLD capacity sewage treatment plant and
laying Sewerage network to zone 2 of
Koyilandy Municipality

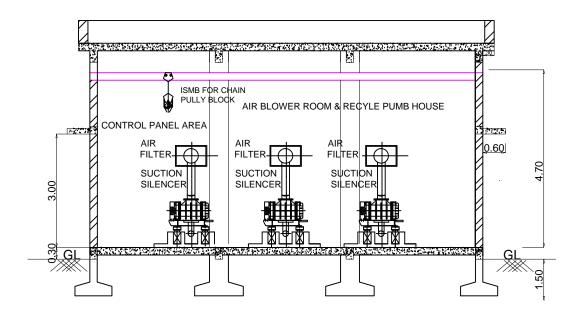
### **DRAWING TITLE**

CENTRIFUGE BUILDING

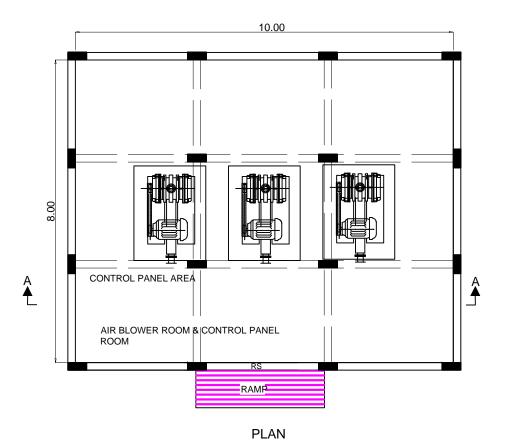
**16**/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE



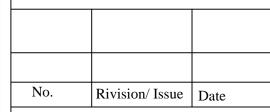


**SECTION A-A** 



### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

Sewerage scheme to Koyilandy
Municipality Phase 2- Construction of 3
MLD capacity sewage treatment plant and
laying Sewerage network to zone 2 of
Koyilandy Municipality

### **DRAWING TITLE**

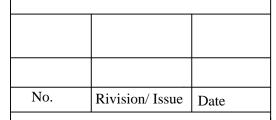
AIR BLOWER ROOM AND CONTROL PANEL ROOM

### **18**/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE



- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

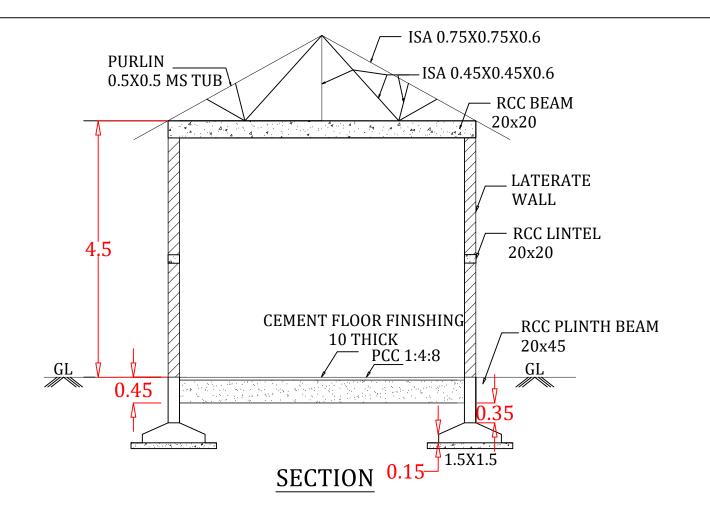
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

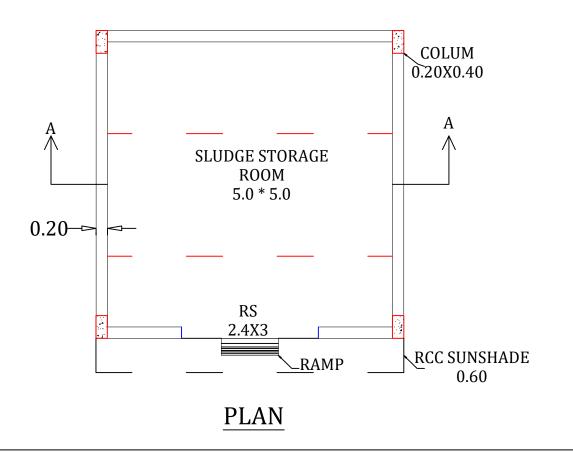
### **DRAWING TITLE**

ADMINISTRATIVE BUILDING MCC AND LAB

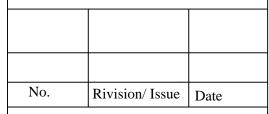
### 19/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE





- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

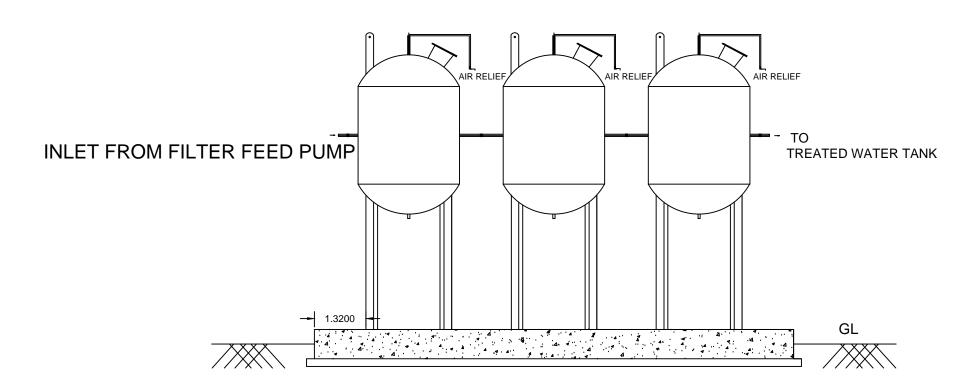
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

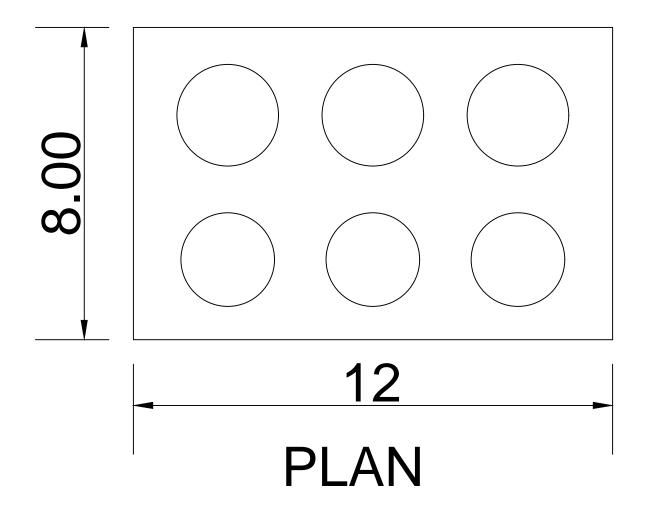
SLUDGE STORAGE ROOM

**20**/KOYILANDY/ZONE 2

Not in scale

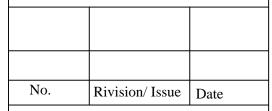


# **SECTION A A**



### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY





PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### PROJECT NAME

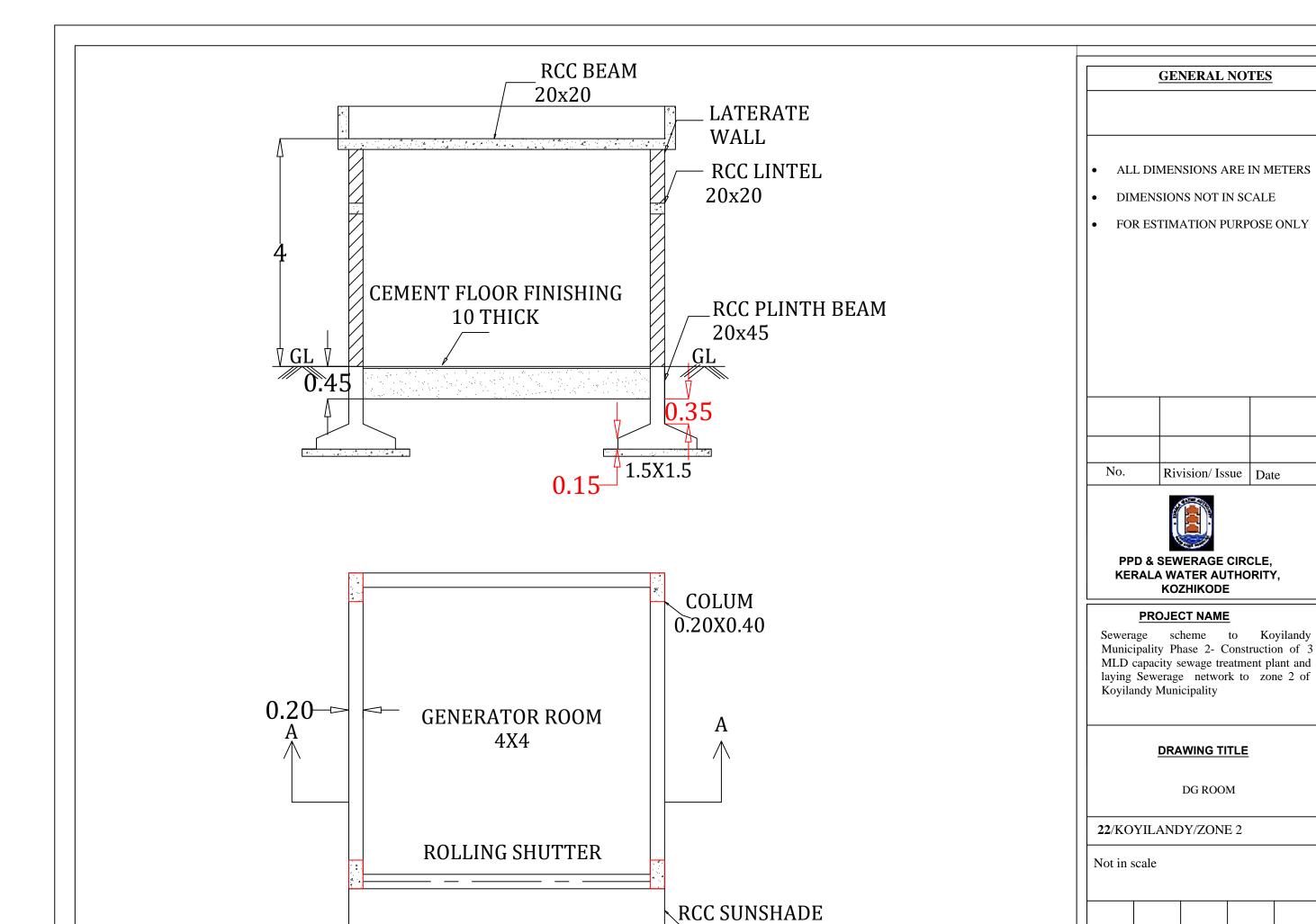
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

### **DRAWING TITLE**

PSF/ACF UNIT

**21**/KOYILANDY/ZONE 2

	AE	AEE	EE	SE	CE



0.60

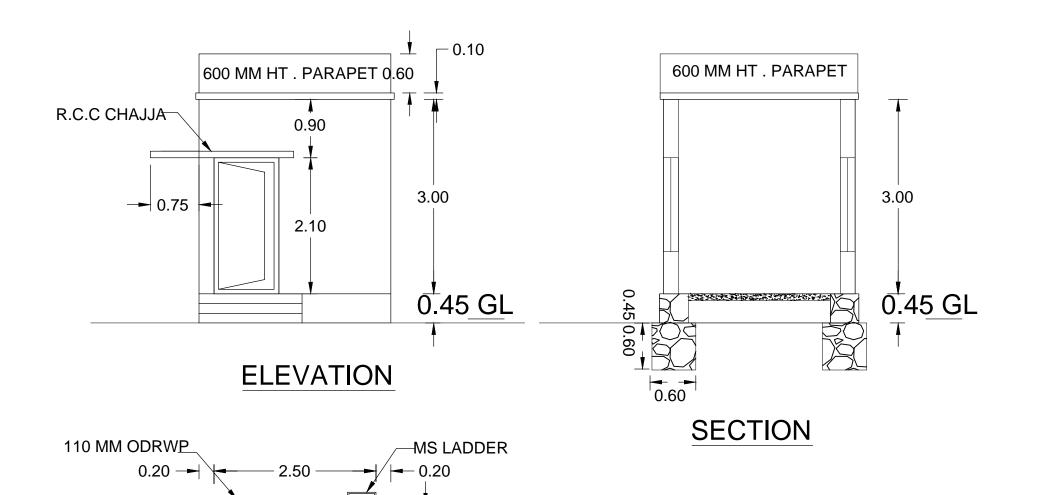
EE

SE

CE

AEE

ΑE



0.75

0.90 (D1)

UP

<del>-</del>1.36 <del>-</del>

1.66 W 1.20

0.75

SECURITY ROOM

2.50 \* 2.50

**PLAN** 

(W) 2.50

### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY

No. Rivision/ Issue Date



PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

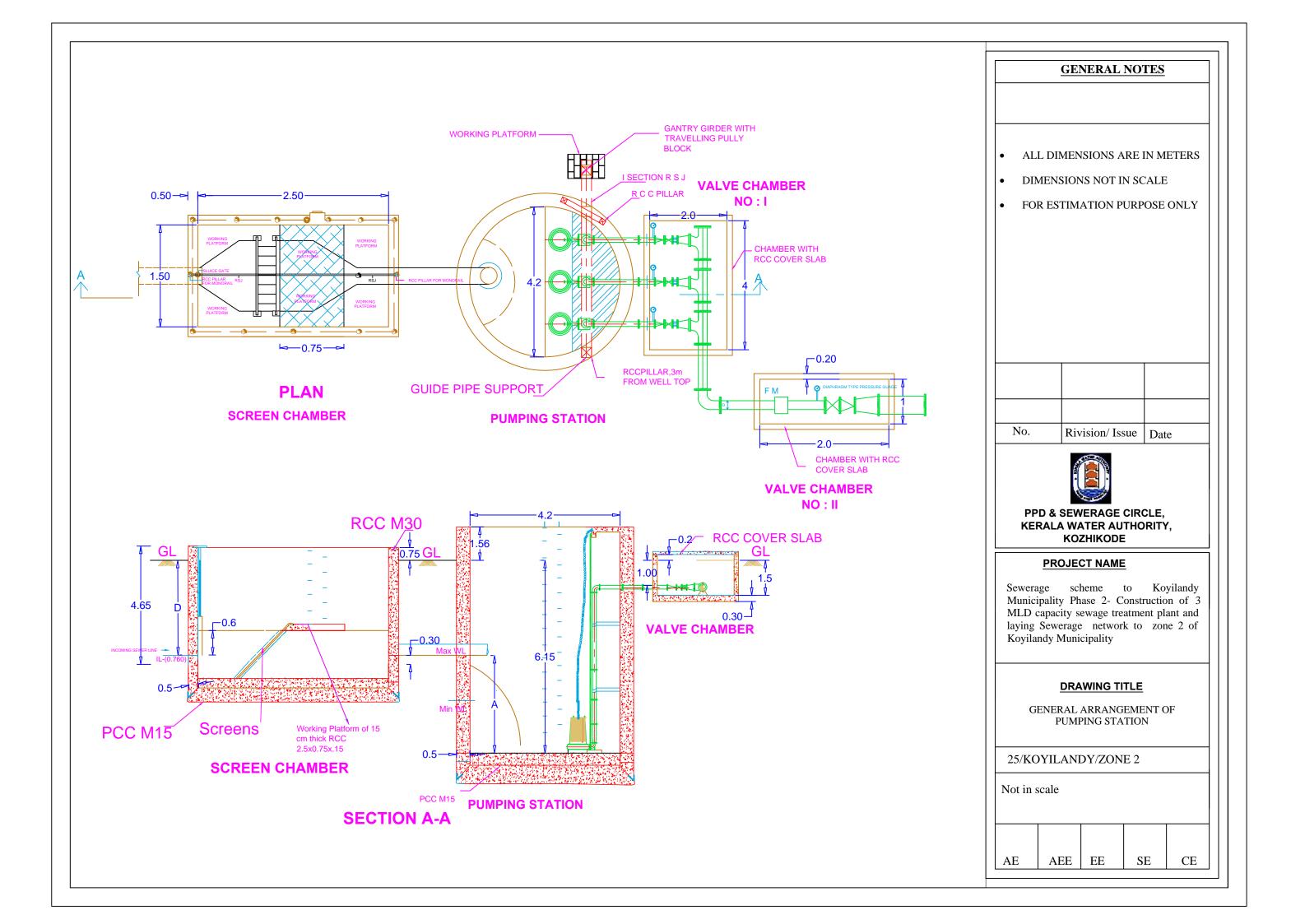
Sewerage scheme to Koyilandy
Municipality Phase 2- Construction of 3
MLD capacity sewage treatment plant and
laying Sewerage network to zone 2 of
Koyilandy Municipality

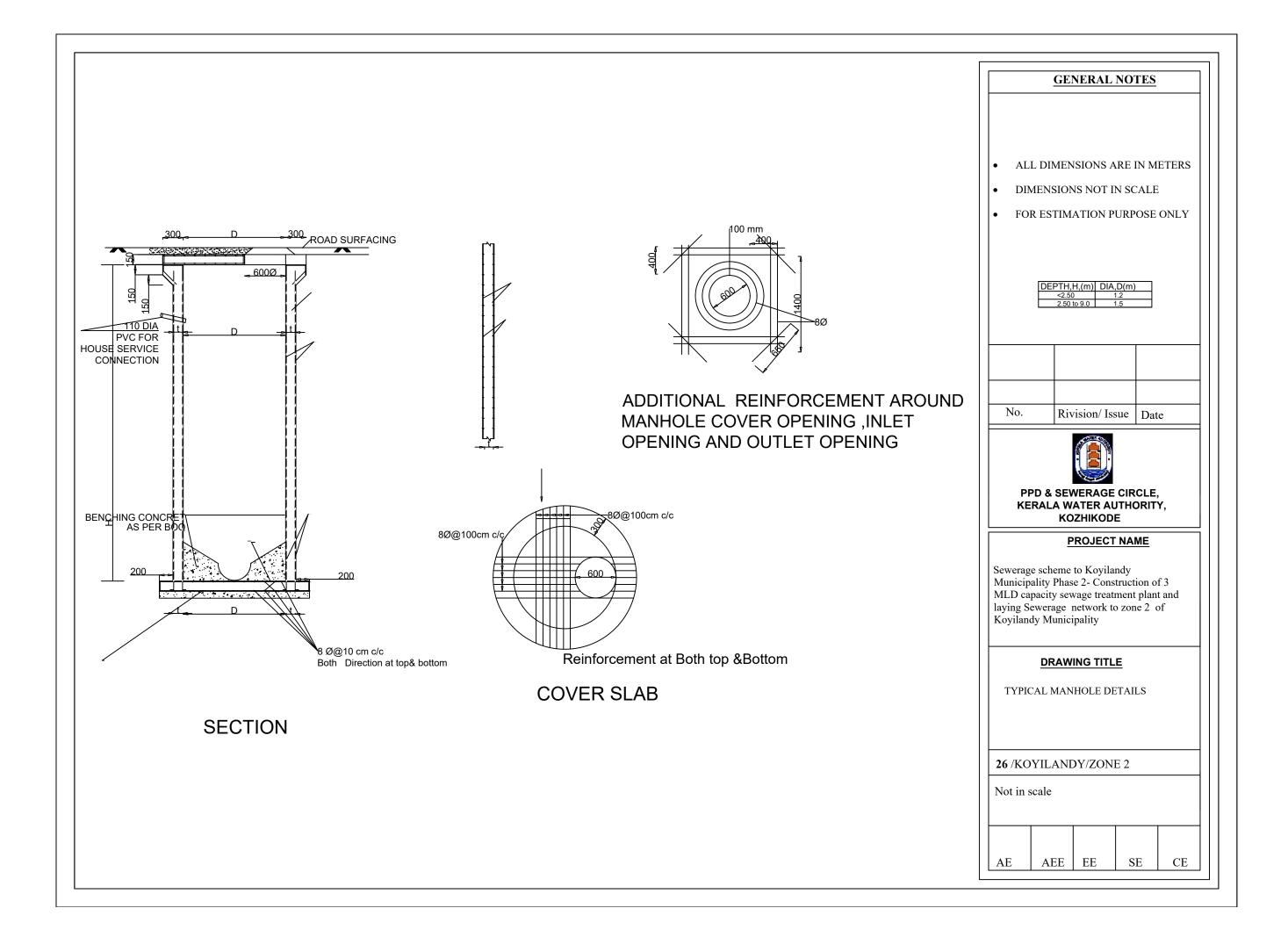
### **DRAWING TITLE**

SECURITY ROOM

23/KOYILANDY /ZONE 2

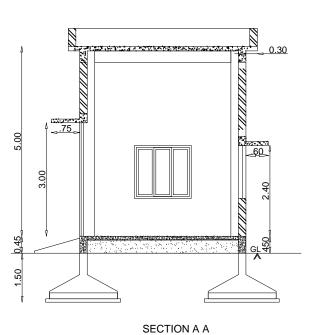
Not in scale





# GENERATOR ROOM 5 X 4 RS Ramp Ramp Ramp

PLAN OF GENERATOR WITH CONTROL ROOM



### **GENERAL NOTES**

- ALL DIMENSIONS ARE IN METERS
- DIMENSIONS NOT IN SCALE
- FOR ESTIMATION PURPOSE ONLY

No.	Rivision/ Issue	Date



PPD & SEWERAGE CIRCLE, KERALA WATER AUTHORITY, KOZHIKODE

### **PROJECT NAME**

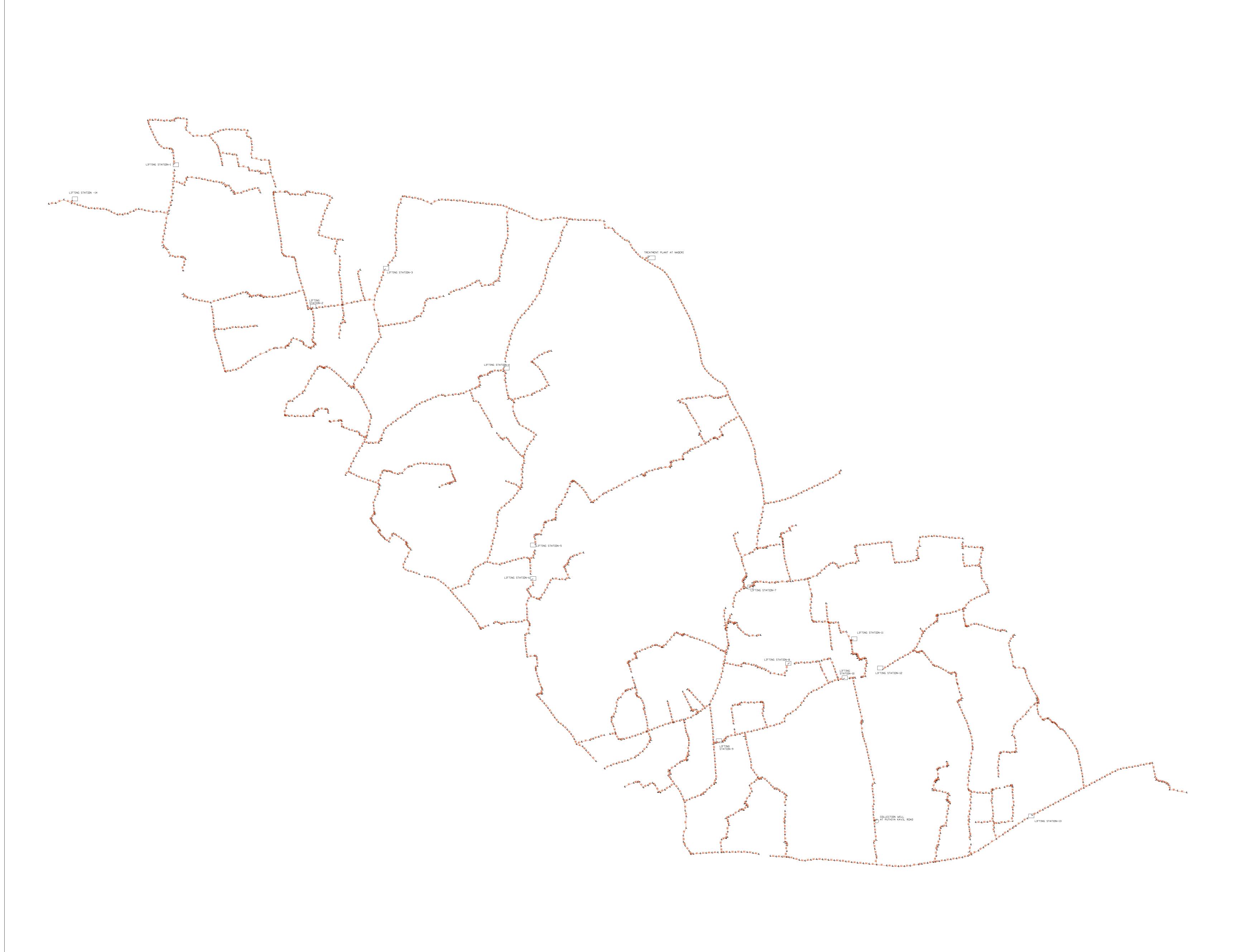
Sewerage scheme to Koyilandy Municipality Phase 2- Construction of 3 MLD capacity sewage treatment plant and laying Sewerage network to zone 2 of Koyilandy Municipality

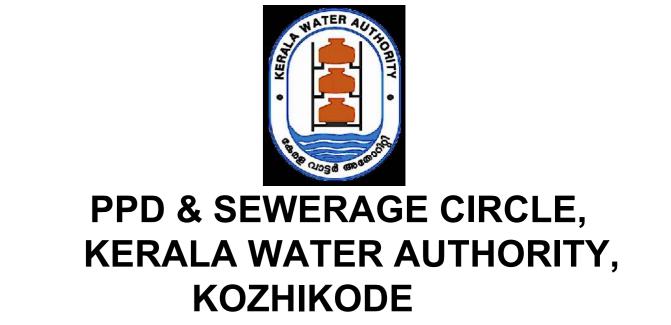
### **DRAWING TITLE**

GENERATOR WITH CONTROL ROOM

27/KOYILANDY/ZONE 2

AE	AEE	EE	SE	CE





# PROJECT NAME AND ADDRESS

SEWERAGE SYSTEM TO KOYILANDY MUNICIPALITY -PHASE 2
CONSTRUCTION OF 3MLD CAPACITY SEWAGE TREATMENT PLANT
AND LAYNG SEWERAGE NET WORK TO ZONE 2
OF KOYILANDY MUNICIPALITY

	Draw	ing	Title	
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		_		
		_		

SEWERAGE NET WORK

Not in scale