



"SAVE WATER "



Office of Chief Engineer (Technical) and
TM, RWSSMB

Public Health Engineering Department,

Jai Bhawan, 2, Civil Lines, Jacob Road, Jaipur

Tel: 0141-2222342, Fax: 0141-2222585

Email: rj_tm@nic.in

No. D&S/BSR/2022-23/ 1868-1978

Date: 02-08-2022

Amendment No.01/BSR-2022

Basic Schedule of Rates (BSR) for year 2022-23 was issued by this office vide office order No. D&S/BSR/2022-23/ 382-492 dated 05.05.2022 for water supply schemes/projects for PHED Rajasthan. On the recommendation of the Committee, constituted by this office order no. D&S/BSR/2022-23/195-210 dated 20.04.2022, in its meeting held on dated 28.04.2022 and Minutes of Meeting issued vide this office no. D&S/BSR/2022-23/1853-1857 dated 01.08.2022, amendment made in existing PHED BSR 2022 as follows:

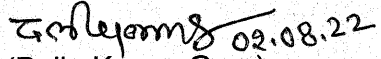
S. No.	Chapter No.	Particulars	Details of Items amended	Remarks
1	All	All items of all Chapters.	Rates changed due to the effect of GST rate on govt. work contract.	Due to GST Notification 03/2022, Central tax dated 13.07.2022, GST rate of work contracts applicable in Department increased from 12 % to 18%
2	1.	DI Pipes, HDPE Pipes, MS pipes, BWSC pipes and MS specials.	Basic Rates changed.	Rates lowered due to the cool down of the prices of raw materials used.
3	2.	MS casing pipe, GI pipes, HDPE riser pipe.	Basic Rates changed.	Rates lowered due to the cool down of the prices of raw materials used.
4	3.	All RCC Reservoirs including DI and GI lowering pipes.	Basic Rates changed.	Rates lowered due to the cool down of the prices of steel bars for RCC reservoirs. GI and DI pipe due to change in rate of pipes.

Td
02.08.2022

5	1.	FHTC with integrated PP saddle piece (item no 1.23)	Nomenclature corrected along with change of the rate.	
6	1.	Item of PTMT tap is added (item no 1.30)	New addition.	As per recommendation of meeting of TC 724 th dated 06.07.2022
7	6.	Nomenclature of Soft seated sluice valve corrected.	MOC details modified as per prevalent TD specification and approved QAPs.	

This order shall be effective with immediate effect.

Enclosure: Amended BSR 2022

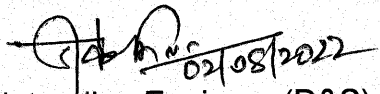

(Dalip Kumar Gaur)
Chief Engineer (Technical) and
TM, RWSSMB, PHED, Raj. Jaipur

No. D&S/BSR/2022-23/ 1868-1978

Date: 02-08-2022

Copy to following:

1. SA to Hon'ble Minister, PHED, Govt. of Rajasthan, Jaipur.
2. PS to Addl. Chief Secretary, PHED& GWD, Govt. of Rajasthan, Jaipur.
3. MD, JJM, Govt. of Rajasthan, Jaipur.
4. Chief Engineer (Rural)/(U&NRW)/(SP)/(Adm.)/JJM/QC, PHED, Jaipur.
5. Chief Engineer (P) Jodhpur/ (PMU), RRWS&FMP PHED Nagaur.
6. FA&CAO, RWSSMB, PHED, Jaipur.
7. Secretary, RWSSMB, PHED Jaipur.
8. Addl. Chief Engineer, PHED, (All)
9. Superintending Engineer, PHED, (All)


Superintending Engineer (D&S)
O/O Chief Engineer (Technical) and
TM, RWSSMB, PHED, Raj. Jaipur

PUBLIC HEALTH ENGINEERING DEPARTMENT

Government of Rajasthan

AMENDMENT 01 PHED BSR 2022

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Chapter 1

Pipe line work

S. No.	Description	Unit	Amended Rate (Rs.)
DI PIPES			
1.1	Providing, lowering, laying in trenches, aligning, fixing in position and jointing Ductile Iron (DI) ISI marked K-7 grade S&S pipes as per IS:8329-2000 (amended up to date), with internal cement mortar lining suitable for potable water with rubber ring (EPDM) joints as per IS: 5382-1985 including all taxes (Central and local), transportation and freight charges, inspection charges, loading/unloading charges, including cost of labour and material, specials (Tee, bend etc.) satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications and direction of Engineer-in-charge. (excluding earth work) Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately.		
1.1.1	80 mm	RMT	1555.00
1.1.2	100 mm	RMT	1606.00
1.1.3	150 mm	RMT	2279.00
1.1.4	200 mm	RMT	2908.00
1.1.5	250 mm	RMT	3784.00
1.1.6	300 mm	RMT	4833.00
1.1.7	350 mm	RMT	5899.00
1.1.8	400 mm	RMT	7201.00
1.1.9	450 mm	RMT	8511.00
1.1.10	500 mm	RMT	10153.00
1.1.11	600 mm	RMT	13272.00
1.1.12	700 mm	RMT	17793.00
1.1.13	800 mm	RMT	22842.00
1.1.14	900 mm	RMT	28012.00
1.1.15	1000 mm	RMT	33614.00
1.2	Providing, lowering, laying in trenches, aligning, fixing in position and jointing Ductile Iron (DI) ISI marked K-9 grade S&S pipes as per IS:8329-2000 (amended up to date), with internal cement mortar lining suitable for potable water with rubber ring (EPDM) joints as per IS: 5382-1985 including all taxes (Central and local), transportation and freight charges, inspection charges, loading/unloading charges, including cost of labour and material, specials (Tee, bend etc.) satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications and direction of Engineer-in-charge. (excluding earth work) Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately.		
1.2.1	100 mm	RMT	1836.00
1.2.2	150 mm	RMT	2612.00
1.2.3	200 mm	RMT	3465.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.2.4	250 mm	RMT	4602.00
1.2.5	300 mm	RMT	5834.00
1.2.6	350 mm	RMT	7116.00
1.2.7	400 mm	RMT	8667.00
1.2.8	450 mm	RMT	10352.00
1.2.9	500 mm	RMT	12133.00
1.2.10	600 mm	RMT	15878.00
1.2.11	700 mm	RMT	20106.00
1.2.12	800 mm	RMT	24729.00
1.2.13	900 mm	RMT	30115.00
1.2.14	1000 mm	RMT	36359.00
1.2.15	1100 mm	RMT	43908.00
1.2.16	1200 mm	RMT	50912.00
1.3	Providing, lowering, laying, aligning, fixing in position and jointing at all level/ depths DI standard specials with rubber ring (EPDM)/ nut bolt and insertion sheet and jointing as per IS: 9523-2000 or as amended up to date, such as tees, bends, tapers, caps etc. within trenches in DI pipe line complete including all material, labour, taxes, testing and commissioning along with pipe line as per technical specifications and direction of Engineer-in-charge (excluding earth work).		
1.3.1	All End Socketed		
1.3.1.1	Up to 300 mm Diameter	Kg	151.00
1.3.1.2	Above 300mm and up to 600 mm diameter	Kg	168.00
1.3.1.3	Above 600 mm diameter	Kg	216.00
1.3.2	All End Flanged		
1.3.2.1	Up to 300 mm Diameter	Kg	165.00
1.3.2.2	Above 300mm and up to 600 mm diameter	Kg	186.00
1.3.2.3	Above 600 mm diameter	Kg	245.00
1.3.3	Single Flange/ MJ Collar		
1.3.3.1	Up to 300 mm Diameter	Kg	157.00
1.3.3.2	Above 300mm and up to 600 mm diameter	Kg	175.00
1.3.3.3	Above 600 mm diameter	Kg	228.00
1.3.4	Double Flange Pipe (up to 1 mtr. length)		
1.3.4.1	Up to 300 mm Diameter	Kg	174.00
1.3.4.2	Above 300mm and up to 600 mm diameter	Kg	203.00
1.3.4.3	Above 600 mm diameter	Kg	256.00

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S. No.	Description	Unit	Amended Rate (Rs.)
HDPE PIPES			
1.4	Providing, lowering, laying and jointing in trenches, standard lengths HDPE ISI marked Pipes as per IS-4984: 1995 (amended up to date) with necessary jointing material like mechanical connectors, i.e. thread/ insert joint/ quick release coupler joint/ compression fitting joint or flanged joint and specials jointing pipe by electro fusion welding method, including all taxes , transportation and freight charges, inspection charges, loading/ unloading charges, stacking of pipes, including cost of labour and material, specials (Tee, bend etc.), satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications and direction of Engineer in-charge of following class and diameter. (excluding earth work). Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately. Supply may be in coil or straight length in 6 M/12 M.		
1.4.1	HDPE PE-80 PN-6		
1.4.1.1	75 mm dia	RMT	264.00
1.4.1.2	90 mm dia	RMT	366.00
1.4.1.3	110 mm dia	RMT	550.00
1.4.2	HDPE PE-100 PN-6		
1.4.2.1	75 mm dia	RMT	224.00
1.4.2.2	90 mm dia	RMT	316.00
1.4.2.3	110 mm dia	RMT	472.00
1.4.3	HDPE PE-80 PN-10		
1.4.3.1	90 mm dia	RMT	507.00
1.4.3.2	110 mm dia	RMT	759.00
1.4.4	HDPE PE-100 PN-10		
1.4.4.1	90 mm dia	RMT	436.00
1.4.4.2	110 mm dia	RMT	646.00
1.5	Providing, lowering, laying and jointing in trenches, standard lengths HDPE ISI marked Pipes as per IS-4984: 1995 (amended up to date) with necessary jointing material like mechanical connectors, i.e. thread/ insert joint/ quick release coupler joint/ compression fitting joint or flanged joint and specials jointing pipe by butt fusion/ electro fusion welding method, including all taxes , transportation and freight charges, inspection charges, loading/ unloading charges, stacking of pipes, including cost of labour and material, specials (Tee, bend etc.), satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications and direction of Engineer in-charge of following class and diameter. (excluding earth work). Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately. Supply of pipe shall be in straight length in 6/12 M.		
1.5.1	HDPE PE-80 PN-6		
1.5.1.1	125 mm dia	RMT	729.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.5.1.2	140 mm dia	RMT	915.00
1.5.1.3	160 mm dia	RMT	1155.00
1.5.1.4	180 mm dia	RMT	1455.00
1.5.1.5	200 mm dia	RMT	1744.00
1.5.1.6	225 mm dia	RMT	2210.00
1.5.2	HDPE PE-100 PN-6		
1.5.2.1	125 mm dia	RMT	618.00
1.5.2.2	140 mm dia	RMT	779.00
1.5.2.3	160 mm dia	RMT	981.00
1.5.2.4	180 mm dia	RMT	1234.00
1.5.2.5	200 mm dia	RMT	1481.00
1.5.2.6	225 mm dia	RMT	1868.00
1.5.3	HDPE PE-80 PN-10		
1.5.3.1	125 mm dia	RMT	1042.00
1.5.3.2	140 mm dia	RMT	1304.00
1.5.3.3	160 mm dia	RMT	1687.00
1.5.3.4	180 mm dia	RMT	2104.00
1.5.3.5	200 mm dia	RMT	2580.00
1.5.3.6	225 mm dia	RMT	3222.00
1.5.4	HDPE PE-100 PN-10		
1.5.4.1	125 mm dia	RMT	873.00
1.5.4.2	140 mm dia	RMT	1094.00
1.5.4.3	160 mm dia	RMT	1423.00
1.5.4.4	180 mm dia	RMT	1789.00
1.5.4.5	200 mm dia	RMT	2170.00
1.5.4.6	225 mm dia	RMT	2718.00
MS PIPES AND SPECIALS			
1.6	Manufacturing, supplying, lowering, laying and jointing in position to correct line spirally welded SAW/Fabricated MS Pipe having bevelled end plates / coils, confirming to IS 3589-2001 or its latest revision/ amendments, for following thickness and inside diameter, including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, including cost of labour and material, specials (Tee, bend etc.), field joints, satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications and direction of Engineer-in-charge; (excluding earthwork, internal lining and outer coating). Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately.		
1.6.1	Dia of Pipe: 300.00 mm (I.D)		
	Thickness of Pipe		
1.6.1.1	5.0 mm	RMT	4064.00
1.6.1.2	6.0 mm	RMT	4523.00
1.6.1.3	7.0 mm	RMT	5445.00
1.6.1.4	8.0 mm	RMT	6373.00
1.6.2	Dia of Pipe: 350.00 mm (I.D)		
	Thickness of Pipe		
1.6.2.1	5.0 mm	RMT	5264.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.6.2.2	6.0 mm	RMT	6334.00
1.6.2.3	7.0 mm	RMT	7411.00
1.6.2.4	8.0 mm	RMT	8493.00
1.6.3	Dia of Pipe: 400.00 mm (I.D)		
	Thickness of Pipe		
1.6.3.1	5.0 mm	RMT	6005.00
1.6.3.2	6.0 mm	RMT	7224.00
1.6.3.3	7.0 mm	RMT	8449.00
1.6.3.4	8.0 mm	RMT	9680.00
1.6.4	Dia of Pipe: 450.00 mm (I.D)		
	Thickness of Pipe		
1.6.4.1	5.0 mm	RMT	6747.00
1.6.4.2	6.0 mm	RMT	8114.00
1.6.4.3	7.0 mm	RMT	9487.00
1.6.4.4	8.0 mm	RMT	10866.00
1.6.4.5	9.0 mm	RMT	12251.00
1.6.5	Dia of Pipe: 500.00 mm (I.D)		
	Thickness of Pipe		
1.6.5.1	5.0 mm	RMT	7488.00
1.6.5.2	6.0 mm	RMT	9004.00
1.6.5.3	7.0 mm	RMT	10525.00
1.6.5.4	8.0 mm	RMT	12052.00
1.6.5.5	9.0 mm	RMT	13585.00
1.6.6	Dia of Pipe: 550.00 mm (I.D)		
	Thickness of Pipe		
1.6.6.1	5.0 mm	RMT	8229.00
1.6.6.2	6.0 mm	RMT	9893.00
1.6.6.3	7.0 mm	RMT	11563.00
1.6.6.4	8.0 mm	RMT	13238.00
1.6.6.5	9.0 mm	RMT	14920.00
1.6.7	Dia of Pipe: 600.00 mm (I.D)		
	Thickness of Pipe		
1.6.7.1	5.0 mm	RMT	8971.00
1.6.7.2	6.0 mm	RMT	10783.00
1.6.7.3	7.0 mm	RMT	12601.00
1.6.7.4	8.0 mm	RMT	14425.00
1.6.7.5	9.0 mm	RMT	16254.00
1.6.7.6	10.0 mm	RMT	18090.00
1.6.7.7	12.0 mm	RMT	21779.00
1.6.8	Dia of Pipe: 650.00 mm (I.D)		
	Thickness of Pipe		
1.6.8.1	5.0 mm	RMT	9712.00
1.6.8.2	6.0 mm	RMT	11673.00
1.6.8.3	7.0 mm	RMT	13639.00
1.6.8.4	8.0 mm	RMT	15611.00
1.6.8.5	9.0 mm	RMT	17589.00
1.6.8.6	10.0 mm	RMT	19573.00
1.6.8.7	12.0 mm	RMT	23559.00
1.6.9	Dia of Pipe: 700.00 mm (I.D)		
	Thickness of Pipe		
1.6.9.1	5.0 mm	RMT	10454.00
1.6.9.2	6.0 mm	RMT	12562.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.6.9.3	7.0 mm	RMT	14677.00
1.6.9.4	8.0 mm	RMT	16797.00
1.6.9.5	9.0 mm	RMT	18923.00
1.6.9.6	10.0 mm	RMT	21056.00
1.6.9.7	12.0 mm	RMT	25338.00
1.6.10	Dia of Pipe: 750.00 mm (I.D)		
	Thickness of Pipe		
1.6.10.1	5.0 mm	RMT	11195.00
1.6.10.2	6.0 mm	RMT	13452.00
1.6.10.3	7.0 mm	RMT	15715.00
1.6.10.4	8.0 mm	RMT	17983.00
1.6.10.5	9.0 mm	RMT	20258.00
1.6.10.6	10.0 mm	RMT	22538.00
1.6.10.7	12.0 mm	RMT	27117.00
1.6.11	Dia of Pipe: 800.00 mm (I.D)		
	Thickness of Pipe		
1.6.11.1	5.0 mm	RMT	11936.00
1.6.11.2	6.0 mm	RMT	14342.00
1.6.11.3	7.0 mm	RMT	16753.00
1.6.11.4	8.0 mm	RMT	19170.00
1.6.11.5	9.0 mm	RMT	21592.00
1.6.11.6	10.0 mm	RMT	24021.00
1.6.11.7	12.0 mm	RMT	28897.00
1.6.12	Dia of Pipe: 850.00 mm (I.D)		
	Thickness of Pipe		
1.6.12.1	5.0 mm	RMT	12678.00
1.6.12.2	6.0 mm	RMT	15231.00
1.6.12.3	7.0 mm	RMT	17791.00
1.6.12.4	8.0 mm	RMT	20356.00
1.6.12.5	9.0 mm	RMT	22927.00
1.6.12.6	10.0 mm	RMT	25504.00
1.6.12.7	12.0 mm	RMT	30676.00
1.6.13	Dia of Pipe: 900.00 mm (I.D)		
	Thickness of Pipe		
1.6.13.1	5.0 mm	RMT	13419.00
1.6.13.2	6.0 mm	RMT	16121.00
1.6.13.3	7.0 mm	RMT	18828.00
1.6.13.4	8.0 mm	RMT	21542.00
1.6.13.5	9.0 mm	RMT	24261.00
1.6.13.6	10.0 mm	RMT	26987.00
1.6.13.7	12.0 mm	RMT	32455.00
1.6.14	Dia of Pipe: 950.00 mm (I.D)		
	Thickness of Pipe		
1.6.14.1	5.0 mm	RMT	14161.00
1.6.14.2	6.0 mm	RMT	17011.00
1.6.14.3	7.0 mm	RMT	19866.00
1.6.14.4	8.0 mm	RMT	22728.00
1.6.14.5	9.0 mm	RMT	25596.00
1.6.14.6	10.0 mm	RMT	28470.00
1.6.14.7	12.0 mm	RMT	34235.00
1.6.15	Dia of Pipe: 1000.00 mm (I.D)		
	Thickness of Pipe		
1.6.15.1	5.0 mm	RMT	14902.00

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S. No.	Description	Unit	Amended Rate (Rs.)
1.6.15.2	6.0 mm	RMT	17900.00
1.6.15.3	7.0 mm	RMT	20904.00
1.6.15.4	8.0 mm	RMT	23914.00
1.6.15.5	9.0 mm	RMT	26930.00
1.6.15.6	10.0 mm	RMT	29952.00
1.6.15.7	12.0 mm	RMT	36014.00
1.6.16	Dia of Pipe: 1050.00 mm (I.D)		
	Thickness of Pipe		
1.6.16.1	5.0 mm	RMT	15643.00
1.6.16.2	6.0 mm	RMT	18790.00
1.6.16.3	7.0 mm	RMT	21942.00
1.6.16.4	8.0 mm	RMT	25101.00
1.6.16.5	9.0 mm	RMT	28265.00
1.6.16.6	10.0 mm	RMT	31435.00
1.6.16.7	12.0 mm	RMT	37793.00
1.6.17	Dia of Pipe: 1100.00 mm (I.D)		
	Thickness of Pipe		
1.6.17.1	5.0 mm	RMT	16385.00
1.6.17.2	6.0 mm	RMT	19680.00
1.6.17.3	7.0 mm	RMT	22980.00
1.6.17.4	8.0 mm	RMT	26287.00
1.6.17.5	9.0 mm	RMT	29600.00
1.6.17.6	10.0 mm	RMT	32918.00
1.6.17.7	12.0 mm	RMT	39573.00
1.6.18	Dia of Pipe: 1150.00 mm (I.D)		
	Thickness of Pipe		
1.6.18.1	5.0 mm	RMT	17126.00
1.6.18.2	6.0 mm	RMT	20569.00
1.6.18.3	7.0 mm	RMT	24018.00
1.6.18.4	8.0 mm	RMT	27473.00
1.6.18.5	9.0 mm	RMT	30934.00
1.6.18.6	10.0 mm	RMT	34401.00
1.6.18.7	12.0 mm	RMT	41352.00
1.6.19	Dia of Pipe: 1200.00 mm (I.D)		
	Thickness of Pipe		
1.6.19.1	5.0 mm	RMT	17868.00
1.6.19.2	6.0 mm	RMT	21459.00
1.6.19.3	7.0 mm	RMT	25056.00
1.6.19.4	8.0 mm	RMT	28659.00
1.6.19.5	9.0 mm	RMT	32269.00
1.6.19.6	10.0 mm	RMT	35884.00
1.6.19.7	12.0 mm	RMT	43131.00
1.6.20	Dia of Pipe: 1250.00 mm (I.D)		
	Thickness of Pipe		
1.6.20.1	6.0 mm	RMT	22349.00
1.6.20.2	7.0 mm	RMT	26094.00
1.6.20.3	8.0 mm	RMT	29846.00
1.6.20.4	9.0 mm	RMT	33603.00
1.6.20.5	10.0 mm	RMT	37366.00
1.6.20.6	12.0 mm	RMT	44911.00
1.6.21	Dia of Pipe: 1300.00 mm (I.D)		
	Thickness of Pipe		
1.6.21.1	6.0 mm	RMT	23238.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.6.21.2	7.0 mm	RMT	27132.00
1.6.21.3	8.0 mm	RMT	31032.00
1.6.21.4	9.0 mm	RMT	34938.00
1.6.21.5	10.0 mm	RMT	38849.00
1.6.21.6	12.0 mm	RMT	46690.00
1.6.22	Dia of Pipe: 1350.00 mm (I.D)		
	Thickness of Pipe		
1.6.22.1	7.0 mm	RMT	28170.00
1.6.22.2	8.0 mm	RMT	32218.00
1.6.22.3	9.0 mm	RMT	36272.00
1.6.22.4	10.0 mm	RMT	40332.00
1.6.22.5	12.0 mm	RMT	48470.00
1.6.23	Dia of Pipe: 1400.00 mm (I.D)		
	Thickness of Pipe		
1.6.23.1	7.0 mm	RMT	29208.00
1.6.23.2	8.0 mm	RMT	33404.00
1.6.23.3	9.0 mm	RMT	37607.00
1.6.23.4	10.0 mm	RMT	41815.00
1.6.23.5	12.0 mm	RMT	50249.00
1.6.24	Dia of Pipe: 1450.00 mm (I.D)		
	Thickness of Pipe		
1.6.24.1	7.0 mm	RMT	30246.00
1.6.24.2	8.0 mm	RMT	34591.00
1.6.24.3	9.0 mm	RMT	38941.00
1.6.24.4	10.0 mm	RMT	43298.00
1.6.24.5	12.0 mm	RMT	52028.00
1.6.25	Dia of Pipe: 1500.00 mm (I.D)		
	Thickness of Pipe		
1.6.25.1	7.0 mm	RMT	31284.00
1.6.25.2	8.0 mm	RMT	35777.00
1.6.25.3	9.0 mm	RMT	40276.00
1.6.25.4	10.0 mm	RMT	44780.00
1.6.25.5	12.0 mm	RMT	53808.00
1.6.26	Dia of Pipe: 1550.00 mm (I.D)		
	Thickness of Pipe		
1.6.26.1	7.0 mm	RMT	32322.00
1.6.26.2	8.0 mm	RMT	36963.00
1.6.26.3	9.0 mm	RMT	41610.00
1.6.26.4	10.0 mm	RMT	46263.00
1.6.26.5	12.0 mm	RMT	55587.00
1.6.27	Dia of Pipe: 1600.00 mm (I.D)		
	Thickness of Pipe		
1.6.27.1	7.0 mm	RMT	33360.00
1.6.27.2	8.0 mm	RMT	38149.00
1.6.27.3	9.0 mm	RMT	42945.00
1.6.27.4	10.0 mm	RMT	47746.00
1.6.27.5	12.0 mm	RMT	57366.00
1.6.28	Dia of Pipe: 1650.00 mm (I.D)		
	Thickness of Pipe		
1.6.28.1	8.0 mm	RMT	39336.00
1.6.28.2	9.0 mm	RMT	44279.00
1.6.28.3	10.0 mm	RMT	49229.00
1.6.28.4	12.0 mm	RMT	59146.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.6.29	Dia of Pipe: 1700.00 mm (I.D)		
	Thickness of Pipe		
1.6.29.1	8.0 mm	RMT	40522.00
1.6.29.2	9.0 mm	RMT	45614.00
1.6.29.3	10.0 mm	RMT	50711.00
1.6.29.4	12.0 mm	RMT	60925.00
1.6.30	Dia of Pipe: 1750.00 mm (I.D)		
	Thickness of Pipe		
1.6.30.1	8.0 mm	RMT	41708.00
1.6.30.2	9.0 mm	RMT	46948.00
1.6.30.3	10.0 mm	RMT	52194.00
1.6.30.4	12.0 mm	RMT	62704.00
1.6.31	Dia of Pipe: 1800.00 mm (I.D)		
	Thickness of Pipe		
1.6.31.1	8.0 mm	RMT	42894.00
1.6.31.2	9.0 mm	RMT	48283.00
1.6.31.3	10.0 mm	RMT	53677.00
1.6.31.4	12.0 mm	RMT	64484.00
1.6.31.5	16.0 mm	RMT	86168.00
1.6.32	Dia of Pipe: 1850.00 mm (I.D)		
	Thickness of Pipe		
1.6.32.1	8.0 mm	RMT	44080.00
1.6.32.2	9.0 mm	RMT	49617.00
1.6.32.3	10.0 mm	RMT	55160.00
1.6.32.4	12.0 mm	RMT	66263.00
1.6.32.5	16.0 mm	RMT	88540.00
1.6.33	Dia of Pipe: 1900.00 mm (I.D)		
	Thickness of Pipe		
1.6.33.1	8.0 mm	RMT	45267.00
1.6.33.2	9.0 mm	RMT	50952.00
1.6.33.3	10.0 mm	RMT	56643.00
1.6.33.4	12.0 mm	RMT	68042.00
1.6.33.5	16.0 mm	RMT	90913.00
1.6.34	Dia of Pipe: 1950.00 mm (I.D)		
	Thickness of Pipe		
1.6.34.1	8.0 mm	RMT	46453.00
1.6.34.2	9.0 mm	RMT	52286.00
1.6.34.3	10.0 mm	RMT	58125.00
1.6.34.4	12.0 mm	RMT	69822.00
1.6.34.5	16.0 mm	RMT	93285.00
1.6.35	Dia of Pipe: 2000.00 mm (I.D)		
	Thickness of Pipe		
1.6.35.1	8.0 mm	RMT	47639.00
1.6.35.2	9.0 mm	RMT	53621.00
1.6.35.3	10.0 mm	RMT	59608.00
1.6.35.4	12.0 mm	RMT	71601.00
1.6.35.5	16.0 mm	RMT	95658.00

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S. No.	Description	Unit	Amended Rate (Rs.)
Lining and coating on MS pipe			
1.7	Providing and applying following Coating to the External surface of MS pipes, including preparation of surface by cleaning as per ISO 8502-3/ SSPC-SP10/ NACE No.2 near white blast cleaning and abrasive blasting to a finish to SA 2.5 as per ISO: 8501-1 and surface profile / anchor profile of 50-75 / 75-100 microns as per ISO: 8503-2, including field joint coating at site complete as per Technical specifications and direction of Engineer –in-charge: 3 LPE (3 Layer Polyethylene) / DFBE (Dual Layer Fusion Bonded Epoxy)/ PU (Polyurethane)/ Polyolefin Tape coating .	SQM	1205.00
1.8	Providing and applying Solvent free, two pack liquid epoxy lining to internal surface of M.S. Pipe as per BS 6920:2000 and AWWA C210 standard including preparation of internal surface of pipe by cleaning and abrasive blasting including field joints coating at site complete as per technical specification and direction of Engineer in In charge. Liquid Epoxy shall be NSF/WARS approved for drinking water	SQM	435.00
1.9	Providing and applying 100% Solids, Rigid, DTM Polyurethane Coating to internal surface of M.S. Pipe as per AWWA C222 standard including preparation of internal surface of pipe by cleaning and abrasive blasting including field joints coating at site complete as per technical specification and direction of Engineer in In charge. Polyurethane Coating shall be NSF/WARS/SS-375 approved for drinking water.	SQM	642.00
1.10	Providing and making inner cement mortar lining to M.S. Pipes with mechanical devices in cement mortar 1:1 proportion , including cost of all materials, labour, special sand required, machinery, power generation, all equipments, including carrying out "C" value performance test of pipeline, including field joints at site complete as per technical specification and direction of Engineer in In charge.		
1.10.1	9 mm thick for pipes up to 700 mm dia	SQM	335.00
1.10.2	12 mm thick for pipes above 700 mm dia	SQM	369.00
1.11	Providing and fixing of flanged/ plain ended MS Specials made from MS sheet strips of relevant IS specification of approved thickness by welding, lowering, laying, aligning, fixing in position at all level/ depths in trenches complete including all taxes, material, labour, inside lining, outside coating, testing and commissioning along with pipe line as per technical specifications and direction of Engineer in-charge.		
1.11.1	MS pipe specials up to 600mm dia (with minimum 5mm thickness sheet)	Kg	129.00
1.11.2	MS pipe specials above 600mm dia (with minimum 6.3mm thickness sheet)	Kg	137.00

S. No.	Description	Unit	Amended Rate (Rs.)
BWSC PIPES			
1.12	Providing , lowering, laying and jointing of Bar Wrapped Steel Cylinder Pipes (BWSC) for overlapping steel welded joint as per IS:15155-2001(amended up to date) of following class and diameter including all taxes (Central and local), transportation and freight charges, inspection charges, loading/ unloading charges, including cost of labour and material, specials (Tee, bend etc.), field joints, satisfactory hydraulic testing, disinfection, commissioning etc. complete as per technical specifications & direction of Engineer-in-charge (excluding earth work). Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately.		
	Notes		
1)	Class mentioned below represents the Factory Test pressure of pipe.		
2)	For external coating at site to the joints, necessary polythene wrapping for pouring cement slurry shall also be provided with each pipe.		
1.12.1	Factory Test Pressure 12 Kg/ Cm2		
1.12.1.1	250mm	RMT	3702.00
1.12.1.2	300 mm	RMT	4215.00
1.12.1.3	350 mm	RMT	4723.00
1.12.1.4	400 mm	RMT	5408.00
1.12.1.5	450 mm	RMT	6241.00
1.12.1.6	500 mm	RMT	6754.00
1.12.1.7	600 mm	RMT	8674.00
1.12.1.8	700 mm	RMT	11155.00
1.12.1.9	800 mm	RMT	13679.00
1.12.1.10	900 mm	RMT	16538.00
1.12.1.11	1000 mm	RMT	19899.00
1.12.1.12	1100 mm	RMT	27390.00
1.12.1.13	1200 mm	RMT	30384.00
1.12.1.14	1300 mm	RMT	33213.00
1.12.1.15	1400 mm	RMT	37033.00
1.12.1.16	1500 mm	RMT	43985.00
1.12.1.17	1600 mm	RMT	46833.00
1.12.2	Factory Test Pressure 14 Kg/ Cm2		
1.12.2.1	250mm	RMT	3705.00
1.12.2.2	300 mm	RMT	4223.00
1.12.2.3	350 mm	RMT	4726.00
1.12.2.4	400 mm	RMT	5422.00
1.12.2.5	450 mm	RMT	6254.00
1.12.2.6	500 mm	RMT	6935.00
1.12.2.7	600 mm	RMT	9048.00
1.12.2.8	700 mm	RMT	12424.00
1.12.2.9	800 mm	RMT	15209.00
1.12.2.10	900 mm	RMT	18440.00
1.12.2.11	1000 mm	RMT	23391.00
1.12.2.12	1100 mm	RMT	27461.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.12.2.13	1200 mm	RMT	31479.00
1.12.2.14	1300 mm	RMT	35886.00
1.12.2.15	1400 mm	RMT	41426.00
1.12.2.16	1500 mm	RMT	51972.00
1.12.2.17	1600 mm	RMT	54557.00
1.12.3	Factory Test Pressure 16 Kg/Cm2		
1.12.3.1	250mm	RMT	3711.00
1.12.3.2	300 mm	RMT	4234.00
1.12.3.3	350 mm	RMT	4732.00
1.12.3.4	400 mm	RMT	5439.00
1.12.3.5	450 mm	RMT	6339.00
1.12.3.6	500 mm	RMT	7379.00
1.12.3.7	600 mm	RMT	9645.00
1.12.3.8	700 mm	RMT	13320.00
1.12.3.9	800 mm	RMT	15349.00
1.12.3.10	900 mm	RMT	19885.00
1.12.3.11	1000 mm	RMT	24039.00
1.12.3.12	1100 mm	RMT	29218.00
1.12.3.13	1200 mm	RMT	33960.00
1.12.3.14	1300 mm	RMT	39093.00
1.12.3.15	1400 mm	RMT	45058.00
1.12.3.16	1500 mm	RMT	53485.00
1.12.3.17	1600 mm	RMT	58901.00
1.12.4	Factory Test Pressure 18 Kg/Cm2		
1.12.4.1	250mm	RMT	3717.00
1.12.4.2	300 mm	RMT	4246.00
1.12.4.3	350 mm	RMT	4737.00
1.12.4.4	400 mm	RMT	5505.00
1.12.4.5	450 mm	RMT	6700.00
1.12.4.6	500 mm	RMT	7806.00
1.12.4.7	600 mm	RMT	10281.00
1.12.4.8	700 mm	RMT	14224.00
1.12.4.9	800 mm	RMT	16525.00
1.12.4.10	900 mm	RMT	21324.00
1.12.4.11	1000 mm	RMT	26027.00
1.12.4.12	1100 mm	RMT	31342.00
1.12.4.13	1200 mm	RMT	36541.00
1.12.4.14	1300 mm	RMT	41985.00
1.12.4.15	1400 mm	RMT	48901.00
1.12.4.16	1500 mm	RMT	57298.00
1.12.4.17	1600 mm	RMT	63847.00
1.12.5	Factory Test Pressure 20 Kg/Cm2		
1.12.5.1	250mm	RMT	3722.00
1.12.5.2	300 mm	RMT	4259.00
1.12.5.3	350 mm	RMT	4802.00
1.12.5.4	400 mm	RMT	5881.00
1.12.5.5	450 mm	RMT	7157.00
1.12.5.6	500 mm	RMT	8411.00
1.12.5.7	600 mm	RMT	11075.00
1.12.5.8	700 mm	RMT	15427.00
1.12.5.9	800 mm	RMT	19298.00
1.12.5.10	900 mm	RMT	23391.00
1.12.5.11	1000 mm	RMT	28767.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.12.5.12	1100 mm	RMT	34384.00
1.12.5.13	1200 mm	RMT	40102.00
1.12.5.14	1300 mm	RMT	46210.00
1.12.5.15	1400 mm	RMT	54122.00
1.12.5.16	1500 mm	RMT	64091.00
1.12.5.17	1600 mm	RMT	70407.00
Laying Jointing and Removing of pipe line			
1.13	De-jointing and removing of already laid CI/DI pipes of following diameters in excavated trenches with care, without damaging pipes, CID joints, valves, specials etc. and other materials and then refilling of soil after de-laying and de-jointing of pipelines with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr. This also include stacking the pipes with care and transporting the same to div./sub div. store or as directed by EIC with in the division. (Rates are Exclusive of Earth Work)		
1.13.1	80 mm	RMT	45.00
1.13.2	100 mm	RMT	50.00
1.13.3	125 mm	RMT	50.00
1.13.4	150 mm	RMT	59.00
1.13.5	200 mm	RMT	79.00
1.13.6	250 mm	RMT	98.00
1.13.7	300 mm	RMT	119.00
1.13.8	350 mm	RMT	134.00
1.13.9	400 mm	RMT	164.00
1.13.10	450 mm	RMT	200.00
1.13.11	500 mm	RMT	257.00
1.13.12	600 mm	RMT	309.00
1.14	De-jointing and removing of already laid MS pipes of following diameters in excavated trenches with care, without damaging pipes, CID joints, valves, specials etc. and other materials and then refilling of soil after de-laying and de-jointing of pipelines with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr. This also include stacking the pipes with care and transporting the same to div./sub div. store or as directed by EIC with in the division. (Rates are Exclusive of Earth Work)		
1.14.1	100 mm	RMT	36.00
1.14.2	125 mm	RMT	36.00
1.14.3	150 mm	RMT	42.00
1.14.4	200 mm	RMT	80.00
1.14.5	250 mm	RMT	99.00
1.14.6	300 mm	RMT	120.00
1.14.7	350 mm	RMT	141.00
1.14.8	400 mm	RMT	162.00
1.14.9	450 mm	RMT	208.00
1.14.10	500 mm	RMT	251.00
1.14.11	600 mm	RMT	303.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.15	Laying, Jointing, Testing and Commissioning of uPVC/ PVC Pipes (Class- 3/ 4) in assorted length with specials, valves etc. including local handling and transportation from PHED store and then refilling of soil with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr as per satisfaction of EIC. (Rates are Exclusive of Earth Work and jointing materials)		
1.15.1	90 mm	RMT	18.00
1.15.2	110 mm	RMT	19.00
1.15.3	125 mm	RMT	23.00
1.15.4	140 mm	RMT	25.00
1.15.5	160 mm	RMT	27.00
1.15.6	180 mm	RMT	30.00
1.15.7	200 mm	RMT	31.00
1.15.8	225 mm	RMT	34.00
1.15.9	250 mm	RMT	36.00
1.15.10	280mm	RMT	39.00
1.15.11	315 mm	RMT	41.00
1.16	Laying, Jointing, Testing and Commissioning of Ductile Iron (DI) Pipes of any class in assorted length with specials, valves etc. including local handling and transportation from PHED store and then refilling of soil with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr as per satisfaction of EIC. (Rates are Exclusive of Earth Work and jointing materials)		
1.16.1	80 mm	RMT	50.00
1.16.2	100 mm	RMT	52.00
1.16.3	125 mm	RMT	53.00
1.16.4	150 mm	RMT	65.00
1.16.5	200 mm	RMT	83.00
1.16.6	250 mm	RMT	102.00
1.16.7	300 mm	RMT	122.00
1.16.8	350 mm	RMT	141.00
1.16.9	400 mm	RMT	173.00
1.16.10	450 mm	RMT	215.00
1.16.11	500 mm	RMT	278.00
1.16.12	600 mm	RMT	327.00
1.17	Laying, Jointing, Testing and Commissioning of AC Pressure Pipes (Class- 10/15/20) of any class in assorted length with specials, valves etc. including local handling and transportation from PHED store and then refilling of soil with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr as per satisfaction of EIC. (Rates are Exclusive of Earth Work and jointing materials)		
1.17.1	80 mm	RMT	32.00
1.17.2	100 mm	RMT	34.00
1.17.3	125 mm	RMT	37.00
1.17.4	150 mm	RMT	40.00
1.17.5	200 mm	RMT	47.00
1.17.6	250 mm	RMT	52.00
1.17.7	300 mm	RMT	98.00

S. No.	Description	Unit	Amended Rate (Rs.)
1.17.8	350 mm	RMT	106.00
1.17.9	400 mm	RMT	121.00
1.17.10	450 mm	RMT	139.00
1.17.11	500 mm	RMT	158.00
1.17.12	600 mm	RMT	162.00
1.18	Laying, Jointing, Testing and Commissioning of HDPE pipes of any grade in assorted length with specials, valves etc. with jointing material/ fixing of necessary jointing material like mechanical connector i.e. thread/ insert joint/quick release coupler joint compression fitting joint or flanged joint and jointing pipe in proper position and jointing of all specials by butt fusion / electro fusion welding method, including local handling and transportation from PHED store and then refilling of soil with proper compaction and disposing of all surplus soil as directed with in a lead of 30 mtr as per satisfaction of EIC. (Rates are Exclusive of Earth Work and jointing materials)		
1.18.1	90 mm	RMT	14.00
1.18.2	110 mm	RMT	16.00
1.18.3	125 mm	RMT	72.00
1.18.4	140 mm	RMT	78.00
1.18.5	160 mm	RMT	90.00
1.18.6	180 mm	RMT	98.00
1.18.7	200 mm	RMT	109.00
1.18.8	225 mm	RMT	120.00
AC pipes			
1.19	Providing, lowering, laying and jointing in trenches, standard lengths ISI marked AC pressure pipe class 15 manufactured by MAZZA process as per IS-1592-2003 or amended up to date with AC coupling and EPDM Rubber sealing rings of Type -3 as per IS: 5382/1985 (Reaffirmed 1998) or amended up to date, including all taxes , transportation and freight charges, inspection charges, loading/ unloading charges, stacking of pipes, labour and material, satisfactory hydraulic testing etc. complete as per technical specifications and direction of Engineer-in-charge. (excluding earth work and specials) Note: These pipes shall only be used for raw water conveyance main from Canal outlet to raw water reservoirs and interconnection works.		
1.19.1	150 mm dia CI-15	RM	709.00
1.19.2	200 mm dia CI-15	RM	1155.00
1.19.3	250 mm dia CI-15	RM	1505.00
1.19.4	300 mm dia CI-15	RM	2178.00
1.19.5	350 mm dia CI-15	RM	2758.00
1.19.6	400 mm dia CI-15	RM	3651.00
1.19.7	450 mm dia CI-15	RM	4288.00
1.19.8	500 mm dia CI-15	RM	5428.00
1.19.9	600 mm dia CI-15	RM	7736.00

S. No.	Description	Unit	Amended Rate (Rs.)
CI Specials			
1.20	Providing, lowering, laying, aligning, fixing in position at all level/ depths CI Class - B specials as per IS : 1538, amended up to date in trenches complete including all material, labour, testing and commissioning along with pipe line/ appurtenance as per Technical Specifications and as per direction of Engineer. Note : E/w to be measured and paid separately.		
1.20.1	Plain ended CI specials including tail piece, spigot end and socket end.		
1.20.1.1	Up to 300 mm dia	Kg	111.00
1.20.1.2	Above 300 mm and up to 600 mm dia	Kg	129.00
1.20.2	Double flanged CI pipe fittings.		
1.20.2.1	Up to 300 mm dia	Kg	129.00
1.20.2.2	Above 300 mm and up to 600 mm dia	Kg	146.00
House hold tap connections			
1.21	Providing Household Tap Connection as per technical specification and approved drawing as per relevant IS code (amended up to date) from uPVC/DI/AC/MS/GI pipe line up to consumer meter/premises by using PVC/MS saddle piece (Complete job).This job includes digging out suitable size of pits and trench for laying service line in all kinds of soil (excluding road); depositing and refilling of pit & jhiri with watering & ramming /compacting in layers and disposal of surplus excavated soil as directed with in a lead of 100 meter ; providing & fixing of all fitting duly approved in accordance with specification for potable water including MS/PVC saddle piece, gunmetal ferrule 4.0 mm , GM Full-way Valve (IS:778 Mark) or wheel valve and specials, below ground level 20 mm nominal dia MDPE pipe PE 80 PN 16 as per ISO 4427 / 20 mm nominal dia PPR-C (Three layered) pipe PN16 SDR 7.4 (IS:15801:2008) (ISI mark) and above ground level using 20 mm dia PPR-C pipe with standard PPR fittings/ 15 mm dia GI pipe with fittings in the premises for fixing a tap / meter box (excluding) ,including accessories with flushing, cleaning, disinfecting and testing of pipe line complete required for making of service connection complete in all respect including labour charges . The service line should be laid at least 45 cm below ground level. Note: Road cut and restoration is not part of this item and paid separately.		
1.21.1	For connection with 20 mm dia MDPE/PPR-C pipe length up to 05 mtr.	Each	1667.00

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S. No.	Description	Unit	Amended Rate (Rs.)
1.22	<p>Providing Household Tap Connection as per technical specification and approved drawing and as per relevant IS code (amended up to date) from HDPE pipe line up to consumer meter/premises by using electro fusion saddle piece (Complete job). This job includes digging out suitable size of pits and trench for laying service line in all kinds of soil; depositing and refilling of pit & jhiri with watering & ramming /compacting in layers and disposal of surplus excavated soil as directed with in a lead of 100 meter ; providing & fixing of all fitting duly approved in accordance with specification for potable water including electrofusion saddle piece, gunmetal ferrule 4.0 mm , GM Full-way Valve (IS:778 Mark) or wheel valve and specials, below ground level 20 mm nominal dia MDPE pipe PE 80 PN 16 as per ISO 4427 / 20 mm nominal dia PPR-C (Three layered) pipe PN16 SDR 7.4 (IS:15801:2008) (ISI mark) for and above ground level using 20 mm dia PPR-C pipe with standard PPR fittings/ 15 mm dia GI pipes with fittings in the premises for fixing a tap / meter box (excluding) ,including accessories with flushing, cleaning, disinfecting and testing of pipe line complete required for making of service connection complete in all respect including labour charges . The service line should be laid at least 45 cm below ground level.</p> <p>Note: Road cut and restoration is not part of this item and paid separately.</p>		
1.22.1	For connection with 20 mm dia MDPE/PPR-C pipe length up to 05 mtr.	Each	1986.00
1.23	<p>Providing Household Tap Connection as per technical specification and approved drawing as per relevant IS code (amended up to date) from HDPE/uPVC/DI/AC/MS/GI pipe line up to consumer meter/premises by using PP mechanical Integrated saddle with inbuilt flow control valve made out of SS316 designed for 5 LPM discharge at 0.5 bar pressure , not exceeding the flow of 7 LPM at 2 bar and a compression elbow, moulded in single piece (Complete job) including digging out suitable size of pits and trench for laying service line in all kinds of soil; depositing and refilling of pit & jhiri with watering & ramming /compacting in layers and disposal of surplus excavated soil as directed with in a lead of 100 meter ; providing & fixing of all fitting duly approved in accordance with specification for potable water including GM Full-way Valve (IS:778 Mark) or wheel valve and specials with 20 mm nominal dia MDPE pipe PE 80 PN 16 as per ISO 4427 / 20 mm nominal dia PPR-C (Three layered) pipe PN16 SDR 7.4 (IS:15801:2008) (ISI mark) and above ground level using PPR-C pipe with standard PPR fittings/ GI pipes in the premises for fixing a tap / meter box (excluding) ,including accessories with flushing, cleaning, disinfecting and testing of pipe line complete required for making of service connection complete in all respect including labour charges . The service line should be laid at least 45 cm below ground level.</p> <p>Note: Road cut and restoration is not part of this item and paid separately.</p>		

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S. No.	Description	Unit	Amended Rate (Rs.)
1.23.1	For connection with 20 mm dia MDPE/PPR-C pipe length up to 05 mtr.	Each	1779.00
1.24	P & F Bib cock (IS : 8931 mark), superior quality of approved make , brass 400 gm, 15 mm nominal bore.	Each	328.00
1.25	P & F Bib cock (IS : 8931 mark), superior quality of approved make, chrome plated with complete brass body including brass handle with wt. 300 to 325 gm.15 mm nominal bore.	Each	348.00
1.26	Road cutting for house hold service connection in minimum trench width wherever road crossing is required. Road cutting of cement concrete,WBM, Black top etc. of all thickness shall be done. by using a concrete cutter machine keeping minimum trench width and restoration of the road with Cement concrete with PCC M-10 and CC M-30 grade as per specification and direction of Engineer in charge..	Mtr	197.00
1.27	Add extra over item no 1.21, 1.22 & 1.23 for providing 20 mm PE 80 PN 16 as per ISO 4427 MDPE pipe including excavation, providing, laying & jointing of service line above 5.00 mtr.	Mtr	46.00
1.28	Add extra over item no 1.21, 1.22 & 1.23 for providing 20 mm ISI marked PN16 SDR 7.4 (IS:15801:2008) PPR-C (Three layered) pipe including excavation, providing, laying & jointing of service line above 5.00 mtr.	Mtr	60.00
PVC-O Pipe			
1.29	Providing, lowering, laying and jointing in trenches, standard lengths ISI marked Rigid PVC-O S/S Pipes (push on joints) as per IS-16647: 2017 (amended upto date) with EPDM Gasket seals on joints including all taxes , transportation and freight charges, inspection charges, loading/ unloading charges, stacking of pipes, laying of pipes, including cost of labour and material, specials (Tee, bend etc.), satisfactory hydraulic testing, disinfection etc. complete as per technical specifications and direction of Engineer-in-charge of following class and diameter. Note : Providing and fixing of all requisite specials as per drawing, design and layout are inclusive in RM measurement of the item and shall not be paid separately.		
1.29.1	PVC-O pipe Class 500 PN-16		
1.29.1.1	110 mm dia	RMT	959.00
1.29.1.2	160 mm dia	RMT	1641.00
1.29.1.3	200 mm dia	RMT	1948.00
1.29.1.4	250 mm dia	RMT	2641.00
1.29.1.5	315 mm dia	RMT	3357.00
PTMT Bib Cock			
1.30	Providing and fixing ISI mark (IS 9763: 2000 or amended upto date) PTMT bib cock 15 moinal bore minimum weight 92 gms and length 100 mm as per technical specification, approved make and direction of Engineer in charge.	Each	196.00

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Chapter-2

Construction and Commissioning of Tube wells, Open Wells & Hand Pumps.

S. No.	Description	Unit	Amended Rate (Rs.)
TUBE WELLS			
2.1	Construction of tube well from ground level & up to 100 mtr depth to accommodate housing and assembly pipe of following sizes in all type of alluvium strata unconsolidated formation such as pebbles, boulders etc. by percussion/rotary drilling method as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications, with gravel as per IS:4097-1967 and it's packing as per IS: 2800 (Part I & II) 1979 as amended up to date (the work includes the cost of gravel & it's primary packing and packing during development, lowering of housing & strainer assembly pipes with supply and wrapping of coir-rope, wherever necessary for arresting fine sand particles and development work, but excluding the cost of housing and strainer pipe assembly). The work would be completed after obtaining sand free water.		
2.1.1	Nominal bore 150 mm dia.	Mtr	999.00
2.1.2	Nominal bore 200 mm dia.	Mtr	1529.00
2.1.3	Nominal bore 250 mm dia.	Mtr	1790.00
2.1.4	Add 15% extra on above item (Item no 2.1.1 to 2.1.3) for drilling depth beyond 100 mtr and up to 200 mtr, rate shall be applicable for only extra depth beyond 100 mtr and up to 200 mtr.		
2.1.5	Add 40% extra on above item (Item no 2.1.1 to 2.1.3) for drilling depth beyond 200 mtr, rate shall be applicable for only extra depth beyond 200 mtr .		
2.2	Construction of Tube Well from ground level and up to 100 mtr. depth to accommodate housing and assembly pipe in all type of alluvium strata, unconsolidated formation such as pebbles, boulders etc. by percussion/ rotary drilling method as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications for removal of overburden. The work includes the cost of lowering of casing pipe, but excludes the cost of casing pipe.		
2.2.1	Nominal bore 200 mm dia.	Mtr	1233.00
2.2.2	Nominal bore 250 mm dia.	Mtr	1390.00
2.2.3	Add 15% extra on above item (Item No 2.2.1 to 2.2.2) for drilling depth beyond 100 mtr, rate shall be applicable for only extra depth beyond 100 mtr .		
2.3	Construction of tube well after completion of drilling by rotary /percussion method & up to 100 mtr. depth in all type of rocks by DTH system as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work shall be deemed completed only after obtaining sand free water. The bore well should have a throughout nominal size bore beyond casing pipe.		
2.3.1	Nominal bore 150 mm dia.	Mtr	878.00
2.3.2	Nominal bore 200 mm dia.	Mtr	1269.00
2.3.3	Nominal bore 250 mm dia.	Mtr	1533.00
2.3.4	Add 15% extra on above item (Item No 2.3.1 to 2.3.3) for drilling depth beyond 100 mtr and up to 200 mtr from ground level, rate shall be applicable for only extra depth beyond 100 mtr and up to 200 mtr.		

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S. No.	Description	Unit	Amended Rate (Rs.)
2.3.5	Add 30% extra on above item (item No 2.3.1 to 2.3.3) for drilling depth beyond 200 mtr and from ground level, rate shall be applicable for only extra depth beyond 200 mtr .		
2.3.6	Add 15% extra on above item (item No 2.3.1 to 2.3.3) for drilling, where strata is collapsible and lowering of casing pipe is required . The work includes lowering of casing pipe, but excluding the cost of casing pipe. The rate shall be applicable for stretch of collapsible strata only.		
2.4	Construction of Tube Well up to 100 mtr. depth in all type of rocks by DTH system & over burden to accommodate casing pipe of following sizes in all types of soils & over burden including lowering of casing pipes, (if required) excluding cost of casing pipes, as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work would be completed after obtaining sand free water. The tube well should have a through out bore as per nominal dia of casing pipe.		
2.4.1	Nominal bore 150 mm dia.	Mtr	729.00
2.4.2	Nominal bore 200 mm dia.	Mtr	1094.00
2.4.3	Add 15% extra on above item (Item No 2.4.1 to 2.4.2) for drilling depth beyond 100 mtr and up to 200 mtr from ground level, rate shall be applicable for only extra depth beyond 100 mtr and up to 200 mtr.		
2.4.4	Add 30% extra on above item (Item No 2.4.1 to 2.4.2) for drilling depth beyond 200 mtr and from ground level, rate shall be applicable for only extra depth beyond 200 mtr .		
2.4.5	Add 15% extra on above item (Item No 2.4.1 to 2.4.4) for drilling, where strata is collapsible and lowering of casing pipe is required . The work includes lowering of casing pipe, but excluding the cost of casing pipe. The rate shall be applicable for stretch of collapsible strata only.		
2.5	Construction of tube well from ground level and up to 100 mtr. depth and above of following sizes in all types of soils in alluvium strata, unconsolidated formation such as pebbles, boulders etc. by " bailing " method and without gravel packing as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work includes formation of cavity at bottom by development with appropriate air compressor or bailer pumping and also lowering of casing pipe but excluding cost of the casing pipe. The tube well should have a throughout bore as per nominal dia of casing pipe. The work would be completed after obtaining sand free water.		
2.5.1	Nominal bore 125 mm dia.	Mtr	487.00
2.5.2	Nominal bore 150 mm dia.	Mtr	543.00
2.5.3	Nominal bore 200 mm dia.	Mtr	897.00
2.6	Construction of tube well from ground level and up to 100 mtr depth and above to accommodate housing assembly pipe in all type of unconsolidated formation such as pebbles, boulders, collapsible formation etc. by Odex drilling method as per IS: IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work will include lowering of housing and strainer pipe assembly and casing shoe including cost of casing shoe, but excluding cost of the casing pipe. The work would be completed after obtaining sand free water.		
2.6.1	Nominal bore 125 mm dia.	Mtr	834.00
2.6.2	Nominal Bore 150 mm dia.	Mtr	1139.00

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S. No.	Description	Unit	Amended Rate (Rs.)
2.6.3	Nominal bore 200 mm dia.	Mtr	1670.00
2.6.4	Add 15% extra on above item (Item No 2.6.1 to 2.6.3) for drilling depth beyond 100 mtr, rate shall be applicable for only extra depth beyond 100 mtr.		
2.7	Deepening of existing tube well by DTH system beyond existing depth up to 100 mtr. and above in all type of rocks including flushing of tube well and obtaining sand free water.		
2.7.1	Nominal bore 150 mm dia.	Mtr	927.00
2.7.2	Nominal bore 200 mm dia.	Mtr	1344.00
2.8	Testing verticality of tube well by plumbing system and yield test and draw down test by pumping system as per IS : 2800 (Part - II) - 1979 or as per amended up to date.	Each	8178.00
2.9	Supplying & Packing P-gravel suitable for slot size/mesh size as suggested in IS 2800 (Part-1) 1991 or as per amended up to date.	Cum.	4109.00
2.10	Development of tube well having depth up to 250 mtr as per IS: 11189- 1985 and IS: 2800 (Part- I)- 1991 (both amended up to date) using suitable methods to give sand free water for required yield of the gravel packed tube well.	Hr.	1467.00
2.11	Supply of ERW M.S. black casing pipe ISI marked (IS: 4270/2001) or amended up to date of following sizes		
2.11.1	150 mm dia NB(Thickness of pipe 5.0 mm & mass of tube 20.13 Kg/m)	Mtr	1920.00
2.11.2	200 mm dia NB (Thickness of pipe 5.4mm & mass of tube 28.46 Kg/m)	Mtr	2715.00
2.11.3	250 mm dia NB (Thickness of pipe 7.1 mm & mass of tube 46.57 Kg/m)	Mtr	4443.00
2.12	Labour charges for making slots on blank pipes made of ERW MS black pipe ISI marked of following sizes, the slotting should be as per IS:8110-1985.		
2.12.1	125 mm dia nominal bore of 4.8 mm thickness	Mtr	173.00
2.12.2	150 mm dia nominal bore of 4.8 mm thickness	Mtr	204.00
2.12.3	200 mm dia nominal bore of 5.4mm thickness	Mtr	311.00
2.12.4	250 mm dia nominal bore of 7.1mm thickness	Mtr	389.00
2.13	Providing & laying ISI marked GI Pipe Light duty ("A" class) as per IS: 1239 for casing pipe for submersible cable external work 40 mm dia complete in all respect.	Mtr	388.00
2.14	Supply & Installation of single phase ISI marked submersible motor pump set of three star or better rating of BEE and as per IS: 8034-2018 (pump) and IS 9283-2013 (motor) or as amended up to date of approved make of following duty condition with required accessories including making connection suitable for tube well/DCB. The job includes lowering of motor pump, installation of complete fitting & accessories, jointing of electrical cables up to switch board, testing of submersible pump set and interconnection up to water mains, complete in all respect.		
2.14.1	Up to 2.0 KW	KW	16541.00
2.14.2	Above 2.0 KW	KW	12896.00
2.15	Supply & Installation of 3 phase ISI marked submersible motor pump set of three star or better rating of BEE and as per IS: 8034-2018 (pump) and IS 9283-2013 (motor) or as amended up to date of approved make of following duty condition with required accessories including making connection suitable for tube well/DCB. The job includes lowering of motor pump, installation of complete fitting & accessories, jointing of electrical cables up to switch board, testing of submersible pump set and interconnection up to water mains, complete in all respect.		
2.15.1	Up to 5.5 KW (7.5 HP) & head up to 120 mtr.	KW	9282.00
2.15.2	Up to 5.5 KW (7.5 HP) & head above 120 mtr.	KW	9988.00

S. No.	Description	Unit	Amended Rate (Rs.)
2.15.3	7.5 KW (10 HP) & head up to 120 mtr.	KW	7143.00
2.15.4	7.5 KW (10 HP) & head above 120 mtr.	KW	7881.00
2.15.5	9.3 KW (12.5 HP) & head up to 120 mtr.	KW	6153.00
2.15.6	9.3 KW (12.5 HP) & head above 120 mtr.	KW	7997.00
2.15.7	11 KW (15 HP) & head up to 120 mtr.	KW	5942.00
2.15.8	11 KW (15 HP) & head above 120 mtr.	KW	6659.00
2.15.9	13 KW (17.5 HP) & head up to 120 mtr.	KW	5700.00
2.15.10	13 KW (17.5 HP) & head above 120 mtr.	KW	6069.00
2.15.11	15 KW (20 HP) and above, head up to 120 mtr.	KW	5299.00
2.15.12	15 KW (20 HP) and above, head above 120 mtr.	KW	5995.00
2.16	Supply and Fixing of Electric feeder panel (having projected canopy) for submersible pump set Single phase up to 5 HP, comprising of DOL Starter, MCB, Indicating Light, Ammeter, Volt meter, connection plate, condensers of approved make and the panel enclosure should be made out from 18 gauge M.S. Sheet with powder coating. Panel size Height 600 mm Width 500 mm depth 250 mm with Stand (made of angle iron of size 35x35x5mm) duly bolted/screwed with enclosure box having 4 legs, each leg's length 18" and double door including in built locking system. The legs should be embedded in M-15 cement concrete platform. The size of CC platform should be equal or bigger than the base size of panel having height of at least 200 mm from ground level. The operation of panel should be suitable for on 240 Volt AC Supply.	Each	10009.00
2.17	Supply and Fixing of electric control feeder panel comprising of suitable rating MCCB, DOL starter, overload relay, ampere meter, volt meter, phase preventer, phase indicators, lighting arrangement etc. complete suitable for three phase pump set. The panel should have space for energy meter (supplied by DISCOM). All these equipments shall be housed by panel box made out from 18 gauge M.S. Sheet with powder coating. Panel should be of minimum size 900 x 600 x 300mm with Stand (made of angle iron of size 35x35x5mm) duly bolted/screwed with enclosure box having 4 legs, each leg's length 18" and double door including in built locking system. The legs should be embedded in M-15 cement concrete platform. The size of CC platform should be equal or bigger than the base size of panel having height of at least 200 mm from ground level. The panel should have opening of suitable size in front of space for energy meter with glass for meter reading. The operation of panel should be suitable for on 440 Volt AC Supply.		
2.17.1	Up to 5.00 HP	Each	13081.00
2.18	Supply and Fixing of electric control feeder panel comprising of suitable rating MCCB , fully automatic star-delta starter, over load relay, ampere meter with CTs, volt meter, phase preventer, suitable starting capacitors, phase indicators, lighting arrangement etc. complete suitable for three phase pump set. The panel should have space for energy meter (supplied by DISCOM). All these equipments shall be housed by panel box made out from 18 gauge M.S. Sheet with powder coating. Panel should be of minimum size 900 x 600 x 450 mm with Stand (made of angle iron of size 35x35x5mm) duly bolted/screwed with enclosure box having 4 legs, each leg's length 18" and double door including in built locking system. The legs should be embedded in M-15 cement concrete plat form. The size of CC platform should be equal or bigger than the base size of panel having height of at least 200 mm from ground level. The panel should have opening of suitable size in front of space for energy meter with glass for meter reading. The operation of panel should be suitable for on 440 Volt AC Supply.		
2.18.1	Above 5 HP and up to 10 HP	Each	25192.00

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S. No.	Description	Unit	Amended Rate (Rs.)
2.18.2	Above 10 HP and up to 15 HP	Each	29204.00
2.18.3	Above 15 HP and up to 20 HP	Each	33236.00
2.18.4	Above 20 HP and up to 30 HP	Each	39375.00
2.19	Supply & Fixing of ISI marked three core PVC flat submersible cable as per IS 694:1990 or amended up to date and conductor as per class 5 of IS 8130:1980 including making connection etc.		
2.19.1	3 core 4.0 Sq.mm	Mtr	211.00
2.19.2	3 core 6.0 Sq.mm	Mtr	314.00
2.19.3	3 core 10.0 Sq.mm	Mtr	538.00
2.19.4	3 core 16.0 Sq.mm	Mtr	802.00
2.20	Supply & Fixing XLPE insulated / P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor Armoured of IS:7098-I/1554-1 approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, second Class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.		
2.20.1	10.0 Sq.mm, 4 core	Mtr	230.00
2.20.2	16.0 Sq.mm, 4 core	Mtr	264.00
2.20.3	25.0 Sq.mm, 3.5 core	Mtr	343.00
2.20.4	35.0 Sq.mm, 3.5 core	Mtr	415.00
2.21	Plate Earthing as per IS:3043 with G.I. Earth plate of size 600mm x 600mm x 6.0mm by embodying 3 to 4 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and C.C. finished chamber covered with hinged type with locking arrangement C.I. Cover, C.I. Frame of size 300mm x 300mm complete with alternate layers of salt and coke/charcoal, testing of earth resistance as required.	Each	3651.00
2.22	Supply & Fixing M S clamp set of 50x6 mm flat from iron with nuts and bolts etc. for holding the riser pipe assembly of submersible pump set.	Each	727.00
2.23	Supply & Fixing tube well cover of MS sheet 8mm thick at top & 5mm thick 100mm wide shroud around the edge so as to form a cap on the top end of casing pipe with GI Nipple 45cm long & two GI flanges at both ends in 80mm sizes passing through a hole in the centre of MS sheet. A 25 mm socket with end plug shall also be welded over top plate. A GI nipple having outside thread of size 1/2" (for installation pressure gauge) shall be provided & welded with 80mm GI nipple near top plate nipple shall be provided with end plug.		
2.23.1	125 mm dia	Each	788.00
2.23.2	150 mm dia	Each	848.00
2.23.3	200 mm dia	Each	1030.00
2.23.4	250 mm dia	Each	1212.00
2.24	Providing & Lowering in tube well ISI marked GI Pipe medium duty ("B" class), Steel tube as per IS:1239 or amended up to date and zinc coating as per IS 4736, threaded and double flanged (welded) on both ends and two number 25x3mm MS flat welded on both ends between pipe & flange, rubber washer & nut bolts etc. complete in all respect.		
2.24.1	32 mm dia	Mtr	419.00
2.24.2	50 mm dia	Mtr	659.00
2.24.3	65 mm dia	Mtr	729.00
2.24.4	80mm dia	Mtr	899.00

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S. No.	Description	Unit	Amended Rate (Rs.)
2.25	Providing & Lowering in tube well ISI marked HDPE pipe as per IS 4984:1995 or amended up to date in PE 80 grade and class PN 10 of following dia. including HDPE/GI fittings and PVC rope confirming to IS 5175:1992 or amended up to date, along with clamping of submersible cable etc. complete in all respect.		
2.25.1	40 mm dia	Mtr	96.00
2.25.2	50 mm dia	Mtr	148.00
2.25.3	63 mm dia	Mtr	235.00
2.25.4	75 mm dia	Mtr	332.00
2.25.5	90 mm dia	Mtr	472.00
2.26	Providing, installing, testing and commissioning of double flanged bulk flow meter with removable mechanism, of class B conforming to ISO 4064/1 or amended up to date of approved make including cost of all material and labour as per specifications with GI Box (sheet 16 SWG) suitable with locking arrangement of following dia.		
2.26.1	50 mm dia	Each	11801.00
2.26.2	65 mm dia	Each	13350.00
2.26.3	80 mm dia	Each	15752.00
2.27	Providing & Fixing pump safety cage as per specifications or as directed by Engineer in charge.	Each	1106.00
2.28	Providing and Fixing of ISI marked PVC storage tank of following capacity as per IS: 12701-1989 (of approved make) with cover, 25 mm dia. 1 mtr long GI overflow pipe, 25 cm long 25 mm dia washout GI pipe with plug & socket, including P&F 32 mm dia Ball Cock (Float valve) IS 1703 marked with rod and PVC ball complete with brass weight 1000 gm, including P&F 15mm dia CI quarter turn heavy duty Bib Cocks four no's of superior quality and approved make, including interconnections complete job.		
2.28.1	1000 litres capacity	Each	8534.00
2.28.2	2000 litres capacity	Each	16436.00
2.29	Fabrication & Fixing M.S. Stand of specified class of angle iron L-shaped of 50 mm size with four legs grouted by 300*300*300 mm CC Block M-15 in the ground and all legs tied up with each other through same size of angle iron along with cross bars to support the bottom of 1000 Ltr./ 2000 Ltr. PVC tank complete in all respect.	kg	117.00
2.30	Providing & Fixing of double flanged, CI body, ISI marked NRV of approved make of following sizes		
2.30.1	65 mm dia	Each	2644.00
2.30.2	80 mm dia	Each	3192.00
2.31	Providing and Fixing 32 mm dia Full way valve or wheel valve as per IS:778 or amended up to date of approved make, on pump delivery pipe.	Each	832.00
2.32	Supplying & Installing 100 mm diameter sealed diaphragm bourdon type pressure gauge of range 0 to 10 kg. including all jointing material as per specification with safety cover.	Each	1243.00
2.33	Construction of bore hole for shallow depth tube well from ground level to required depth for following size for all type of relevant strata by percussion/ rotary drilling/ hand boring method excluding cost of casing pipe. The bore hole should be as per nominal bore of PVC casing pipe. The work will be complete after obtaining sand free water.		
2.33.1	125 mm dia nominal bore	Mtr.	347.00
2.33.2	150 mm dia nominal bore	Mtr.	387.00
2.33.3	200 mm dia nominal bore	Mtr.	551.00
2.33.4	250 mm dia nominal bore	Mtr.	775.00

S. No.	Description	Unit	Amended Rate (Rs.)
2.34	Providing and Lowering of ISI mark PVC-U casing and screen pipe as per IS : 12818 : 2010 or amended up to date having pipe thickness as per IS code suitable for TW and DCB with threading , winding with superior quality of plastic mesh & rope in three layers with end cap complete as per technical specification and direction of Engineer In charge.		
2.34.1	Shallow well casing pipe (CS) suitable for depth up to 80 mtr.		
2.34.1.1	150 mm nominal dia (internal dia).	Mtr	648.00
2.34.1.2	200 mm nominal dia (internal dia).	Mtr	1189.00
2.34.1.3	250 mm nominal dia (internal dia).	Mtr.	1857.00
2.34.2	Medium well casing pipe (CM) suitable for depth above 80 mtr and up to 250 mtr.		
2.34.2.1	100 mm nominal dia (internal dia)	Mtr.	386.00
2.34.2.2	125 mm nominal dia (internal dia)	Mtr.	614.00
2.34.2.3	150 mm nominal dia (internal dia)	Mtr	840.00
2.34.2.4	200 mm nominal dia (internal dia)	Mtr	1520.00
2.34.2.5	250 mm nominal dia (internal dia)	Mtr.	2364.00
2.35	Supply of ISI mark AC pressure pipe class 15 manufactured by MAZZA process as per IS:1592-2003 or amended up to date, for casing of tube well for following dia nominal bore, with jointing material PVC coupler as per technical specification and direction of Engineer In charge.		
2.35.1	125 mm nominal dia	Mtr	371.00
2.35.2	150 mm nominal dia	Mtr	583.00
2.35.3	200 mm nominal dia	Mtr	959.00
2.35.4	250 mm nominal dia	Mtr	1261.00
2.35.5	300 mm nominal dia	Mtr	1829.00
2.36	Making slots of hole size and Nos. as directed by EIC in AC pressure pipe Class 15 as per technical specification for using slotted pipe in TW casing.	Per 100 no.	97.00

RCC OPEN WELLS

2.37	Dry sinking of well true & vertical in all types of soil including sand, silt, clay, mixed up to 25% with gravel and river bed stones up to size 300 mm in any direction complete as per drawing and technical specification (depth from level of placing of cutting edge & internal dia, to be taken for measurement) rate includes all percentage of pebbles, boulders and river bed stones. (depth to be measured from ground level)		
2.37.1	for depth up to 5.00 m	P.M. dia P.M. depth	1527.00
2.37.2	for depth from 5.00 m to 10.0 mtr	P.M. dia P.M. depth	2117.00
2.37.3	for depth from 10.0 m to 15.0 mtr	P.M. dia P.M. depth	2539.00
2.37.4	for depth from 15.0 m to 20.0 mtr and above.	P.M. dia P.M. depth	2963.00

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S. No.	Description	Unit	Amended Rate (Rs.)
2.38	Wet sinking of well in all type of strata (soil & boulders in any quantity) including required operations like chiselling, air and water jetting, hoist drives, skilled divers etc. for removal of isolated obstructions and minor blasting if required and lifting of excavated material up to ground level, and spreading the same with ramming and watering within a radius of 50 m from the site of open well. Rate includes all percentage of pebbles, boulders and river bed stones. (depth to be measured from ground level)		
2.38.1	for depth up to 5.00m	P.M. dia P.M. depth	2197.00
2.38.2	for depth from 5.00m to 10.0 mtr	P.M. dia P.M. depth	3622.00
2.38.3	for depth from 10.00m to 15.0 mtr	P.M. dia P.M. depth	4596.00
2.38.4	for depth from 15.0 m to 20.0 mtr	P.M. dia P.M. depth	5479.00
2.38.5	for depth from 20.0 m to 25.0 mtr	P.M. dia P.M. depth	6655.00
2.38.6	for depth from 25.0 m to 30.0 mtr and above.	P.M. dia P.M. depth	7832.00
2.39	Earth work in excavation over areas (exceeding 30cm depth, 1.5 mtr in width and 10 SQM in plan) for construction of open well, lift up to 1.5 Mtr. including taking out the excavated soil and disposal of surplus excavated soil as directed within a lead of 50 meter.		
2.39.1	All kind of soil	CUM	316.00
2.39.2	Ordinary Rock	CUM	677.00
2.39.3	Hard Rock (Requiring blasting)	CUM	980.00
2.39.4	Hard Rock (Blasting Prohibited)	CUM	1360.00
2.40	Add extra over item No. 2.39.1 for every additional lift of 1.5 Mtr. or part thereof : In all kind of soils.	CUM	47.00
2.41	Add extra over item No. 2.39.2-4 for every additional lift of 1.5 Mtr. or part thereof : In Ordinary rock and hard rock.	CUM	67.00
2.42	Add 20% extra over item No. 2.39 for excavation in saturated soil where pumping or baling out of water is required, including shoring strutting where required and dewatering.		
2.43	Labour charges for horizontal boring 100 mm dia in open well in rocky strata with all types of rock cutting & drilling tools etc. including all T&P required for job including dewatering arrangement.	Mtr	655.00

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S. No.	Description	Unit	Amended Rate (Rs.)
HAND PUMPS			
2.44	Construction of tube well from ground level & up to 100 mtr depth to accommodate housing and assembly pipe of following sizes in all type of alluvium strata unconsolidated formation such as pebbles, boulders etc. by percussion/rotary drilling method as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications, with gravel as per IS:4097-1967 and it's packing as per IS: 2800 (Part I & II) 1979 as amended up to date (the work includes the cost of gravel & it's primary packing and packing during development, lowering of housing & strainer assembly pipes with supply and wrapping of coir-rope, wherever necessary for arresting fine sand particles and development work, but excluding the cost of housing and strainer pipe assembly). The work would be completed after obtaining sand free water.		
2.44.1	Nominal bore 125 mm dia.	Mtr	669.00
2.44.2	Add 15% extra on above item for drilling depth beyond 100 mtr, If depth of bore is more than 100 mtr.		
2.45	Construction of Tube Well up to 100 mtr. depth in all type of rocks by DTH system & over burden to accommodate casing pipe of following sizes in all types of soils & over burden including lowering of casing pipes, (if required) excluding cost of casing pipes, as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work would be completed after obtaining sand free water. The tube well should have a through out bore as per nominal dia of casing pipe.		
2.45.1	Nominal bore 100 mm dia.	Mtr	472.00
2.45.2	Nominal bore 125 mm dia.	Mtr	539.00
2.45.3	Add 15% extra on above item for drilling depth beyond 100 mtr, If depth of bore is more than 100 mtr.		
2.46	Construction of tube well from ground level and up to 100 mtr. depth and above of following sizes in all types of soils in alluvium strata, unconsolidated formation such as pebbles, boulders etc. by bailing method and without gravel packing as per IS:2800 Part 1: 1991 and IS:2800 Part II: 1979 (both amended up to date) and technical specifications. The work includes formation of cavity at bottom by development with appropriate air compressor or bailer pumping and also lowering of casing pipe but excluding cost of the casing pipe. The tube well should have a throughout bore as per nominal dia of casing pipe. The work would be completed after obtaining sand free water.		
2.46.1	Nominal bore 100 mm dia.	Mtr	341.00
2.46.2	Nominal bore 125 mm dia.	Mtr	373.00
2.47	Supply of ERW M.S. black casing pipe ISI marked {IS:1239(Part-1:2004)} medium of following sizes at site of work.		
2.47.1	100 mm dia NB (Thickness of pipe 4.5 mm & mass of tube 12.50 Kg/m)	Mtr	1286.00
2.47.2	125 mm dia NB(Thickness of pipe 4.8 mm & mass of tube 16.40 Kg/m)	Mtr	1603.00
2.48	Providing and Lowering of ISI mark Medium well PVC-U casing and screen pipe (CM) as per IS : 12818 : 2010 or amended up to date having pipe thickness as per IS code suitable for bore well with threading , winding with superior quality of plastic mesh & rope in three layers with end cap complete as per technical specification and direction of Engineer In charge.		
2.48.1	100 mm nominal dia (internal dia).	Mtr	386.00
2.48.2	125 mm nominal dia (internal dia).	Mtr	614.00

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S. No.	Description	Unit	Amended Rate (Rs.)
2.49	Labour charges for making slots on blank pipes made of ERW MS black pipe ISI marked of following sizes, the slotting should be as per IS:8110-1985.		
2.49.1	100 mm dia nominal bore	Mtr	133.00
2.49.2	125 mm dia nominal bore	Mtr	171.00
2.50	Supply & installation of GI pipe 32 mm medium class "B" with pipe sockets (heavy duty).	Mtr	401.00
2.51	Supply and installation of ISI marked India Mark II Hand pump set complete with cylinder & 15 connecting rods.	Set	16473.00
2.52	Supply and installation of ISI Marked India Mark II Hand pump set Extra-Deep (EDW) complete with cylinder and connecting rods.		
2.52.1	EDWHP + 20 Connecting rod.	Set	18648.00
2.52.2	EDWHP + 23 Connecting rod + 1 Weight.	Set	20762.00
2.52.3	EDWHP + 26 Connecting rod + 2 Weight.	Set	22378.00
2.52.4	EDWHP + 30 Connecting rod + 3 Weight.	Set	22875.00
2.53	Supply and installation of ISI mark connecting rod as per departmental specifications. of 3 meter length.	Each	183.00
2.54	Installation of India Mark II/III E.D. I & II hand pump set complete on existing platform.	Each	868.00
2.55	Construction of 185 cm. dia platform as per approved design & drawing of UNICEF.	Each	3502.00

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Chapter 3

RCC Reservoirs

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.1	<p>Construction and commissioning of RCC flat slab Over Head Service Reservoir of following capacity and staging including all material and labour charges as per the Scope of work and Technical Specification, consisting of the following main activities: -</p> <p>a) Topographic survey, preparation of site contour plan, conducting SBC test and its approval from department before construction. Submission and approval of concrete mix design and water quality test report for water to be used in construction.</p> <p>b) Excavation in all types of soil, PCC below foundation, all RCC Work, Plinth protection all around the structure including all material, labour, shuttering, scaffolding etc.</p> <p>c) OHSR shall be provided with adequate plinth protection all around the structure in a width starting from edge of structure at GL and extending at least up to 1.0m beyond the edge of outer most projection of OHSR. The plinth protection shall consist of 150mm thick PCC in M-15 grade concrete laid over 150mm thick layer of compacted soil.</p> <p>d) Providing and applying two coats of food grade epoxy paint on the inside surface roof slab, and 600 mm height of the vertical wall.</p> <p>e) Successfully hydro test and water tightness test as per I.S. code.</p> <p>f) Providing and applying three coats of anti-carbonation paint on the top surface of the roof slab.</p> <p>g) Providing and applying three coats of cement-based paint on the external surface of the container, balcony, cone wall, columns & beams etc.</p> <p>h) Providing and fixing SS-304 ventilator, SS 304 manhole frame and cover and SS-304 ladder from top Slab to bottom Slab inside container.</p> <p>i) Providing and fixing of MS section ladder from the last landing to balcony and MS ladder with safety cage from balcony to top slab.</p> <p>j) Providing and fixing water level indicator (float type).</p> <p>k) Providing and fixing of hand railing all around the balcony, roof and staircase, consisting of 25mm diameter Class-B GI pipe in two rows and 1000 mm high, 50X50X6mm angle iron vertical post at a maximum spacing of 1500mm centres.</p> <p>l) All MS parts to be painted with two coats of the enamel paint over the primer coat of red oxide.</p> <p>m) Providing and fixing of 150mm wide PVC water bar for the construction joints in the container (vertical wall & cone wall).</p> <p>n) Providing one Aluminium portable ladder of appropriate length to access first landing (3.5 to 4.5m above GL) from ground.</p> <p>o) Lighting arrestor consisting of providing and fixing of 2 Nos. of chemical earthing and connecting it to the conical cover of SS ventilator with two separate GI strips of 50mmX3mm.</p> <p>p) CI/DI puddle collar shall be fixed in the bottom/slab for connecting inlet, outlet, overflow and washout pipe of the reservoir.</p> <p>q) Painting the name of the scheme and other details on the reservoir, and any other work related to structure as per the directions of Engineer-in- Charge, Technical Specification and Scope of Work.</p> <p>r) Inlet, outlet, overflow, washout pipes and valves are not included in this work, provision for the same shall be taken separately.</p>		
3.1.1	Rates for RCC OHSR, SBC 7 T/sqm, SEISMIC ZONE-II & STAGING 15 M		
3.1.1.1	50 KL capacity	Litre	42.53
3.1.1.2	75 KL capacity	Litre	35.53
3.1.2	Rates for RCC OHSR, SBC 7 T/sqm, SEISMIC ZONE-III & STAGING 15 M		
3.1.2.1	50 KL capacity	Litre	44.42
3.1.2.2	75 KL capacity	Litre	36.61

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.1.3	Rates for RCC OHSR, SBC 7 T/sqm, SEISMIC ZONE-IV & STAGING 15 M		
3.1.3.1	50 KL capacity	Litre	47.46
3.1.3.2	75 KL capacity	Litre	39.47
3.1.4	Rates for RCC OHSR, SBC 10 T/sqm, SEISMIC ZONE-II & STAGING 15 M		
3.1.4.1	50 KL capacity	Litre	38.70
3.1.4.2	75 KL capacity	Litre	30.45
3.1.5	Rates for RCC OHSR, SBC 10 T/sqm, SEISMIC ZONE-III & STAGING 15 M		
3.1.5.1	50 KL capacity	Litre	39.65
3.1.5.2	75 KL capacity	Litre	31.34
3.1.6	Rates for RCC OHSR, SBC 10 T/sqm, SEISMIC ZONE-IV & STAGING 15 M		
3.1.6.1	50 KL capacity	Litre	40.57
3.1.6.2	75 KL capacity	Litre	31.95
3.1.7	Rates for RCC OHSR, SBC 18 T/sqm, SEISMIC ZONE-II & STAGING 15 M		
3.1.7.1	50 KL capacity	Litre	37.14
3.1.7.2	75 KL capacity	Litre	29.23
3.1.8	Rates for RCC OHSR, SBC 18 T/sqm, SEISMIC ZONE-III & STAGING 15 M		
3.1.8.1	50 KL capacity	Litre	38.47
3.1.8.2	75 KL capacity	Litre	30.27
3.1.9	Rates for RCC OHSR, SBC 18 T/sqm, SEISMIC ZONE-IV & STAGING 15 M		
3.1.9.1	50 KL capacity	Litre	39.31
3.1.9.2	75 KL capacity	Litre	31.01
3.2	<p>Construction and commissioning of RCC INTZE type Over Head Service Reservoir of following capacity and staging as per the Scope of work and Technical specifications, consisting of the following main activities: -</p> <p>a) Topographic survey, preparation of site contour plan, conducting SBC test and its approval from department before construction. Submission and approval of concrete mix design and water quality test report for water to be used in construction.</p> <p>b) Excavation in all types of soil, PCC below foundation, all RCC Work, Plinth protection all around the structure including all material, labour, shuttering, scaffolding etc.</p> <p>c) OHSR shall be provided with adequate plinth protection all around the structure in a width starting from edge of structure at GL and extending at least up to 1.0m beyond the edge of outer most projection of OHSR. The plinth protection shall consist of 150mm thick PCC in M-15 grade concrete laid over 150mm thick layer of compacted soil.</p> <p>d) Providing and applying two coats of food grade epoxy paint on the inside surface on the top dome, edge beam and 600 mm height of the vertical wall.</p> <p>e) Conducting successfully hydro test and water tightness test as per I.S. code.</p> <p>f) Providing and applying three coats of anti-carbonation paint on the top surface of the Top Dome.</p> <p>g) Providing and applying three coats of cement-based paint on the external surface of the container, balcony, cone wall, columns & beams etc..</p> <p>h) Providing and fixing SS-304 ventilator, SS 304 manhole frame and cover and SS-304 ladder from top dome/Slab to bottom dome/Slab inside container.</p> <p>i) Providing and fixing of MS section ladder from the last landing to balcony having railing all around it and MS ladder with safety cage from balcony to top dome/slab.</p> <p>j) Providing and fixing water level indicator (float type).</p>		

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Sr. No.	Description	Unit	Amended Rate (Rs.)
	<p>k) Providing and fixing of hand railing all around the balcony, top dome and staircase consisting of 25mm diameter Class-B GI pipe in two rows and 1000 mm high, 50X50X6mm angle iron vertical post at a maximum spacing of 1500mm centres.</p> <p>l) All MS parts to be painted with two coats of the enamel paint over the primer coat of red oxide.</p> <p>m) Providing and fixing of 150mm wide PVC water bar for the construction joints in the container (vertical wall & cone wall).</p> <p>n) Providing one Aluminium portable ladder of appropriate length to access first landing (3.5 to 4.5m above GL) from ground.</p> <p>o) Lighting arrestor consisting of providing and fixing of 2 Nos. of chemical earthing and connecting it to the conical cover of SS ventilator with two separate GI strips of 50mmX3mm.</p> <p>p) Cl/DI puddle collar shall be fixed in the bottom dome/ slab for connecting inlet, outlet, overflow and washout pipe of the reservoir.</p> <p>q) Painting the name of the scheme and other details on the reservoir, and any other work related to structure as per the directions of Engineer-in- Charge, Technical Specification and Scope of Work.</p> <p>r) <i>Inlet, outlet, overflow, washout pipes and valves are not included in this work, provision for the same shall be taken separately.</i></p>		0
3.2.1	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-II & STAGING 18 M		0
3.2.1.1	100 KL capacity	Litre	31.28
3.2.1.2	150KL capacity	Litre	24.50
3.2.1.3	200KL capacity	Litre	21.44
3.2.1.4	250KL capacity	Litre	20.90
3.2.1.5	300KL capacity	Litre	21.67
3.2.1.6	400KL capacity	Litre	19.80
3.2.1.7	500KL capacity	Litre	18.99
3.2.1.8	600 KL capacity	Litre	16.56
3.2.1.9	700 KL capacity	Litre	15.86
3.2.1.10	800 KL capacity	Litre	15.27
3.2.1.11	900 KL capacity	Litre	14.77
3.2.1.12	1000 KL capacity	Litre	14.34
3.2.1.13	1250 KL capacity	Litre	13.46
3.2.1.14	1500 KL capacity	Litre	12.79
3.2.1.15	1750 KL capacity	Litre	12.25
3.2.1.16	2000 KL capacity	Litre	11.79
3.2.2	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-III & STAGING 18 M		
3.2.2.1	100 KL capacity	Litre	32.21
3.2.2.2	150KL capacity	Litre	25.55
3.2.2.3	200KL capacity	Litre	22.29
3.2.2.4	250KL capacity	Litre	21.98
3.2.2.5	300KL capacity	Litre	22.40
3.2.2.6	400KL capacity	Litre	20.52
3.2.2.7	500KL capacity	Litre	19.66
3.2.2.8	600 KL capacity	Litre	17.11
3.2.2.9	700 KL capacity	Litre	16.38
3.2.2.10	800 KL capacity	Litre	15.77
3.2.2.11	900 KL capacity	Litre	15.26
3.2.2.12	1000 KL capacity	Litre	14.80
3.2.2.13	1250 KL capacity	Litre	13.91
3.2.2.14	1500 KL capacity	Litre	13.20
3.2.2.15	1750 KL capacity	Litre	12.64
3.2.2.16	2000 KL capacity	Litre	12.17

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.3	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-IV & STAGING 18 M		
3.2.3.1	100 KL capacity	Litre	35.98
3.2.3.2	150KL capacity	Litre	27.48
3.2.3.3	200KL capacity	Litre	23.75
3.2.3.4	250KL capacity	Litre	22.80
3.2.3.5	300KL capacity	Litre	23.53
3.2.3.6	400KL capacity	Litre	21.24
3.2.3.7	500KL capacity	Litre	19.77
3.2.3.8	600 KL capacity	Litre	18.13
3.2.3.9	700 KL capacity	Litre	17.22
3.2.3.10	800 KL capacity	Litre	16.47
3.2.3.11	900 KL capacity	Litre	15.84
3.2.3.12	1000 KL capacity	Litre	15.29
3.2.3.13	1250 KL capacity	Litre	14.19
3.2.3.14	1500 KL capacity	Litre	13.44
3.2.3.15	1750 KL capacity	Litre	12.78
3.2.3.16	2000 KL capacity	Litre	12.22
3.2.4	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-II & STAGING 18 M		
3.2.4.1	100 KL capacity	Litre	27.91
3.2.4.2	150KL capacity	Litre	21.59
3.2.4.3	200KL capacity	Litre	19.23
3.2.4.4	250KL capacity	Litre	18.36
3.2.4.5	300KL capacity	Litre	18.40
3.2.4.6	400KL capacity	Litre	15.41
3.2.4.7	500KL capacity	Litre	15.17
3.2.4.8	600 KL capacity	Litre	13.49
3.2.4.9	700 KL capacity	Litre	12.75
3.2.4.10	800 KL capacity	Litre	12.15
3.2.4.11	900 KL capacity	Litre	11.64
3.2.4.12	1000 KL capacity	Litre	11.21
3.2.4.13	1250 KL capacity	Litre	10.34
3.2.4.14	1500 KL capacity	Litre	9.68
3.2.4.15	1750 KL capacity	Litre	9.16
3.2.4.16	2000 KL capacity	Litre	8.72
3.2.5	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-III & STAGING 18 M		
3.2.5.1	100 KL capacity	Litre	29.87
3.2.5.2	150KL capacity	Litre	23.26
3.2.5.3	200KL capacity	Litre	20.62
3.2.5.4	250KL capacity	Litre	19.04
3.2.5.5	300KL capacity	Litre	20.09
3.2.5.6	400KL capacity	Litre	16.97
3.2.5.7	500KL capacity	Litre	16.48
3.2.5.8	600 KL capacity	Litre	14.77
3.2.5.9	700 KL capacity	Litre	14.00
3.2.5.10	800 KL capacity	Litre	13.37
3.2.5.11	900 KL capacity	Litre	12.82
3.2.5.12	1000 KL capacity	Litre	12.37
3.2.5.13	1250 KL capacity	Litre	11.44
3.2.5.14	1500 KL capacity	Litre	10.74
3.2.5.15	1750 KL capacity	Litre	10.18
3.2.5.16	2000 KL capacity	Litre	9.72
3.2.6	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-IV & STAGING 18 M		

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.6.1	100 KL capacity	Litre	32.58
3.2.6.2	150KL capacity	Litre	25.78
3.2.6.3	200KL capacity	Litre	19.74
3.2.6.4	250KL capacity	Litre	22.45
3.2.6.5	300KL capacity	Litre	22.02
3.2.6.6	400KL capacity	Litre	16.98
3.2.6.7	500KL capacity	Litre	17.64
3.2.6.8	600 KL capacity	Litre	15.60
3.2.6.9	700 KL capacity	Litre	14.74
3.2.6.10	800 KL capacity	Litre	14.02
3.2.6.11	900 KL capacity	Litre	13.42
3.2.6.12	1000 KL capacity	Litre	12.92
3.2.6.13	1250 KL capacity	Litre	11.88
3.2.6.14	1500 KL capacity	Litre	11.12
3.2.6.15	1750 KL capacity	Litre	10.49
3.2.6.16	2000 KL capacity	Litre	10.00
3.2.7	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-II & STAGING 18 M		
3.2.7.1	100 KL capacity	Litre	25.14
3.2.7.2	150KL capacity	Litre	19.69
3.2.7.3	200KL capacity	Litre	17.47
3.2.7.4	250KL capacity	Litre	16.20
3.2.7.5	300KL capacity	Litre	16.04
3.2.7.6	400KL capacity	Litre	14.23
3.2.7.7	500KL capacity	Litre	13.19
3.2.7.8	600 KL capacity	Litre	12.37
3.2.7.9	700 KL capacity	Litre	11.67
3.2.7.10	800 KL capacity	Litre	11.12
3.2.7.11	900 KL capacity	Litre	10.63
3.2.7.12	1000 KL capacity	Litre	10.23
3.2.7.13	1250 KL capacity	Litre	9.42
3.2.7.14	1500 KL capacity	Litre	8.80
3.2.7.15	1750 KL capacity	Litre	8.31
3.2.7.16	2000 KL capacity	Litre	7.91
3.2.8	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-III & STAGING 18 M		
3.2.8.1	100 KL capacity	Litre	25.98
3.2.8.2	150KL capacity	Litre	20.53
3.2.8.3	200KL capacity	Litre	18.08
3.2.8.4	250KL capacity	Litre	17.14
3.2.8.5	300KL capacity	Litre	16.65
3.2.8.6	400KL capacity	Litre	14.92
3.2.8.7	500KL capacity	Litre	13.82
3.2.8.8	600 KL capacity	Litre	12.90
3.2.8.9	700 KL capacity	Litre	12.19
3.2.8.10	800 KL capacity	Litre	11.61
3.2.8.11	900 KL capacity	Litre	11.13
3.2.8.12	1000 KL capacity	Litre	10.70
3.2.8.13	1250 KL capacity	Litre	9.87
3.2.8.14	1500 KL capacity	Litre	9.23
3.2.8.15	1750 KL capacity	Litre	8.72
3.2.8.16	2000 KL capacity	Litre	8.31
3.2.9	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-IV & STAGING 18 M		
3.2.9.1	100 KL capacity	Litre	26.37

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.9.2	150KL capacity	Litre	20.53
3.2.9.3	200KL capacity	Litre	16.39
3.2.9.4	250KL capacity	Litre	17.79
3.2.9.5	300KL capacity	Litre	17.10
3.2.9.6	400KL capacity	Litre	14.97
3.2.9.7	500KL capacity	Litre	13.79
3.2.9.8	600 KL capacity	Litre	13.01
3.2.9.9	700 KL capacity	Litre	12.31
3.2.9.10	800 KL capacity	Litre	11.73
3.2.9.11	900 KL capacity	Litre	11.25
3.2.9.12	1000 KL capacity	Litre	10.83
3.2.9.13	1250 KL capacity	Litre	10.00
3.2.9.14	1500 KL capacity	Litre	9.36
3.2.9.15	1750 KL capacity	Litre	8.85
3.2.9.16	2000 KL capacity	Litre	8.44
3.2.10	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-II & STAGING 20 M		
3.2.10.1	100 KL capacity	Litre	33.80
3.2.10.2	150KL capacity	Litre	26.52
3.2.10.3	200KL capacity	Litre	22.89
3.2.10.4	250KL capacity	Litre	21.98
3.2.10.5	300KL capacity	Litre	22.74
3.2.10.6	400KL capacity	Litre	20.57
3.2.10.7	500KL capacity	Litre	19.39
3.2.10.8	600 KL capacity	Litre	17.57
3.2.10.9	700 KL capacity	Litre	16.75
3.2.10.10	800 KL capacity	Litre	16.07
3.2.10.11	900 KL capacity	Litre	15.49
3.2.10.12	1000 KL capacity	Litre	14.99
3.2.10.13	1250 KL capacity	Litre	13.98
3.2.10.14	1500 KL capacity	Litre	13.21
3.2.10.15	1750 KL capacity	Litre	12.59
3.2.10.16	2000 KL capacity	Litre	12.07
3.2.11	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-III & STAGING 20 M		
3.2.11.1	100 KL capacity	Litre	34.04
3.2.11.2	150KL capacity	Litre	27.10
3.2.11.3	200KL capacity	Litre	23.36
3.2.11.4	250KL capacity	Litre	22.95
3.2.11.5	300KL capacity	Litre	23.54
3.2.11.6	400KL capacity	Litre	21.30
3.2.11.7	500KL capacity	Litre	20.05
3.2.11.8	600 KL capacity	Litre	17.82
3.2.11.9	700 KL capacity	Litre	17.04
3.2.11.10	800 KL capacity	Litre	16.39
3.2.11.11	900 KL capacity	Litre	15.85
3.2.11.12	1000 KL capacity	Litre	15.36
3.2.11.13	1250 KL capacity	Litre	14.40
3.2.11.14	1500 KL capacity	Litre	13.65
3.2.11.15	1750 KL capacity	Litre	13.06
3.2.11.16	2000 KL capacity	Litre	12.56
3.2.12	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-IV & STAGING 20 M		
3.2.12.1	100 KL capacity	Litre	38.33
3.2.12.2	150KL capacity	Litre	29.33

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Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.12.3	200KL capacity	Litre	25.04
3.2.12.4	250KL capacity	Litre	24.17
3.2.12.5	300KL capacity	Litre	25.15
3.2.12.6	400KL capacity	Litre	22.60
3.2.12.7	500KL capacity	Litre	20.82
3.2.12.8	600 KL capacity	Litre	18.95
3.2.12.9	700 KL capacity	Litre	17.98
3.2.12.10	800 KL capacity	Litre	17.17
3.2.12.11	900 KL capacity	Litre	16.51
3.2.12.12	1000 KL capacity	Litre	15.92
3.2.12.13	1250 KL capacity	Litre	14.77
3.2.12.14	1500 KL capacity	Litre	13.88
3.2.12.15	1750 KL capacity	Litre	13.17
3.2.12.16	2000 KL capacity	Litre	12.58
3.2.13	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-II & STAGING 20 M		
3.2.13.1	100 KL capacity	Litre	30.57
3.2.13.2	150KL capacity	Litre	23.57
3.2.13.3	200KL capacity	Litre	20.56
3.2.13.4	250KL capacity	Litre	19.46
3.2.13.5	300KL capacity	Litre	19.35
3.2.13.6	400KL capacity	Litre	17.23
3.2.13.7	500KL capacity	Litre	15.76
3.2.13.8	600 KL capacity	Litre	14.50
3.2.13.9	700 KL capacity	Litre	13.61
3.2.13.10	800 KL capacity	Litre	12.87
3.2.13.11	900 KL capacity	Litre	12.26
3.2.13.12	1000 KL capacity	Litre	11.75
3.2.13.13	1250 KL capacity	Litre	10.71
3.2.13.14	1500 KL capacity	Litre	9.94
3.2.13.15	1750 KL capacity	Litre	9.32
3.2.13.16	2000 KL capacity	Litre	8.83
3.2.14	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-III & STAGING 20 M		
3.2.14.1	100 KL capacity	Litre	31.78
3.2.14.2	150KL capacity	Litre	24.50
3.2.14.3	200KL capacity	Litre	21.61
3.2.14.4	250KL capacity	Litre	21.17
3.2.14.5	300KL capacity	Litre	21.07
3.2.14.6	400KL capacity	Litre	18.84
3.2.14.7	500KL capacity	Litre	17.30
3.2.14.8	600 KL capacity	Litre	15.15
3.2.14.9	700 KL capacity	Litre	14.35
3.2.14.10	800 KL capacity	Litre	13.53
3.2.14.11	900 KL capacity	Litre	12.81
3.2.14.12	1000 KL capacity	Litre	12.35
3.2.14.13	1250 KL capacity	Litre	11.41
3.2.14.14	1500 KL capacity	Litre	10.70
3.2.14.15	1750 KL capacity	Litre	10.15
3.2.14.16	2000 KL capacity	Litre	9.69
3.2.15	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-IV & STAGING 20 M		
3.2.15.1	100 KL capacity	Litre	34.27
3.2.15.2	150KL capacity	Litre	27.30
3.2.15.3	200KL capacity	Litre	20.59

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Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.15.4	250KL capacity	Litre	23.75
3.2.15.5	300KL capacity	Litre	23.24
3.2.15.6	400KL capacity	Litre	20.33
3.2.15.7	500KL capacity	Litre	18.64
3.2.15.8	600 KL capacity	Litre	15.95
3.2.15.9	700 KL capacity	Litre	15.12
3.2.15.10	800 KL capacity	Litre	14.43
3.2.15.11	900 KL capacity	Litre	13.87
3.2.15.12	1000 KL capacity	Litre	13.37
3.2.15.13	1250 KL capacity	Litre	12.38
3.2.15.14	1500 KL capacity	Litre	11.61
3.2.15.15	1750 KL capacity	Litre	11.01
3.2.15.16	2000 KL capacity	Litre	10.51
3.2.16	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-II & STAGING 20 M		
3.2.16.1	100 KL capacity	Litre	27.66
3.2.16.2	150KL capacity	Litre	21.48
3.2.16.3	200KL capacity	Litre	18.65
3.2.16.4	250KL capacity	Litre	17.32
3.2.16.5	300KL capacity	Litre	16.98
3.2.16.6	400KL capacity	Litre	14.91
3.2.16.7	500KL capacity	Litre	13.82
3.2.16.8	600 KL capacity	Litre	12.95
3.2.16.9	700 KL capacity	Litre	12.17
3.2.16.10	800 KL capacity	Litre	11.54
3.2.16.11	900 KL capacity	Litre	10.99
3.2.16.12	1000 KL capacity	Litre	10.55
3.2.16.13	1250 KL capacity	Litre	9.64
3.2.16.14	1500 KL capacity	Litre	8.96
3.2.16.15	1750 KL capacity	Litre	8.42
3.2.16.16	2000 KL capacity	Litre	7.98
3.2.17	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-III & STAGING 20 M		
3.2.17.1	100 KL capacity	Litre	27.81
3.2.17.2	150KL capacity	Litre	21.79
3.2.17.3	200KL capacity	Litre	19.21
3.2.17.4	250KL capacity	Litre	18.22
3.2.17.5	300KL capacity	Litre	17.66
3.2.17.6	400KL capacity	Litre	15.55
3.2.17.7	500KL capacity	Litre	14.43
3.2.17.8	600 KL capacity	Litre	13.83
3.2.17.9	700 KL capacity	Litre	13.06
3.2.17.10	800 KL capacity	Litre	12.41
3.2.17.11	900 KL capacity	Litre	11.87
3.2.17.12	1000 KL capacity	Litre	11.41
3.2.17.13	1250 KL capacity	Litre	10.49
3.2.17.14	1500 KL capacity	Litre	9.80
3.2.17.15	1750 KL capacity	Litre	9.25
3.2.17.16	2000 KL capacity	Litre	8.80
3.2.18	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-IV & STAGING 20 M		
3.2.18.1	100 KL capacity	Litre	27.89
3.2.18.2	150KL capacity	Litre	21.52
3.2.18.3	200KL capacity	Litre	17.24
3.2.18.4	250KL capacity	Litre	18.68

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.18.5	300KL capacity	Litre	18.03
3.2.18.6	400KL capacity	Litre	15.71
3.2.18.7	500KL capacity	Litre	14.44
3.2.18.8	600 KL capacity	Litre	13.89
3.2.18.9	700 KL capacity	Litre	13.14
3.2.18.10	800 KL capacity	Litre	12.53
3.2.18.11	900 KL capacity	Litre	11.99
3.2.18.12	1000 KL capacity	Litre	11.55
3.2.18.13	1250 KL capacity	Litre	10.65
3.2.18.14	1500 KL capacity	Litre	9.98
3.2.18.15	1750 KL capacity	Litre	9.44
3.2.18.16	2000 KL capacity	Litre	9.00
3.2.19	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-II & STAGING 22 M		
3.2.19.1	100 KL capacity	Litre	35.91
3.2.19.2	150KL capacity	Litre	27.50
3.2.19.3	200KL capacity	Litre	23.87
3.2.19.4	250KL capacity	Litre	23.25
3.2.19.5	300KL capacity	Litre	23.33
3.2.19.6	400KL capacity	Litre	21.04
3.2.19.7	500KL capacity	Litre	19.93
3.2.19.8	600 KL capacity	Litre	18.05
3.2.19.9	700 KL capacity	Litre	17.15
3.2.19.10	800 KL capacity	Litre	16.41
3.2.19.11	900 KL capacity	Litre	15.78
3.2.19.12	1000 KL capacity	Litre	15.25
3.2.19.13	1250 KL capacity	Litre	14.16
3.2.19.14	1500 KL capacity	Litre	13.33
3.2.19.15	1750 KL capacity	Litre	12.66
3.2.19.16	2000 KL capacity	Litre	12.12
3.2.20	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-III & STAGING 22 M		
3.2.20.1	100 KL capacity	Litre	36.12
3.2.20.2	150KL capacity	Litre	28.04
3.2.20.3	200KL capacity	Litre	24.37
3.2.20.4	250KL capacity	Litre	23.77
3.2.20.5	300KL capacity	Litre	24.16
3.2.20.6	400KL capacity	Litre	21.78
3.2.20.7	500KL capacity	Litre	20.60
3.2.20.8	600 KL capacity	Litre	18.49
3.2.20.9	700 KL capacity	Litre	17.61
3.2.20.10	800 KL capacity	Litre	16.87
3.2.20.11	900 KL capacity	Litre	16.26
3.2.20.12	1000 KL capacity	Litre	15.73
3.2.20.13	1250 KL capacity	Litre	14.64
3.2.20.14	1500 KL capacity	Litre	13.82
3.2.20.15	1750 KL capacity	Litre	13.17
3.2.20.16	2000 KL capacity	Litre	12.62
3.2.21	Rates for RCC OHSR,SBC 7 T/sqm, SEISMIC ZONE-IV & STAGING 22 M		
3.2.21.1	100 KL capacity	Litre	39.30
3.2.21.2	150KL capacity	Litre	30.10
3.2.21.3	200KL capacity	Litre	25.45
3.2.21.4	250KL capacity	Litre	24.45
3.2.21.5	300KL capacity	Litre	25.57

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.21.6	400KL capacity	Litre	22.87
3.2.21.7	500KL capacity	Litre	21.01
3.2.21.8	600 KL capacity	Litre	19.26
3.2.21.9	700 KL capacity	Litre	18.26
3.2.21.10	800 KL capacity	Litre	17.43
3.2.21.11	900 KL capacity	Litre	16.73
3.2.21.12	1000 KL capacity	Litre	16.12
3.2.21.13	1250 KL capacity	Litre	14.91
3.2.21.14	1500 KL capacity	Litre	13.99
3.2.21.15	1750 KL capacity	Litre	13.25
3.2.21.16	2000 KL capacity	Litre	12.66
3.2.22	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-II & STAGING 22 M		
3.2.22.1	100 KL capacity	Litre	33.12
3.2.22.2	150KL capacity	Litre	24.87
3.2.22.3	200KL capacity	Litre	21.90
3.2.22.4	250KL capacity	Litre	20.77
3.2.22.5	300KL capacity	Litre	20.06
3.2.22.6	400KL capacity	Litre	17.73
3.2.22.7	500KL capacity	Litre	16.19
3.2.22.8	600 KL capacity	Litre	14.56
3.2.22.9	700 KL capacity	Litre	13.66
3.2.22.10	800 KL capacity	Litre	12.94
3.2.22.11	900 KL capacity	Litre	12.33
3.2.22.12	1000 KL capacity	Litre	11.81
3.2.22.13	1250 KL capacity	Litre	10.77
3.2.22.14	1500 KL capacity	Litre	10.00
3.2.22.15	1750 KL capacity	Litre	9.38
3.2.22.16	2000 KL capacity	Litre	8.88
3.2.23	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-III & STAGING 22 M		
3.2.23.1	100 KL capacity	Litre	33.68
3.2.23.2	150KL capacity	Litre	25.57
3.2.23.3	200KL capacity	Litre	22.42
3.2.23.4	250KL capacity	Litre	21.80
3.2.23.5	300KL capacity	Litre	21.79
3.2.23.6	400KL capacity	Litre	19.23
3.2.23.7	500KL capacity	Litre	17.66
3.2.23.8	600 KL capacity	Litre	16.07
3.2.23.9	700 KL capacity	Litre	15.10
3.2.23.10	800 KL capacity	Litre	14.29
3.2.23.11	900 KL capacity	Litre	13.69
3.2.23.12	1000 KL capacity	Litre	13.18
3.2.23.13	1250 KL capacity	Litre	12.15
3.2.23.14	1500 KL capacity	Litre	11.37
3.2.23.15	1750 KL capacity	Litre	10.75
3.2.23.16	2000 KL capacity	Litre	10.24
3.2.24	Rates for RCC OHSR,SBC 10 T/sqm, SEISMIC ZONE-IV & STAGING 22 M		
3.2.24.1	100 KL capacity	Litre	36.39
3.2.24.2	150KL capacity	Litre	27.92
3.2.24.3	200KL capacity	Litre	21.13
3.2.24.4	250KL capacity	Litre	24.44
3.2.24.5	300KL capacity	Litre	23.88
3.2.24.6	400KL capacity	Litre	20.71

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Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.24.7	500KL capacity	Litre	18.99
3.2.24.8	600 KL capacity	Litre	17.70
3.2.24.9	700 KL capacity	Litre	16.66
3.2.24.10	800 KL capacity	Litre	15.89
3.2.24.11	900 KL capacity	Litre	15.25
3.2.24.12	1000 KL capacity	Litre	14.69
3.2.24.13	1250 KL capacity	Litre	13.58
3.2.24.14	1500 KL capacity	Litre	12.74
3.2.24.15	1750 KL capacity	Litre	12.06
3.2.24.16	2000 KL capacity	Litre	11.52
3.2.25	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-II & STAGING 22 M		
3.2.25.1	100 KL capacity	Litre	29.57
3.2.25.2	150KL capacity	Litre	22.92
3.2.25.3	200KL capacity	Litre	19.74
3.2.25.4	250KL capacity	Litre	18.66
3.2.25.5	300KL capacity	Litre	17.74
3.2.25.6	400KL capacity	Litre	15.52
3.2.25.7	500KL capacity	Litre	14.29
3.2.25.8	600 KL capacity	Litre	13.06
3.2.25.9	700 KL capacity	Litre	12.23
3.2.25.10	800 KL capacity	Litre	11.55
3.2.25.11	900 KL capacity	Litre	10.99
3.2.25.12	1000 KL capacity	Litre	10.49
3.2.25.13	1250 KL capacity	Litre	9.55
3.2.25.14	1500 KL capacity	Litre	8.83
3.2.25.15	1750 KL capacity	Litre	8.26
3.2.25.16	2000 KL capacity	Litre	7.80
3.2.26	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-III & STAGING 22 M		
3.2.26.1	100 KL capacity	Litre	30.16
3.2.26.2	150KL capacity	Litre	22.98
3.2.26.3	200KL capacity	Litre	20.02
3.2.26.4	250KL capacity	Litre	19.11
3.2.26.5	300KL capacity	Litre	18.52
3.2.26.6	400KL capacity	Litre	16.19
3.2.26.7	500KL capacity	Litre	14.93
3.2.26.8	600 KL capacity	Litre	13.59
3.2.26.9	700 KL capacity	Litre	12.76
3.2.26.10	800 KL capacity	Litre	12.08
3.2.26.11	900 KL capacity	Litre	11.53
3.2.26.12	1000 KL capacity	Litre	11.03
3.2.26.13	1250 KL capacity	Litre	10.08
3.2.26.14	1500 KL capacity	Litre	9.36
3.2.26.15	1750 KL capacity	Litre	8.79
3.2.26.16	2000 KL capacity	Litre	8.32
3.2.27	Rates for RCC OHSR,SBC 18 T/sqm, SEISMIC ZONE-IV & STAGING 22 M		
3.2.27.1	100 KL capacity	Litre	29.42
3.2.27.2	150KL capacity	Litre	22.66
3.2.27.3	200KL capacity	Litre	17.87
3.2.27.4	250KL capacity	Litre	19.25
3.2.27.5	300KL capacity	Litre	18.71
3.2.27.6	400KL capacity	Litre	16.15
3.2.27.7	500KL capacity	Litre	14.86

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Sr. No.	Description	Unit	Amended Rate (Rs.)
3.2.27.8	600 KL capacity	Litre	13.71
3.2.27.9	700 KL capacity	Litre	12.93
3.2.27.10	800 KL capacity	Litre	12.27
3.2.27.11	900 KL capacity	Litre	11.73
3.2.27.12	1000 KL capacity	Litre	11.27
3.2.27.13	1250 KL capacity	Litre	10.35
3.2.27.14	1500 KL capacity	Litre	9.64
3.2.27.15	1750 KL capacity	Litre	9.09
3.2.27.16	2000 KL capacity	Litre	8.63
3.2.28	For staging above 22 Mtr (only in exceptional condition where hydraulics not permit) add 2% per Mtr above 22 Mtr.		
3.3	<p>Construction of RCC (Flat slab type) Clear Water Reservoir of following capacity as per the Scope of work and Technical specification, consisting of the following main activities: -</p> <p>a) Topographic survey, preparation of site contour plan, conducting SBC test and its approval from department before construction. Submission and approval of concrete mix design and water quality test report for water to be used in construction.</p> <p>b) Excavation in all types of soil, PCC below foundation & all RCC Work including all labour and material charges including providing and fixing of accessories such as SS ladder, SS manhole frame and covers, water level indicator (float type), SS ventilator with SS screen, float valve, puddle collars, G.I. pipe railing around walk way, Top Dome/Slab, Staircase.</p> <p>c) CWR shall be provided with adequate plinth protection all around the structure in a width starting from edge of structure at GL and extending at least up to 1.0m beyond the vertical wall of CWR. The plinth protection shall consist of 150mm thick PCC in M-15 concrete over 150mm thick compacted soil fill.</p> <p>d) Providing and applying two coats of food grade epoxy paint on the inside surface of the roof slab, and 600 mm height of the vertical wall.</p> <p>e) Successful hydro test and water tightness test as per I.S. code.</p> <p>f) Providing and applying three coats of anti-carbonation paint on the roof Slab.</p> <p>g) Providing and applying three coats of cement-based paint on the remaining external surface area of the structure.</p> <p>h) Providing and fixing SS-304 ventilator, SS 304 manhole frame and cover and SS 304 ladder from roof slab to bottom Slab, inside container. Providing and fixing water level indicator (Float type).</p> <p>i) Providing and fixing MS ladder from ground to top slab.</p> <p>j) All MS parts to be painted with two coats of the enamelled paint over the primer coat of red oxide.</p> <p>k) Providing and fixing of 150mm wide water bar for the construction joints in the container.</p> <p>l) Providing and fixing CI/DI puddle collars the vertical wall for connecting inlet, outlet, overflow and washout pipes of the reservoir.</p> <p>m) Inlet, outlet, overflow, washout pipes and valves are not included in this work, provision for the same shall be taken separately.</p>		
3.3.1	Rates for RCC Partially Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-2,3 & 4		
3.3.1.1	50 KL capacity	Litre	8.80
3.3.1.2	75 KL capacity	Litre	7.99
3.3.1.3	100 KL capacity	Litre	7.88
3.3.1.4	150KL capacity	Litre	7.07
3.3.1.5	200KL capacity	Litre	6.55
3.3.1.6	250KL capacity	Litre	6.29
3.3.1.7	300KL capacity	Litre	6.11

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.3.2	Rates for RCC Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-2,3 & 4		
3.3.2.1	50 KL capacity	Litre	8.86
3.3.2.2	75 KL capacity	Litre	8.05
3.3.2.3	100 KL capacity	Litre	7.89
3.3.2.4	150KL capacity	Litre	7.00
3.3.2.5	200KL capacity	Litre	6.56
3.3.2.6	250KL capacity	Litre	6.21
3.3.2.7	300KL capacity	Litre	6.18
3.4	<p>Construction of RCC (Dome type) Clear Water Reservoir of following capacity as per Scope of work and Technical specification, consisting of the following main activities: -</p> <p>a) Topographic survey, preparation of site contour plan, conducting SBC test and its approval from department before construction. Submission and approval of concrete mix design and water quality test report for water to be used in construction. .</p> <p>b) Excavation in all types of soil, PCC below foundation & all RCC Work including all labour and material charges including providing and fixing of accessories such as SS ladder, SS manhole frame and covers, water level indicator (float type), SS ventilator with SS screen, float valve, puddle collars, G.I. pipe railing around walk way, Top Dome/Slab, Staircase.</p> <p>c) CWR shall be provided with adequate plinth protection all around the structure in a width starting from edge of structure at GL and extending at least up to 1.0m beyond the vertical wall of CWR. The plinth protection shall consist of 150mm thick PCC in M-15 concrete over 150mm thick compacted soil fill.</p> <p>d) Providing and applying two coats of food grade epoxy paint on the inside surface of the roof slab, and 600 mm height of the vertical wall.</p> <p>e) Successful hydro test and water tightness test as per I.S. code.</p> <p>f) Providing and applying three coats of anti-carbonation paint on the roof Slab.</p> <p>g) Providing and applying three coats of cement-based paint on the remaining external surface area of the structure.</p> <p>h) Providing and fixing SS-304 ventilator, SS 304 manhole frame and cover and SS 304 ladder from roof slab to bottom Slab, inside container. Providing and fixing water level indicator (Float type).</p> <p>i) Providing and fixing MS ladder from ground to top slab.</p> <p>j) All MS parts to be painted with two coats of the enamelled paint over the primer coat of red oxide.</p> <p>k) Providing and fixing of 150mm wide water bar for the construction joints in the container.</p> <p>l) Providing and fixing CI/DI puddle collars the vertical wall for connecting inlet, outlet, overflow and washout pipes of the reservoir.</p> <p>m) Inlet, outlet, overflow, washout pipes and valves are not included in this work, provision for the same shall be taken separately.</p>		
3.4.1	Rates for RCC Partially Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE2,3 & 4		
3.4.1.1	400 KL capacity	Litre	6.67
3.4.2	Rates for RCC Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-2,3 & 4		
3.4.2.1	400 KL capacity	Litre	6.44
3.4.3	Rates for RCC Partially Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-2 & 3.		
3.4.3.1	500 KL capacity	Litre	5.67
3.4.3.2	600 KL capacity	Litre	5.40
3.4.3.3	700 KL capacity	Litre	5.36
3.4.3.4	800 KL capacity	Litre	5.33

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.4.3.5	900 KL capacity	Litre	5.23
3.4.3.6	1000 KL capacity	Litre	5.15
3.4.4	Rates for RCC Partially Underground type clear water reservoir SBC 12.5 T/sqm, SEISMIC ZONE-2 & 3.		
3.4.4.1	500 KL capacity	Litre	5.52
3.4.4.2	600 KL capacity	Litre	5.22
3.4.4.3	700 KL capacity	Litre	5.15
3.4.4.4	800 KL capacity	Litre	5.11
3.4.4.5	900 KL capacity	Litre	4.98
3.4.4.6	1000 KL capacity	Litre	4.88
3.4.5	Rates for RCC Partially Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-4		
3.4.5.1	500 KL capacity	Litre	6.30
3.4.5.2	600 KL capacity	Litre	6.06
3.4.5.3	700 KL capacity	Litre	5.99
3.4.5.4	800 KL capacity	Litre	5.94
3.4.5.5	900 KL capacity	Litre	5.73
3.4.5.6	1000 KL capacity	Litre	5.57
3.4.6	Rates for RCC Partially Underground type clear water reservoir SBC 12.5 T/sqm, SEISMIC ZONE-4		
3.4.6.1	500 KL capacity	Litre	5.65
3.4.6.2	600 KL capacity	Litre	5.46
3.4.6.3	700 KL capacity	Litre	5.36
3.4.6.4	800 KL capacity	Litre	5.29
3.4.6.5	900 KL capacity	Litre	5.13
3.4.6.6	1000 KL capacity	Litre	5.00
3.4.7	Rates for RCC Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-2 & 3		
3.4.7.1	500 KL capacity	Litre	5.71
3.4.7.2	600 KL capacity	Litre	5.63
3.4.7.3	700 KL capacity	Litre	5.54
3.4.7.4	800 KL capacity	Litre	5.48
3.4.7.5	900 KL capacity	Litre	5.36
3.4.7.6	1000 KL capacity	Litre	5.27
3.4.8	Rates for RCC Underground type clear water reservoir SBC 12.5 T/sqm, SEISMIC ZONE- 2 & 3		
3.4.8.1	500 KL capacity	Litre	5.58
3.4.8.2	600 KL capacity	Litre	5.48
3.4.8.3	700 KL capacity	Litre	5.42
3.4.8.4	800 KL capacity	Litre	5.37
3.4.8.5	900 KL capacity	Litre	5.25
3.4.8.6	1000 KL capacity	Litre	5.14
3.4.9	Rates for RCC Underground type clear water reservoir SBC 7 T/sqm, SEISMIC ZONE-4		
3.4.9.1	500 KL capacity	Litre	5.81
3.4.9.2	600 KL capacity	Litre	5.77
3.4.9.3	700 KL capacity	Litre	5.65
3.4.9.4	800 KL capacity	Litre	5.56
3.4.9.5	900 KL capacity	Litre	5.45
3.4.9.6	1000 KL capacity	Litre	5.35
3.4.10	Rates for RCC Underground type clear water reservoir SBC 12.5 T/sqm, SEISMIC ZONE-4		
3.4.10.1	500 KL capacity	Litre	5.81
3.4.10.2	600 KL capacity	Litre	5.77

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Sr. No.	Description	Unit	Amended Rate (Rs.)
3.4.10.3	700 KL capacity	Litre	5.65
3.4.10.4	800 KL capacity	Litre	5.56
3.4.10.5	900 KL capacity	Litre	5.45
3.4.10.6	1000 KL capacity	Litre	5.35
3.5	<p>Construction of RCC Dome type Ground Level Service Reservoir (GLSR) of following capacity as per the Scope of work and Technical specifications, consisting of the following main activities: -</p> <p>a) Topographic survey, preparation of site contour plan, conducting SBC test and its approval from department before construction. Submission and approval of concrete mix design and water quality test report for water to be used in construction.</p> <p>b) Excavation in all types of soil, PCC below foundation & all RCC Work.</p> <p>c) All the GLSR shall be provided with adequate plinth protection all around the structure in a width starting from edge of structure at GL and extending at least up to 1.0m beyond the vertical wall. The plinth protection shall consist of 150mm thick PCC in M-15 concrete over 150mm thick compacted soil fill.</p> <p>d) Providing and applying two coats of food grade epoxy paint on the inside surface of the roof slab, and 600 mm height of the vertical wall giving.</p> <p>e) Successful hydro test and water tightness test as per I.S. code.</p> <p>f) Providing and applying three coats of anti-carbonation paint on the roof Slab.</p> <p>g) Providing and applying three coats of cement-based paint on the remaining external surface area of the structure.</p> <p>h) Providing and fixing SS-304 ventilator, SS 304 manhole frame and cover and SS 304 ladder from top bottom Slab inside container. Providing and fixing water level indicator (Float type).</p> <p>i) Providing and fixing MS ladder from ground to top slab with safety cage.</p> <p>j) All MS parts to be painted with two coats of the enamelled paint over the primer coat of red oxide.</p> <p>k) Providing and fixing of 150mm wide water bar for the construction joints in the container.</p> <p>l) Providing and fixing CI/DI puddle collars the vertical wall for connecting inlet, outlet, overflow and washout pipe of the reservoir.</p> <p>m) Inlet, outlet, overflow, washout pipes and valves are not included in this work, provision for the same shall be taken separately.</p>		
3.5.1	Rates for RCC GROUND LEVEL SERVICE RESERVOIR SEISMIC ZONE-II & III and SBC18T/sqm		
3.5.1.1	50 KL capacity	Litre	11.02
3.5.1.2	100 KL capacity	Litre	8.28
3.5.1.3	150 KL capacity	Litre	6.95
3.5.1.4	200 KL capacity	Litre	6.43
3.5.1.5	250 KL capacity	Litre	5.88
3.5.1.6	300 KL capacity	Litre	5.67
3.5.1.7	400 KL capacity	Litre	5.40
3.5.1.8	500 KL capacity	Litre	5.25
3.5.2	Rates for RCC GROUND LEVEL SERVICE RESERVOIR SEISMIC ZONE-4 & SBC 18T/sqm		
3.5.2.1	50 KL capacity	Litre	11.28
3.5.2.2	100 KL capacity	Litre	8.42
3.5.2.3	150 KL capacity	Litre	7.07
3.5.2.4	200 KL capacity	Litre	6.46
3.5.2.5	250 KL capacity	Litre	5.91
3.5.2.6	300 KL capacity	Litre	5.69
3.5.2.7	400 KL capacity	Litre	5.42
3.5.2.8	500 KL capacity	Litre	5.25

Sr. No.	Description	Unit	Amended Rate (Rs.)
3.6	Providing and fixing double flanged ISI marked GI pipes medium duty (class B) Steel tube as per IS:1239 or amended up to date and zinc coating as per IS 4736 with GI fittings excluding valves as vertical pipes for RCC Reservoirs including specials required such as bend, tee etc. providing and fixing with MS clamps clamps at every 3 mtr, jointing materials such as nuts, bolt, rubber packing, hydraulic testing etc. complete in all respect up to and from valve chamber as per direction of EIC, Technical Specification and Scope of work.		
3.6.1	50 mm	Mtr	665.00
3.6.2	65 mm	Mtr	853.00
3.6.3	80 mm	Mtr	906.00
3.6.4	100 mm	Mtr	1190.00
3.7	Providing and fixing double flanged ISI marked DI Class K-9 pipes as per IS:8329-2000 (amended up to date), as vertical pipes for RCC Reservoirs including specials required such as duck foot bend, bend, tee etc. providing and fixing clamps at every 3 mtr, jointing materials such as nuts, bolt, rubber packing, hydraulic testing etc. complete in all respect up to and from valve chamber as per direction of EIC, Technical Specification and Scope of work.		
3.7.1	100 mm	Mtr	2457.00
3.7.2	150 mm	Mtr	3527.00
3.7.3	200 mm	Mtr	4762.00
3.7.4	250 mm	Mtr	6430.00
3.7.5	300 mm	Mtr	8181.00
3.7.6	350 mm	Mtr	9912.00
3.7.7	400 mm	Mtr	12079.00
3.7.8	450 mm	Mtr	14315.00
3.7.9	500 mm	Mtr	16805.00
3.7.10	600 mm	Mtr	22245.00
3.7.11	700 mm	Mtr	28460.00
	Note: The rates for DI double flanged pipes shall be reduced 5%, If used other than OHSR pipes.		

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Chapter 4

Earth work, Road cutting, restoration & trenchless laying

S. No.	Description	Unit	Amended Rate (Rs.)
4.1	Earth work in excavation by mechanical means (Hydraulic Excavator)/ manual means in trenches of required width and gradient for laying and jointing of pipe line including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 Mtr. including taking out the excavated soil, and then returning the soil as required in layers not exceeding 20cm in depth including consolidating each deposited layer by ramming, watering etc. and disposal of surplus excavated soil as directed within a lead of 50 Mtr. including required all safety provisions etc.: All kinds of soil	Cum	204.00
4.2	Add extra for trenches for every additional lift over item no 4.1		
4.2.1	Above 1.5 mtr and up to 3.0 mtr.	Cum	20.00
4.2.2	Above 3.0 mtr and up to 4.5 mtr.	Cum	41.00
4.3	Earth work in excavation by mechanical means (Hydraulic Excavator)/ manual means in trenches of required width and gradient for laying and jointing of pipe line including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 Mtr. including taking out the excavated soil, and then returning the soil as required in layers not exceeding 20cm in depth including consolidating each deposited layer by ramming, watering etc. and stacking serviceable material for measurements and disposal of unserviceable material as directed, with in a lead of 50 Mtr. including all safety provisions required .:		
4.3.1	Ordinary rock	Cum	366.00
4.3.2	Hard rock (requiring blasting)	Cum	546.00
4.3.3	Hard rock(blasting prohibited)	Cum	930.00
4.4	Add extra for trenches for every additional lift over item no 4.3		
4.4.1	Above 1.5 mtr and up to 3.0 mtr.	Cum	37.00
4.4.2	Above 3.0 mtr and up to 4.5 mtr.	Cum	73.00
4.5	Dismantling of cement concrete pavement for pipe line line and chambers by mechanical means using pneumatic tools, cutting the peripheral edge by CC cutter, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 meters. Measurement for dismantled trench to be made as per standard trench width specified in tender document and no extra payment shall be made be made for trench width more than specified, re-handling of material/earth to complete the tasks as per technical specification and scope of work.	Cum	756.00

S. No.	Description	Unit	Amended Rate (Rs.)
4.6	Dismantling of flexible pavement for pipe line line and chambers by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials up to a lead of 1000 meters. Measurement for dismantled trench to be made as per standard trench width specified in tender document and no extra payment shall be made for trench width more than specified, re-handling of material/earth to complete the tasks per technical specification and scope of work.		
4.6.1	Bituminous courses	Cum	416.00
4.6.2	Granular courses	Cum	296.00
4.7	Providing and laying in position cement concrete M10 grade nominal mix 1:3:6 (1 Cement : 3coarse sand : 6 graded stone aggregate 40 mm nominal size) in base course complete including all material, labour, machinery, lighting, guarding for road restoration work in trenches of pipe line and chamber work. Measurement for CC work to be made as per standard trench width specified in tender document and no extra payment shall be made for trench width more than specified, complete work as per technical specification and scope of work.	Cum	4797.00
4.8	Providing and laying in position cement concrete in specified grade over prepared base course complete including finishing, curing, all material, labour, machinery, lighting, guarding for road restoration work in trenches of pipe line and chamber work. Measurement for CC work to be made as per standard trench width specified in tender document and no extra payment shall be made for trench width more than specified, complete work as per technical specification and scope of work.		
4.8.1	M20 grade Nominal Mix 1: 1.5: 3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size).	Cum	6507.00
4.8.2	Plain cement concrete pavement of M-30 Grade	Cum	6874.00

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S. No.	Description	Unit	Amended Rate (Rs.)
4.9	Removing & Re-fixing of Precast concrete interlocking blocks for laying of pipe line by manual method, stacking of serviceable & non serviceable material separately, disposal of dismantled material lead up to 50 mtr. The C.C. interlocking paving blocks be laid on average 25 mm thick bed of coarse sand and the joints to be filled with fine sand. Laying procedure on compacted sub base as defined. Complete job is to be executed as per the directions of Engineer in charge. The rates to be inclusive of fixing of minimum 70 percent reusable precast concrete interlocking block and cost of required new precast concrete interlocking block against damaged, including all lead and lift as per Technical specifications. (Interlocking block manufactured by fully computerized automatic stationery hydraulic vibro pressed machine & full computerized automatic batching plant of class A-1 as per BS:6717-2001. Tensile splitting strength and breaking load as per BS: 6717-2001 Colour: Grey cement natural colour. Variation in Dimension : Less than 1.6 mm Variation in thickness: Less than 3.2 mm)		
4.9.1	60 mm thick.	Sqm.	283.00
4.9.2	80 mm thick.	Sqm.	308.00
4.9.3	100 mm thick	Sqm.	343.00
4.10	Horizontal directional drilling (by trenchless technology) of suitable dia hole minimum 1.0 mtr below natural ground level in all type of soil under CC/BT roads and pulling HDPE pipes of dia up to 110 mm , which are available in the form of a coil including excavation, shoring/ strutting, preparation, maintain the thrust and including, road dismantling, excavation and refilling of drive pit and exit pit, restoration of road cut as per technical specification and scope of work. Excluding cost of pipe line. Note: Trenchless laying shall be done only for laying of pipe line (rising main) and road crossing of distribution pipe line under CC/BT roads.	RMT	298.00

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S. No.	Description	Unit	Amended Rate (Rs.)
4.11	Supply laying and pushing of MS casing pipe of specified thickness approved by concerned department authority by trenchless method adopting any suitable technology below ground at required depth under running traffic condition as per Highway/ Railway standard including carrying out survey work at the job site for determining underground cable trenches like telephone, cable, water & sanitary lines and resistivity test for finding the soil strata using necessary equipments for completion of works, mobilizing of machineries and specialized crew at the job site complete in all respect, including excavation of driven pit and exit pit (up to 3 meter depth) with proper protection at these sites with shoring sheets and ISMB. Providing MS cutting edges for front shield and constructing thrust bed at designated level. Necessary dewatering and providing concrete foundation at the base of the driven pit, PVC/Rubber saddle as per the requirement of Highway/Railway authority, crane for handling of pipe and any other machinery, tools, and tackles required, construction of temporary works as per design, drawing and method as per approved by authority specification and the direction of the Engineer. Apply corrosion, resistant, protection on inside and outside of casing pipe as per technical specification.		
4.11.1	300 mm Dia 8 mm thick casing pipe.	RMT	19088.00
4.11.2	400 mm Dia 8 mm thick casing pipe .	RMT	21848.00
4.11.3	500 mm Dia 8 mm thick casing pipe .	RMT	24583.00
4.11.4	600 mm Dia 10 mm thick casing pipe .	RMT	31582.00
4.11.5	700 mm Dia 10 mm thick casing pipe .	RMT	35002.00
4.12	Removing & Re-fixing of Bricks Kharbanja road by manual means for laying of pipe line, stacking of serviceable & unserviceable material separately, disposal of dismantled material lead upto 50 mtr. The Bricks interlocking be laid on average 12 mm thick bed of mud mortar and the joints to be filled with pointing in cement mortar 1:3. Laying procedure on compacted sub base as defined. Complete job is to be executed as per the direction of Engineer in charge. The rates are inclusive of fixing of minimum 70 percent reusable Bricks and cost of required new First class FPS bricks (min. 10.5 Mpa) in place of damaged bricks, all lead and lift as per Technical Specifications and direction of Engineer in Charge.		
4.12.1	Horizontal aligned Bricks	Sqm.	245.00
4.12.2	Vertical aligned Bricks	Sqm.	272.00

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Chapter 5

Pump sets

Sr. No.	Description	Unit	Amended Rate(Rs.)
5.1	Providing, installation, testing and commissioning of Centrifugal Monoblock pump set conforming to IS 9079 , 2 pole motor operating at synchronised speed of 3000 RPM with requisite MOC impeller, priming funnel, cock, suitable flanges at suction and delivery side. Pump shall have common shaft for pump and motor. Motor shall be suitable for working on 415 V \pm 10%, 3 Ph, 50 Hz A.C. Supply. Motor shall be TEFC type and Pump set shall be suitable for working at various discharge and head requirements as per scope of work. Pump shall be erected on C.C. foundation / cross channels / RSJ frame block with suitable foundation bolts grouted in C.C. foundation block etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge of following power rating, suitable for prescribed duty conditions mentioned in TD.		
5.1.1	Centrifugal Monoblock Pump set (Single Stage)		
5.1.1.1	2.2 KW (3.0 HP)	Each	36328.00
5.1.1.2	3.7 KW (5.0 HP)	Each	46673.00
5.1.1.3	5.5 KW (7.5 HP)	Each	59127.00
5.1.1.4	7.5 KW (10 HP)	Each	72297.00
5.1.1.5	9.3 KW (12.5 HP)	Each	84622.00
5.1.1.6	11.0 KW (15 HP)	Each	89101.00
5.1.1.7	15.0 KW (20.0 HP)	Each	120499.00
5.1.1.8	18.5 KW (25.0 HP)	Each	150288.00
5.1.2	Centrifugal Monoblock Pump set (Double Stage)		
5.1.2.1	3.7 KW (5.0 HP)	Each	55191.00
5.1.2.2	5.5 KW (7.5 HP)	Each	67298.00
5.1.2.3	7.5 KW (10.0 HP)	Each	80622.00
5.1.2.4	9.3 KW (12.5 HP)	Each	89474.00
5.1.2.5	11.0 KW (15.0 HP)	Each	98763.00
5.1.2.6	15.0 KW (20.0 HP)	Each	129765.00
	Vacuum Pump set (Monoblock)		
5.2	Providing, installation, testing and commissioning of Mono block Vacuum pump set with base plate including C.C. foundation / cross channels / RSJ frame and foundation bolts etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge.		
5.2.1	0.75 KW (1 HP), single Ph	Each	32689.00
5.2.2	2.2 KW (3 HP), three Ph	Each	61230.00
	Vacuum Pump set (Coupled)		
5.3	Providing, installation, testing and commissioning of Vacuum pump set with horizontal foot mounted TEFC squirrel cage motor working on three phase 50 Hz, 415 Volts \pm 10% with base plate including cost of flexible couplings, coupling guard etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge.		
5.3.1	3.7 KW (5.0 HP)	Each	131352.00
5.3.2	7.5 KW (10.0 HP)	Each	162048.00

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Sr. No.	Description	Unit	Amended Rate(Rs.)
5.4	Providing, installation, testing and commissioning of Submerged Centrifugal Pump sets with motor 4 pole synchronised speed of 1500 rpm (water immersed, dry air filled, class "F" insulated TEWC motor integrally mounted on volute casing pump sets for drinking water) 3 phase, +/- 3%, 415 volt +/- 10%, along with suitable foundation/ installation device and with 10 mtr cable, material of construction of impeller SS, casing (volute) CI, wearing ring SS, etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge of following power rating, suitable for prescribed duty conditions mentioned in TD.		
5.4.1	15 KW	Each	265676.00
5.4.2	18.5 KW	Each	327667.00
5.4.3	22 KW	Each	389658.00
5.4.4	30 KW	Each	531352.00
5.4.5	37 KW	Each	640972.00
5.4.6	45 KW	Each	678575.00
5.4.7	55 KW	Each	856737.00
5.4.8	75 KW	Each	967432.00
5.4.9	90 KW	Each	1279396.00
5.4.10	110 KW	Each	1611098.00
5.4.11	125 KW	Each	1767041.00
5.4.12	132 KW	Each	1863574.00
5.4.13	160 KW	Each	2145806.00
5.4.14	180 KW	Each	2279702.00
5.4.15	200 KW	Each	2735645.00
5.5	Providing, installation, testing and commissioning of submersible monoblock pump set conforming to IS 8034 and 2 pole motor operating at synchronised speed of speed 3000 RPM, with water proof winding. Pump shall be suitable for various delivery head and discharge with stainless steel shaft. Motor suitable for working on 415 V \pm 10%, 3 Ph, 50 Hz AC and with water lubricated bearing to accept entire hydraulic thrust. Supply, with cable guard, thrust carbon/fibre bearing to withstand entire hydraulic thrust. The pump set shall be suitable for direct coupling, with suitable suction strainer. Pump should have suitable discharge out let as per manufacturer's design. Antithrust stream lined non return valve shall be provided with the pump and minimum 6 m submersible copper conductor cable in single / double run and 2 pairs of suitable size erection clamp 10 mm thick shall be provided with each pump etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge of following power rating, suitable for prescribed duty conditions mentioned in TD.		
5.5.1	2.2 KW (3.0 HP)	Each	38474.00
5.5.2	3.7 KW (5.0 HP)	Each	42763.00
5.5.3	5.5 KW (7.5 HP)	Each	57552.00
5.5.4	7.5 KW (10 HP)	Each	64847.00
5.5.5	9.3 KW (12.5 HP)	Each	81830.00
5.5.6	11.0 KW (15 HP)	Each	91512.00
5.5.7	15.0 KW (20.0 HP)	Each	108300.00

Sr. No.	Description	Unit	Amended Rate(Rs.)
5.6	Providing, installation, testing and commissioning of submersible dewatering pump set conforming to relevant IS codes and as per scope of work and Technical Specifications, with water proof winding. Pump shall be suitable for various delivery head and discharge with stainless steel shaft, impeller, pump and motor body. Motor suitable for working on 415 V \pm 10%, 3 Ph, 50 Hz A.C. Supply, with cable guard. The pump set shall be suitable for direct coupling, with suitable suction strainer etc. complete in all respect as per specification, scope of work and direction of Engineer in Charge of following power rating, suitable for prescribed duty conditions mentioned in TD.		
5.6.1	0.75 KW (1.0 HP)	Each	43642.00
5.6.2	1.5 KW (2.0 HP)	Each	48533.00
5.6.3	2.2 KW (3.0 HP)	Each	85561.00
5.6.4	3.7 KW (5.0 HP)	Each	112273.00
5.7	Providing and fixing at site with necessary packing, Horizontal Centrifugal Split Casting pumps with 4 pole induction motor operating at synchronised speed of speed 1500 RPM as per IS 12615: 2011 or amended up to date, CI casing and casing ring, SS 316 impeller, SS 410 Shaft and shaft sleeve, coupling guard, common base plate, foundation bolts, Cement concrete foundation etc. complete with all respect as per the specification and scope of work and direction of Engineer in Charge of following range of duty conditions. Note: Duty condition of required pump shall also be mentioned in BoQ.		
5.7.1	Discharge 20 to 30 LPS and head 20 to 30 M	Each	179864.00
5.7.2	Discharge 20 to 30 LPS and head 31 to 40 M	Each	261894.00
5.7.3	Discharge 20 to 30 LPS and head 41 to 50 M	Each	313504.00
5.7.4	Discharge 20 to 30 LPS and head 51 to 60 M	Each	364607.00
5.7.5	Discharge 20 to 30 LPS and head 61 to 70 M	Each	455000.00
5.7.6	Discharge 20 to 30 LPS and head 71 to 80 M	Each	455000.00
5.7.7	Discharge 20 to 30 LPS and head 81 to 90 M	Each	455000.00
5.7.8	Discharge 31 to 40 LPS and head 20 to 30 M	Each	261894.00
5.7.9	Discharge 31 to 40 LPS and head 31 to 40 M	Each	313504.00
5.7.10	Discharge 31 to 40 LPS and head 41 to 50 M	Each	364607.00
5.7.11	Discharge 31 to 40 LPS and head 51 to 60 M	Each	455000.00
5.7.12	Discharge 31 to 40 LPS and head 61 to 70 M	Each	536538.00
5.7.13	Discharge 31 to 40 LPS and head 71 to 80 M	Each	536538.00
5.7.14	Discharge 31 to 40 LPS and head 81 to 90 M	Each	635185.00
5.7.15	Discharge 41 to 50 LPS and head 20 to 30 M	Each	313504.00
5.7.16	Discharge 41 to 50 LPS and head 31 to 40 M	Each	455000.00
5.7.17	Discharge 41 to 50 LPS and head 41 to 50 M	Each	455000.00
5.7.18	Discharge 41 to 50 LPS and head 51 to 60 M	Each	536538.00
5.7.19	Discharge 41 to 50 LPS and head 61 to 70 M	Each	635185.00
5.7.20	Discharge 41 to 50 LPS and head 71 to 80 M	Each	754723.00
5.7.21	Discharge 41 to 50 LPS and head 81 to 90 M	Each	754723.00
5.7.22	Discharge 51 to 60 LPS and head 20 to 30 M	Each	364607.00
5.7.23	Discharge 51 to 60 LPS and head 31 to 40 M	Each	455000.00
5.7.24	Discharge 51 to 60 LPS and head 41 to 50 M	Each	536538.00
5.7.25	Discharge 51 to 60 LPS and head 51 to 60 M	Each	635185.00
5.7.26	Discharge 51 to 60 LPS and head 61 to 70 M	Each	754723.00

Sr. No.	Description	Unit	Amended Rate(Rs.)
5.7.27	Discharge 51 to 60 LPS and head 71 to 80 M	Each	927926.00
5.7.28	Discharge 51 to 60 LPS and head 81 to 90 M	Each	927926.00
5.7.29	Discharge 61 to 70 LPS and head 20 to 30 M	Each	364607.00
5.7.30	Discharge 61 to 70 LPS and head 31 to 40 M	Each	455000.00
5.7.31	Discharge 61 to 70 LPS and head 41 to 50 M	Each	635185.00
5.7.32	Discharge 61 to 70 LPS and head 51 to 60 M	Each	754723.00
5.7.33	Discharge 61 to 70 LPS and head 61 to 70 M	Each	927926.00
5.7.34	Discharge 61 to 70 LPS and head 71 to 80 M	Each	927926.00
5.7.35	Discharge 61 to 70 LPS and head 81 to 90 M	Each	1070902.00
5.7.36	Discharge 71 to 80 LPS and head 20 to 30 M	Each	455000.00
5.7.37	Discharge 71 to 80 LPS and head 31 to 40 M	Each	536538.00
5.7.38	Discharge 71 to 80 LPS and head 41 to 50 M	Each	754723.00
5.7.39	Discharge 71 to 80 LPS and head 51 to 60 M	Each	927926.00
5.7.40	Discharge 71 to 80 LPS and head 61 to 70 M	Each	927926.00
5.7.41	Discharge 71 to 80 LPS and head 71 to 80 M	Each	1070902.00
5.7.42	Discharge 71 to 80 LPS and head 81 to 90 M	Each	1282359.00
5.7.43	Discharge 81 to 90 LPS and head 20 to 30 M	Each	455000.00
5.7.44	Discharge 81 to 90 LPS and head 31 to 40 M	Each	635185.00
5.7.45	Discharge 81 to 90 LPS and head 41 to 50 M	Each	754723.00
5.7.46	Discharge 81 to 90 LPS and head 51 to 60 M	Each	927926.00
5.7.47	Discharge 81 to 90 LPS and head 61 to 70 M	Each	927926.00
5.7.48	Discharge 81 to 90 LPS and head 71 to 80 M	Each	1282359.00
5.7.49	Discharge 81 to 90 LPS and head 81 to 90 M	Each	1282359.00
5.7.50	Discharge 91 to 100 LPS and head 20 to 30 M	Each	536538.00
5.7.51	Discharge 91 to 100 LPS and head 31 to 40 M	Each	754723.00
5.7.52	Discharge 91 to 100 LPS and head 41 to 50 M	Each	927926.00
5.7.53	Discharge 91 to 100 LPS and head 51 to 60 M	Each	927926.00
5.7.54	Discharge 91 to 100 LPS and head 61 to 70 M	Each	1070902.00
5.7.55	Discharge 91 to 100 LPS and head 71 to 80 M	Each	1282359.00
5.7.56	Discharge 91 to 100 LPS and head 81 to 90 M	Each	1428405.00
5.7.57	Discharge 101 to 120 LPS and head 20 to 30 M	Each	536538.00
5.7.58	Discharge 101 to 120 LPS and head 31 to 40 M	Each	754723.00
5.7.59	Discharge 101 to 120 LPS and head 41 to 50 M	Each	927926.00
5.7.60	Discharge 101 to 120 LPS and head 51 to 60 M	Each	1070902.00
5.7.61	Discharge 101 to 120 LPS and head 61 to 70 M	Each	1282359.00
5.7.62	Discharge 101 to 120 LPS and head 71 to 80 M	Each	1282359.00
5.7.63	Discharge 101 to 120 LPS and head 81 to 90 M	Each	1798036.00
5.7.64	Discharge 121 to 140 LPS and head 20 to 30 M	Each	635185.00
5.7.65	Discharge 121 to 140 LPS and head 31 to 40 M	Each	927926.00
5.7.66	Discharge 121 to 140 LPS and head 41 to 50 M	Each	1070902.00
5.7.67	Discharge 121 to 140 LPS and head 51 to 60 M	Each	1282359.00
5.7.68	Discharge 121 to 140 LPS and head 61 to 70 M	Each	1282359.00
5.7.69	Discharge 121 to 140 LPS and head 71 to 80 M	Each	1479948.00
5.7.70	Discharge 121 to 140 LPS and head 81 to 90 M	Each	1798036.00
5.7.71	Discharge 141 to 160 LPS and head 20 to 30 M	Each	754723.00
5.7.72	Discharge 141 to 160 LPS and head 31 to 40 M	Each	927926.00
5.7.73	Discharge 141 to 160 LPS and head 41 to 50 M	Each	1282359.00
5.7.74	Discharge 141 to 160 LPS and head 51 to 60 M	Each	1428405.00
5.7.75	Discharge 141 to 160 LPS and head 61 to 70 M	Each	1798036.00
5.7.76	Discharge 141 to 160 LPS and head 71 to 80 M	Each	1798036.00
5.7.77	Discharge 141 to 160 LPS and head 81 to 90 M	Each	2127544.00

Sr. No.	Description	Unit	Amended Rate(Rs.)
5.7.78	Discharge 161 to 180 LPS and head 20 to 30 M	Each	927926.00
5.7.79	Discharge 161 to 180 LPS and head 31 to 40 M	Each	1070902.00
5.7.80	Discharge 161 to 180 LPS and head 41 to 50 M	Each	1282359.00
5.7.81	Discharge 161 to 180 LPS and head 51 to 60 M	Each	1479948.00
5.7.82	Discharge 161 to 180 LPS and head 61 to 70 M	Each	1798036.00
5.7.83	Discharge 161 to 180 LPS and head 71 to 80 M	Each	1860530.00
5.7.84	Discharge 161 to 180 LPS and head 81 to 90 M	Each	2127544.00
5.7.85	Discharge 181 to 200 LPS and head 20 to 30 M	Each	927926.00
5.7.86	Discharge 181 to 200 LPS and head 31 to 40 M	Each	1282359.00
5.7.87	Discharge 181 to 200 LPS and head 41 to 50 M	Each	1428405.00
5.7.88	Discharge 181 to 200 LPS and head 51 to 60 M	Each	1798036.00
5.7.89	Discharge 181 to 200 LPS and head 61 to 70 M	Each	1860530.00
5.7.90	Discharge 181 to 200 LPS and head 71 to 80 M	Each	2178397.00
5.7.91	Discharge 181 to 200 LPS and head 81 to 90 M	Each	2390539.00
5.8	Providing and fixing at site with necessary packing, Horizontal Centrifugal Split Casting pumps with 4 pole induction motor operating at synchronised speed of speed 1500 RPM as per IS 12615: 2011 or amended up to date , CI casing and casing ring, SS 316 impeller, SS 410 Shaft and shaft sleeve, coupling guard, common base plate, foundation bolts, Cement concrete foundation etc. complete with all respect as per the specification and scope of work and direction of Engineer in Charge of following range of duty conditions. Note: Duty condition of required pump shall also be mentioned in BoQ.		
5.8.1	Discharge 201 to 220 LPS and head 20 to 30 M	Each	927926.00
5.8.2	Discharge 201 to 220 LPS and head 31 to 40 M	Each	1282359.00
5.8.3	Discharge 201 to 220 LPS and head 41 to 50 M	Each	1798036.00
5.8.4	Discharge 201 to 220 LPS and head 51 to 60 M	Each	1860530.00
5.8.5	Discharge 201 to 220 LPS and head 61 to 70 M	Each	2127544.00
5.8.6	Discharge 221 to 240 LPS and head 20 to 30 M	Each	1070902.00
5.8.7	Discharge 221 to 240 LPS and head 31 to 40 M	Each	1428405.00
5.8.8	Discharge 221 to 240 LPS and head 41 to 50 M	Each	1798036.00
5.8.9	Discharge 221 to 240 LPS and head 51 to 60 M	Each	2127544.00
5.8.10	Discharge 221 to 240 LPS and head 61 to 70 M	Each	2178397.00
5.8.11	Discharge 241 to 260 LPS and head 20 to 30 M	Each	1070902.00
5.8.12	Discharge 241 to 260 LPS and head 31 to 40 M	Each	1479948.00
5.8.13	Discharge 241 to 260 LPS and head 41 to 50 M	Each	1798036.00
5.8.14	Discharge 241 to 260 LPS and head 51 to 60 M	Each	2127544.00
5.8.15	Discharge 241 to 260 LPS and head 61 to 70 M	Each	2390539.00
5.8.16	Discharge 261 to 280 LPS and head 20 to 30 M	Each	1282359.00
5.8.17	Discharge 261 to 280 LPS and head 31 to 40 M	Each	1798036.00
5.8.18	Discharge 261 to 280 LPS and head 41 to 50 M	Each	1860530.00
5.8.19	Discharge 261 to 280 LPS and head 51 to 60 M	Each	2178397.00
5.8.20	Discharge 261 to 280 LPS and head 61 to 70 M	Each	2654578.00
5.8.21	Discharge 281 to 300 LPS and head 20 to 30 M	Each	1282359.00
5.8.22	Discharge 281 to 300 LPS and head 31 to 40 M	Each	1798036.00
5.8.23	Discharge 281 to 300 LPS and head 41 to 50 M	Each	2127544.00
5.8.24	Discharge 281 to 300 LPS and head 51 to 60 M	Each	2178397.00
5.8.25	Discharge 281 to 300 LPS and head 61 to 70 M	Each	2654578.00
5.8.26	Discharge 301 to 325 LPS and head 20 to 30 M	Each	1428405.00
5.8.27	Discharge 301 to 325 LPS and head 31 to 40 M	Each	1798036.00

Sr. No.	Description	Unit	Amended Rate(Rs.)
5.8.28	Discharge 301 to 325 LPS and head 41 to 50 M	Each	2178397.00
5.8.29	Discharge 301 to 325 LPS and head 51 to 60 M	Each	2390539.00
5.8.30	Discharge 301 to 325 LPS and head 61 to 70 M	Each	2888448.00
5.8.31	Discharge 326 to 350 LPS and head 20 to 30 M	Each	1428405.00
5.8.32	Discharge 326 to 350 LPS and head 31 to 40 M	Each	1860530.00
5.8.33	Discharge 326 to 350 LPS and head 41 to 50 M	Each	2178397.00
5.8.34	Discharge 326 to 350 LPS and head 51 to 60 M	Each	2654578.00
5.8.35	Discharge 326 to 350 LPS and head 61 to 70 M	Each	2888448.00
5.8.36	Discharge 351 to 400 LPS and head 20 to 30 M	Each	1798036.00
5.8.37	Discharge 351 to 400 LPS and head 31 to 40 M	Each	2127544.00
5.8.38	Discharge 351 to 400 LPS and head 41 to 50 M	Each	2390539.00
5.8.39	Discharge 351 to 400 LPS and head 51 to 60 M	Each	2888448.00
5.8.40	Discharge 351 to 400 LPS and head 61 to 70 M	Each	3292301.00

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Chapter 6

Valves and Appurtenances

S. No.	Description	Unit	Amended Rate (Rs.)
6.1	Providing, lowering, aligning, fixing in position in pipe line, CI D/F Sluice valves straight and pocket less body passage of approved make of following Pressure rating & dia complete, confirming to IS:14846 (amended up to date) and of following specifications: Body, Bonnet, Wedge, Gland, Thrust Plate, Cap & Hand wheel of Grey cast iron of IS:210/ FG200 Stem - AISI- 410 ,Body Seat ring, Wedge facing ring & Bushes - LTB2/ SS , Face to face dimensions as per IS 14846/2000 (amended up to date) ,Epoxy (Non-Toxic- suitable for drinking water) applied inside and outside, Flanges Drilled as per IS 1538. Nut-Bolt confirming to IS:1363 and IS: 1367/ CS/ galvanised steel Insertion rubber of black EPDM 6mm thick . Sluice valves including all jointing & jointing material, labour, testing and commissioning along with pipe line as per Technical Specifications and as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.1.1	Manually Operated CI Sluice valve of Class PN-1.0		
6.1.1.1	80 mm HW	Each	6219.00
6.1.1.2	100 mm HW	Each	8768.00
6.1.1.3	125 mm HW	Each	11421.00
6.1.1.4	150 mm HW	Each	14321.00
6.1.1.5	200 mm HW	Each	22889.00
6.1.1.6	250 mm HW	Each	36242.00
6.1.1.7	300 mm HW	Each	48899.00
6.1.1.8	350 mm with Gear	Each	91666.00
6.1.1.9	400 mm with Gear	Each	119775.00
6.1.1.10	450 mm with Gear	Each	158530.00
6.1.1.11	500 mm with Gear	Each	194498.00
6.1.1.12	600 mm with Gear	Each	279467.00
6.1.2	Motorized Sluice Valves with Electric Actuator with integral starter of Class PN 1.0		
6.1.2.1	80 mm dia	Each	120737.00
6.1.2.2	100 mm dia	Each	125977.00
6.1.2.3	125 mm dia	Each	131963.00
6.1.2.4	150 mm dia	Each	140146.00
6.1.2.5	200 mm dia	Each	158601.00
6.1.2.6	250 mm dia	Each	179889.00
6.1.2.7	300 mm dia	Each	193720.00
6.1.2.8	350 mm dia	Each	241672.00
6.1.2.9	400 mm dia	Each	273273.00
6.1.2.10	450 mm dia	Each	318061.00
6.1.2.11	500 mm dia	Each	364790.00
6.1.2.12	600 mm dia.	Each	453083.00
6.2	Providing, lowering, laying, aligning, fixing in position CI D/F short body pattern type butterfly valves having body, disc and end cover in graded cast iron generally conforming to (IS13095/1991amended up to date), synthetic rubber faced ring secured on disc by retaining ring with SS steel screw stub shaft of SS riding in Teflon bearing including C.C. foundation/ structural steel support, material, labour, testing along with pipe line and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work		
6.2.1	Manually Operated Butterfly Valve PN-1.0		
6.2.1.1	100 mm dia (With lever operated)	Each	13623.00

S. No.	Description	Unit	Amended Rate (Rs.)
6.2.1.2	125 mm dia (With lever operated)	Each	17582.00
6.2.1.3	150 mm dia (With lever operated)	Each	21877.00
6.2.1.4	200 mm dia (With Gear Operated)	Each	35527.00
6.2.1.5	250 mm dia (With Gear Operated)	Each	44938.00
6.2.1.6	300 mm dia (With Gear Operated)	Each	55807.00
6.2.1.7	350 mm dia (With Gear Operated)	Each	68974.00
6.2.1.8	400 mm dia (With Gear Operated)	Each	87057.00
6.2.1.9	450 mm dia (With Gear Operated)	Each	105224.00
6.2.1.10	500 mm dia (With Gear Operated)	Each	125666.00
6.2.1.11	600 mm dia (With Gear Operated)	Each	174298.00
6.2.1.12	700 mm dia (With Gear Operated)	Each	249036.00
6.2.1.13	800 mm dia (With Gear Operated)	Each	343398.00
6.2.1.14	900 mm dia (With Gear Operated)	Each	443112.00
6.2.1.15	1000 mm dia (With Gear Operated)	Each	567529.00
6.3	Providing, lowering, aligning, fixing in position in pipe line, CI double flanged swing type Non Return Valves (NRV) of approved make of following Pressure rating & dia complete, confirming to IS: 5312 (part -1)/ 2004 (amended up to date) and of following specifications: Body, Cover & disc of Grey cast iron of IS:210/ FG200. Face to face dimensions as per IS 5312 (part -1):2004 , Flanges Drilled as per IS:1538. Epoxy (Non-Toxic & suitable for drinking water) applied on body, cover and disc inside and outside . Body seat ring of SS/CS Door face ring - EPDM/ Neoprene (food grade quality) ,Shaft of SS- AISI- 410 ,Hinge Malleable cast iron / SS AISI- 316 ,Bonnet Gasket EPDM, Bush- Leaded tin Bronze/ PTET, Gasket EPDM/NBR ,Nut-Bolt as per IS:1363 and IS: 1367 (galvanised steel) ,Insertion rubber of black EPDM 6mm thick. Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.3.1	Class PN 1.0		
6.3.1.1	80 mm dia	Each	6461.00
6.3.1.2	100 mm dia	Each	8402.00
6.3.1.3	125 mm dia	Each	11158.00
6.3.1.4	150 mm dia	Each	13954.00
6.3.1.5	200 mm dia	Each	24087.00
6.3.1.6	250 mm dia	Each	38872.00
6.3.1.7	300 mm dia	Each	53847.00
6.3.1.8	350 mm dia	Each	94889.00
6.3.1.9	400 mm dia	Each	133124.00
6.3.1.10	450 mm dia	Each	169082.00
6.3.1.11	500 mm dia	Each	233006.00
6.3.1.12	600 mm dia	Each	366871.00

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S. No.	Description	Unit	Amended Rate (Rs.)
6.4	Providing, lowering, aligning, fixing in position in pipe line, CI double flanged Dual plate check valve of approved make of following Pressure rating & dia complete, as per API: 594/ API: 598 and of following specifications: Body & Cover of Grey cast iron of IS:210/ FG200 , Disc / plates - Cast steel ,Disc seal ring of EPDM/ NBR (food grade quality) ,Body seat of SS ,Face to face dimensions as per API: 594 ,Flanges Drilled as per IS:1538. Epoxy (Non-Toxic & suitable for drinking water) applied on body & cover inside and outside . Shaft/Stop Pin of SS- AISI- 304/410 , Hinge SS AISI 316/304 / CS ,Spring SS AISI 316/304 , Bonnet Gasket EPDM ,Bush- Brass with EPDM/NBR "O "ring seal.Nut-Bolt conforming to IS:1363 and IS: 1367 (galvanised steel) ,Insertion rubber of black EPDM 6mm thick . Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.4.1	Class PN 1.0	Each	6178.00
6.4.1.1	80 mm dia	Each	8025.00
6.4.1.2	100 mm dia	Each	9892.00
6.4.1.3	125 mm dia	Each	12726.00
6.4.1.4	150 mm dia	Each	22038.00
6.4.1.5	200 mm dia	Each	36352.00
6.4.1.6	250 mm dia	Each	49669.00
6.4.1.7	300 mm dia	Each	62268.00
6.4.1.8	350 mm dia	Each	88779.00
6.4.1.9	400 mm dia	Each	112929.00
6.4.1.10	450 mm dia	Each	120577.00
6.4.1.11	500 mm dia	Each	164363.00
6.4.1.12	600 mm dia	Each	
6.5	Providing, lowering, aligning, fixing in position and Jointing in pipe line, CI single Air Valve Flanged/ Screwed type of approved makes for following pressure rating & dia complete, confirming to IS: 14845-2000 (amended up to date) and of following specifications: Body , Cover and Cowl - Grey Cast Iron as per IS:210- FG 200 ,Float- Stainless Steel AISI 304 / IS: 3444 ,Float Guide- HBT1,Body seat ring - Leaded tin bronze/ SS , Seal ring and face ring - EPDM/NBR, Ends flanged according to IS 6418 or Screwed type shall have external pipe threads conforming to IS 554 Fasteners - CS Epoxy paint inside outside of food grade safe. for drinking water ,Valves including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of connecting tee, pipe piece and earth work.		
6.5.1	Class PN 1.0	Each	2480.00
6.5.1.1	15 mm S-1 Type	Each	3234.00
6.5.1.2	25 mm S-1 Type	Each	3979.00
6.5.1.3	40 mm S-1 Type	Each	4981.00
6.5.1.4	50 mm S-2 Type		
6.5.2	Class PN 1.6	Each	2773.00
6.5.2.1	15 mm S-1 Type	Each	3507.00
6.5.2.2	25 mm S-1 Type	Each	4719.00
6.5.2.3	40 mm S-1 Type	Each	5252.00
6.5.2.4	50 mm S-2 Type		

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S. No.	Description	Unit	Amended Rate (Rs.)
6.6	Providing, lowering, aligning, fixing in position and Jointing in pipe line, CI Double Acting Kinetic Air Valve with isolating Sluice Valve of approved makes for following pressure rating & dia complete, confirming to IS: 14845-2000 (amended up to date) and of following specifications: Body, Cover and Cowl - Grey Cast Iron as per IS:210- FG 200, Float - Stainless Steel AISI 304 / IS: 3444, Float Guide- HBT1, HP Orifice- HTB2/ SS, Body seat ring - Leaded tin bronze/ SS, Seal ring and face ring - EPDM/NBR, Ends flanged according to IS 6418, Fasteners - CS, Epoxy paint inside outside of food grade safe for drinking water, Valves including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of connecting tee, pipe piece and earth work.		
6.6.1	Class PN 1.0	Each	12374.00
6.6.1.1	40 mm	Each	13843.00
6.6.1.2	50 mm	Each	18416.00
6.6.1.3	80 mm	Each	24942.00
6.6.1.4	100 mm	Each	51954.00
6.6.1.5	150 mm	Each	79774.00
6.6.1.6	200 mm		
6.6.2	Class PN 1.6	Each	13222.00
6.6.2.1	40 mm	Each	14802.00
6.6.2.2	50 mm	Each	18419.00
6.6.2.3	80 mm	Each	25624.00
6.6.2.4	100 mm	Each	52236.00
6.6.2.5	150 mm	Each	80928.00
6.6.2.6	200 mm		
6.7	Providing, lowering, aligning, fixing in position and Jointing in pipe line, CI Body Flanged End Tamper proof Kinetic Air Valve of approved makes of following pressure rating and dia and as per following specifications: Governing standard - AWWA C512/ IS:14845:2000(amended up to date), Body, High pressure cover, Low pressure cover, Cowl and Joint support ring - Grey cast iron of grade IS:210/FG200, Float- LP ball & HP ball : AISI 304 stainless Steel, Float Guide- HTB1, Seat ring & Gasket - EPDM/NBR, HP Orifice & HP orifice plug : HTB2/ SS, Bush: Bronze, Flanges as per IS/ BS, Drilled as per IS:1538. Epoxy paint (Non-Toxic & suitable for drinking water) applied on body & cover inside and outside Fasteners - CS/ Galvanised steel, Outlet of big orifice will have a screen to prevent Tamper of float, with CI metal seated D/F Non rising stem Sluice Valves as per (IS: 14846 amended up to date) PN 1.0 ratings Valves including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of connecting tee, pipe piece and earth work.		
6.7.1	Class PN 1.0	Each	13241.00
6.7.1.1	40 mm	Each	14109.00
6.7.1.2	50 mm	Each	18237.00
6.7.1.3	80 mm	Each	24320.00
6.7.1.4	100 mm	Each	41307.00
6.7.1.5	150 mm	Each	58875.00
6.7.1.6	200 mm		

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S. No.	Description	Unit	Amended Rate (Rs.)
6.8	Providing, lowering, aligning, fixing in position in pipe line at work site, DI D/F Resilient seated (soft seated) Sluice Valves (Gate Valves) , Vacuum tight(bubble tight), straight and pocket less body passage of approved make of following class & dia complete confirming to BS-EN-1171/ AWWA C-509 and of following specifications: Body & bonnet of Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865 or equivalent grade as per IS :3896-part2 1985 and subsequent revisions, Wedge of same material as body & shall vulcanised rubber lined with EPDM (food grade quality) and seals of NBR Face to face dimensions as per BS 5163-89/ IS 14846/2000 (amended up to date) /Din 3202 F4, Stem/ spindle of SS AISI 316/410 Electrostatic epoxy powder(EP-P)/ Fusion bond epoxy (Non-Toxic- suitable for drinking water) coated with minimum thickness of 250 microns inside and outside, Drilled as per IS 1538. Nut-Bolt confirming to IS:1363 and IS: 1367 (Galvanised steel) Insertion rubber of black EPDM 6mm thick. Suitable support structure as per directions of EIC, Sluice valves including all jointing & jointing material, labour, testing and commissioning along with pipe line as per Technical Specifications and as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.8.1	Manually Operated Resilient Seated Sluice Valves of Class PN 1.6		
6.8.1.1	80 mm dia	Each	9599.00
6.8.1.2	100 mm dia	Each	11800.00
6.8.1.3	125 mm dia	Each	17832.00
6.8.1.4	150 mm dia	Each	20518.00
6.8.1.5	200 mm dia	Each	31698.00
6.8.1.6	250 mm dia	Each	53688.00
6.8.1.7	300 mm dia	Each	67874.00
6.8.1.8	350 mm dia	Each	129786.00
6.8.1.9	400 mm dia	Each	168623.00
6.8.1.10	450 mm dia	Each	226574.00
6.8.1.11	500 mm dia	Each	293032.00
6.8.1.12	600 mm dia.	Each	431444.00
6.8.1.13	700 mm dia. With Gear	Each	807614.00
6.8.1.14	800 mm dia. With Gear	Each	1137778.00
6.8.1.15	900 mm dia. With Gear	Each	1597899.00
6.8.1.16	1000 mm dia. With Gear	Each	2125695.00
6.8.2	Motorized Sluice Valves with Electric Actuator and integral starter of Class PN 1.0		
6.8.2.1	80 mm dia	Each	132426.00
6.8.2.2	100 mm dia	Each	136674.00
6.8.2.3	125 mm dia	Each	144043.00
6.8.2.4	150 mm dia.	Each	150399.00
6.8.2.5	200 mm dia	Each	173735.00
6.8.2.6	250 mm dia	Each	200411.00
6.8.2.7	300 mm dia	Each	220173.00
6.8.2.8	350 mm dia	Each	287994.00
6.8.2.9	400 mm dia	Each	322376.00
6.8.2.10	450 mm dia	Each	408337.00
6.8.2.11	500 mm dia	Each	475663.00
6.8.2.12	600 mm dia.	Each	600613.00
6.8.3	Motorized Sluice Valves with Electric Actuator and integral starter of Class PN 1.6		
6.8.3.1	80 mm dia	Each	134679.00
6.8.3.2	100 mm dia	Each	138280.00
6.8.3.3	125 mm dia	Each	148606.00
6.8.3.4	150 mm dia	Each	151924.00
6.8.3.5	200 mm dia	Each	170122.00
6.8.3.6	250 mm dia	Each	199521.00

S. No.	Description	Unit	Amended Rate (Rs.)
6.8.3.7	300 mm dia	Each	214185.00
6.8.3.8	350 mm dia	Each	287564.00
6.8.3.9	400 mm dia	Each	320622.00
6.8.3.10	450 mm dia	Each	398637.00
6.8.3.11	500 mm dia	Each	475832.00
6.8.3.12	600 mm dia.	Each	610319.00
6.9	Providing, lowering, aligning, fixing in position in pipe line, DI D/F resilient seated (soft seated) short body pattern type double eccentric Butterfly valves of approved make of following class & dia complete confirming to BS EN 593/ BS 5155/ IS 13095/1991 amended up to date and of following specifications: Body, disc and end cover of Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865 or equivalent grade as per IS :3896-part2-1985 and subsequent revisions, Face to face dimensions as per DIN 3202 F4/ IS 13095 Drilled as per IS:1538. Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on both body and disc inside and outside. Disc seal ring of EPDM/ Neoprene (food grade quality) and disc seal retaining ring of SS/CS. Shaft of SS-AISI- 410/316 & shaft bearings- bronze/ PTET or Teflon with EPDM/NBR "O "ring seal, Nut-Bolt confirming to IS:1363 and IS: 1367 (Galvanised steel) Insertion rubber of black EPDM 6mm thick. Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.9.1	Class PN 1.6, Manually Operated with Gear		
6.9.1.1	100 mm dia	Each	53433.00
6.9.1.2	150 mm dia	Each	62710.00
6.9.1.3	200 mm dia	Each	64808.00
6.9.1.4	250 mm dia	Each	71688.00
6.9.1.5	300 mm dia	Each	83105.00
6.9.1.6	350 mm dia	Each	104096.00
6.9.1.7	400 mm dia	Each	135436.00
6.9.1.8	450 mm dia	Each	171010.00
6.9.1.9	500 mm dia	Each	215476.00
6.9.1.10	600 mm dia	Each	270343.00
6.9.1.11	700 mm dia	Each	373272.00
6.9.1.12	800 mm dia.	Each	498133.00
6.9.1.13	900 mm dia.	Each	637981.00
6.9.1.14	1000 mm dia.	Each	833418.00
6.9.2	Class PN 1.0, Motorised Operated		
6.9.2.1	200 mm dia	Each	175475.00
6.9.2.2	250 mm dia	Each	186393.00
6.9.2.3	300 mm dia	Each	213288.00
6.9.2.4	350 mm dia	Each	233729.00
6.9.2.5	400 mm dia	Each	265222.00
6.9.2.6	450 mm dia	Each	299042.00
6.9.2.7	500 mm dia	Each	332937.00
6.9.2.8	600 mm dia	Each	389805.00
6.9.2.9	700 mm dia	Each	504330.00
6.9.2.10	800 mm dia.	Each	645868.00
6.9.2.11	900 mm dia.	Each	785507.00
6.9.2.12	1000 mm dia.	Each	1011875.00
6.9.3	Class PN 1.6, Motorised Operated		
6.9.3.1	200 mm dia	Each	175113.00
6.9.3.2	250 mm dia	Each	192658.00
6.9.3.3	300 mm dia	Each	220468.00

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S. No.	Description	Unit	Amended Rate (Rs.)
6.9.3.4	350 mm dia	Each	242109.00
6.9.3.5	400 mm dia	Each	274992.00
6.9.3.6	450 mm dia	Each	309573.00
6.9.3.7	500 mm dia	Each	346047.00
6.9.3.8	600 mm dia	Each	401652.00
6.9.3.9	700 mm dia.	Each	520335.00
6.9.3.10	800 mm dia.	Each	686546.00
6.9.3.11	900 mm dia.	Each	821743.00
6.9.3.12	1000 mm dia.	Each	1060415.00
6.10	Providing, lowering, aligning, fixing in position in pipe line, DI resilient seated (soft seated) Concentric Wafer type, Butterfly valves of approved make of following Pressure rating & dia complete confirming to BS EN 593/ BS 5155/ IS 13095/1991 amended up to date and of following specifications: Body- Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865 or equivalent grade as per IS :3896-part2-1985 and subsequent revisions, Disc - DI (same as body material) / CS, Face to face dimensions as per DIN 3202 F4/ IS 13095 , Flanges Drilled as per IS:1538 ,Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on both body and disc inside and outside . Liner & Disc seal - EPDM/ Neoprene (food grade quality) ,Shaft of SS- AISI- 410/420 & shaft bearings- bronze/ PTET or Teflon with EPDM/NBR "O "ring seal , Nut-Bolt confirming to IS:1363 and IS: 1367/ Galvanised steel, Insertion rubber of black EPDM 6mm thick ,Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.10.1	Class PN 1.6, Wafer Type		
6.10.1.1	80 mm (Lever Operated)	Each	10774.00
6.10.1.2	100 mm (Lever Operated)	Each	13020.00
6.10.1.3	125 mm (Lever Operated)	Each	21904.00
6.10.1.4	150 mm (Lever Operated)	Each	24099.00
6.10.1.5	200 mm (with Gear)	Each	37056.00
6.10.1.6	250 mm (with Gear)	Each	48714.00
6.10.1.7	300 mm (with Gear)	Each	53753.00
6.11	Providing, lowering, aligning, fixing in position in pipe line, DI D/F resilient seated (soft seated) Swing type Non Return Valve of approved make of following Pressure rating & dia complete, generally confirming to IS: 5312 (part -1)/ 2004 (amended up to date) and of following specifications: Body, Bonnet & disc of Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865 or equivalent grade as per IS :3896-part2-1985 and subsequent revisions, Face to face dimensions as per IS 5312 (part -1):2004 Drilled as per IS:1538. Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on body, cover and disc inside and outside . Disc seal ring of EPDM/ Neoprene (food grade quality) and disc seal retaining ring of SS/CS.Shaft of SS- AISI- 410, Hinge SS AISI 316/410 ,Bonnet Gasket EPDM ,Bush- Brass with EPDM/NBR "O "ring seal Nut-Bolt confirming to IS:1363 and IS: 1367 (galvanised steel) Insertion rubber of black EPDM 6mm thick. Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.11.1	Class PN 1.6		
6.11.1.1	80 mm dia	Each	9464.00
6.11.1.2	100 mm dia	Each	12411.00

S. No.	Description	Unit	Amended Rate (Rs.)
6.11.1.3	125 mm dia	Each	17659.00
6.11.1.4	150 mm dia	Each	21451.00
6.11.1.5	200 mm dia	Each	35512.00
6.11.1.6	250 mm dia	Each	54968.00
6.11.1.7	300 mm dia	Each	76752.00
6.11.1.8	350 mm dia	Each	132142.00
6.11.1.9	400 mm dia	Each	178872.00
6.11.1.10	450 mm dia	Each	232089.00
6.11.1.11	500 mm dia	Each	276755.00
6.11.1.12	600 mm dia	Each	367489.00
6.12	Providing, lowering, aligning, fixing in position in pipe line, DI double flanged resilient seated Dual plate check valve of approved make of following Pressure rating & dia complete, as per API: 594/ API: 598 and of following specifications: Body & Bonnet of Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865 or equivalent grade as per IS :3896-part2-1985 and subsequent revisions, Disc / plates - SG-400/12 or CF-8M, Face to face dimensions as per API: 594 , Flanges Drilled as per IS:1538. Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on body and cover inside and outside . Disc seal ring of EPDM/ Neoprene (food grade quality) and disc seal retaining ring of SS/CS. Shaft of SS- AISI- 410 , Hinge SS AISI 316/304, Spring SS AISI 316/304, Bonnet Gasket EPDM , Bush- Brass with EPDM/NBR "O "ring seal, Nut-Bolt confirming to IS:1363 and IS: 1367 (galvanised steel) , Insertion rubber of black EPDM 6mm thick .Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning along with pipeline as per Technical Specification & as per direction of Engineer-in-charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.12.1	Class PN 1.6	Each	11599.00
6.12.1.1	80 mm dia	Each	13584.00
6.12.1.2	100 mm dia	Each	14509.00
6.12.1.3	125 mm dia	Each	21213.00
6.12.1.4	150 mm dia	Each	37792.00
6.12.1.5	200 mm dia	Each	57774.00
6.12.1.6	250 mm dia	Each	79409.00
6.12.1.7	300 mm dia	Each	86816.00
6.12.1.8	350 mm dia	Each	115493.00
6.12.1.9	400 mm dia	Each	137920.00
6.12.1.10	450 mm dia	Each	165058.00
6.12.1.11	500 mm dia	Each	

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S. No.	Description	Unit	Amended Rate (Rs.)
6.13	Providing, lowering, aligning, fixing in position and Jointing in pipe line, DI Body Flanged End Tamper proof Kinetic Air Valve of approved makes of following pressure rating and dia and as per following specifications: Governing standard - AWWA C512/ IS:14845:2000(amended up to date) Body, High pressure cover, Low pressure cover, Cowl and Joint support ring - Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865, Float- LP ball & HP ball : AISI 304 stainless Steel, Seat ring & Gasket - EPDM/NBR ,HP Orifice & HP orifice plug : Bronze/ SS ,Bush: Bronze ,Flanges as per IS/ BS, Drilled as per IS:1538. Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on body & cover inside and outside fasteners - CS/ Galvanised steel, Outlet of big orifice will have a screen to prevent Tamper of float, with DI metal seated D/F Non rising stem Sluice Valves as per (IS: 14846 amended up to date) PN 1.6 ratings Valves including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of connecting tee, pipe piece and earth work.		
6.13.1	Class PN 1.6		
6.13.1.1	40 mm dia	Each	15030.00
6.13.1.2	50 mm dia	Each	15120.00
6.13.1.3	80 mm dia	Each	19959.00
6.13.1.4	100 mm dia	Each	26848.00
6.13.1.5	150 mm dia	Each	46105.00
6.13.1.6	200 mm dia	Each	61041.00
6.14	Providing, lowering, aligning, fixing in position and Jointing in pipe line, combination Air Release Valve Kinetic type with single chamber housed Double orifice and have 3 functions , large Air exhaust, small Air venting and large air intake during vacuum of pipeline of approved makes of following pressure rating and dia and as per following specifications: Governing standard - AWWA C512 ,Body and bonnet of Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or GR SG-400/12 as per IS 1865,Float & internal trim: AISI 304 stainless Steel, Seat ring & Gasket - EPDM/NBR Drilled as per IS:1538. Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied on body & cover inside and outside Fasteners - CS/ Galvanised steel ,Outlet of big orifice will have a screen to prevent Tamper of float, Big orifice size should be equal or larger than the inlet flange bore, for fully comply with AWWA C512.), Valve including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer in charge. Note: Rates are exclusive of connecting tee, pipe piece and earth work.		
6.14.1	Class PN 1.6		
6.14.1.1	50 mm dia	Each	18973.00
6.14.1.2	80 mm dia	Each	24094.00
6.14.1.3	100 mm dia	Each	31723.00
6.14.1.4	150 mm dia	Each	51349.00
6.14.1.5	200 mm dia	Each	66525.00

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S. No.	Description	Unit	Amended Rate (Rs.)
6.15	Providing, lowering, aligning & fixing in position DI D/F Plunger Type Flow Control Valve of approved make of following Pressure rating & dia complete and of following specifications: Body- Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or EN-JS 1030, Plunger/ Piston - Stainless steel AISI- 304/ Gr 1.4301, Piston Guides- Bronze Welded Overlay / SS Shaft/Crank/Spindle- Stainless steel AISI- 410/ Gr 1.4021 Body Seat Ring- Stainless steel AISI- 316/304/ Bronze IS:318-LTB2 ,Seal (O- ring / Quad ring)- EPDM/ NBR, Bearing Bush - Bronze IS:318-LTB2,Slotted cylinder / Strainer / Diffuser- AISI- 420/ 304,Nut- Bolts - SS, Face to Face- as per ANSI B 16.1/ EN 558-1 and Flange ends should be as per ANSI B-16.5, Class 150 and Class 300/ EN-1092-2. Insertion rubber of black EPDM 6mm thick ,Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied both inside and outside . Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning as per Technical Specification & as per direction of Engineer-In- Charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.15.1	Plunger Type Flow Control Valve		
6.15.1.1	80 mm dia	Each	338820.00
6.15.1.2	100mm dia	Each	384067.00
6.15.1.3	125 mm dia	Each	431132.00
6.15.1.4	150mm dia	Each	467804.00
6.15.1.5	200mm dia	Each	557109.00
6.15.1.6	250mm dia	Each	655791.00
6.15.1.7	300mm dia	Each	804152.00
6.15.1.8	350mm dia	Each	860474.00
6.15.1.9	400mm dia	Each	1088666.00
6.15.1.10	450mm dia	Each	1172558.00
6.15.1.11	500mm dia	Each	1558418.00
6.15.1.12	600mm dia	Each	1954565.00
6.15.1.13	700mm dia	Each	3255900.00
6.15.1.14	800mm dia	Each	4234729.00
6.15.1.15	900mm dia	Each	5851308.00
6.15.1.16	1000mm dia	Each	5977677.00
6.16	Providing, lowering, aligning and fixing in position DI D/F Diaphragm type Pressure Reducing / Flow Control Valve of approved make of following Pressure rating & dia complete and of following specifications: Body & Bonnet - Ductile cast iron of grade GGG40/GGG50 as per DIN 1693 or ASTM A 536, Diaphragm and Resilient seal disc - Flexible, non-wicking nylon fabric reinforced synthetic elastomer -Buna-N / EPDM (FDA / WRAS approved), Body Seat Ring - Cast stainless steel ASTM- A 351 GR. CF8M / AISI- 316, raised, replaceable inline & onsite Stem - Stainless Steel, AISI-316/410, raised, replaceable inline & onsite Spring & Bearing bush- Stainless Steel, AISI-316 ,Disc guide, disc retainer & diaphragm washer - Stainless Steel, AISI-304/ 316/Bronze ,Seal- EPDM/ NBR ,Pilot Body- Stainless Steel, AISI-304/ CF8 or Brass Tubing - Stainless Steel, AISI-304 / Copper ,Solenoid Valve- Stainless Steel, AISI-316 ,Throttling plug - Stainless Steel, AISI-304, Nut- Bolts - SS Face to Face- as per ANSI B 16.1/ EN 558-1 and Flange ends should be as per ANSI B-16.5, Class 150 and Class 300/ EN-1092-2. Insertion rubber of black EPDM 6mm thick Electrostatic Epoxy Powder(EP-P) / Fusion Bonded Epoxy (Non-Toxic & suitable for drinking water) coated with minimum thickness of 250 micron applied both inside and outside. Suitable support structure as per directions of EIC including jointing & jointing material, labour, testing and commissioning as per Technical Specification & as per direction of Engineer-In- Charge. Note: Rates are exclusive of tail piece/ dismantling joints and earth work.		
6.16.1	Pilot operated SCADA Compatible Diaphragm Type Pressure Reducing Valves (Class PN 1.6)		
6.16.1.1	80 mm dia	Each	116695.00

S. No.	Description	Unit	Amended Rate (Rs.)
6.16.1.2	100 mm dia	Each	128608.00
6.16.1.3	125 mm dia	Each	151689.00
6.16.1.4	150 mm dia	Each	175198.00
6.16.1.5	200 mm dia	Each	216569.00
6.16.1.6	250 mm dia	Each	296523.00
6.16.1.7	300 mm dia	Each	392768.00
6.16.1.8	350 mm dia	Each	519664.00
6.16.1.9	400 mm dia	Each	682369.00
6.16.1.10	450 mm dia	Each	957345.00
6.16.1.11	500 mm dia	Each	1325994.00
6.16.1.12	600 mm dia	Each	1776749.00
6.16.2	Diaphragm Type Flow Control Valve With Electrical Actuator suitable for scada (PN 1.6)		
6.16.2.1	80 mm dia	Each	110489.00
6.16.2.2	100 mm dia	Each	120656.00
6.16.2.3	125 mm dia	Each	132770.00
6.16.2.4	150 mm dia	Each	146648.00
6.16.2.5	200 mm dia	Each	191667.00
6.16.2.6	250 mm dia	Each	261543.00
6.16.2.7	300 mm dia	Each	343475.00
6.16.2.8	350 mm dia	Each	481585.00
6.16.2.9	400 mm dia	Each	862062.00
6.16.2.10	450 mm dia	Each	1221275.00
6.16.2.11	500 mm dia	Each	1535237.00
6.16.2.12	600 mm dia	Each	2317383.00
<u>Dismantling/ Expansion Joints</u>			
6.17	Providing, lowering, laying, aligning, fixing in position and jointing CI dismantling joint (Suitable for Sluice valves etc.) as per IS specifications complete of the following sizes including all jointing material, cost of all labour, testing and commissioning Technical Specifications and as per direction of Engineer. Class PN 1.0		
6.17.1	80 mm dia	Each	3150.00
6.17.2	100 mm dia.	Each	3844.00
6.17.3	125 mm dia.	Each	4869.00
6.17.4	150 mm dia.	Each	6018.00
6.17.5	200 mm dia.	Each	8817.00
6.17.6	250 mm dia.	Each	12171.00
6.17.7	300 mm dia.	Each	13697.00
6.17.8	350 mm dia.	Each	18980.00
6.17.9	400 mm dia.	Each	24272.00
6.17.10	450 mm dia.	Each	29375.00
6.17.11	500 mm dia.	Each	36222.00
6.17.12	600 mm dia.	Each	51071.00
6.18	Providing, lowering, laying, aligning, fixing in position and jointing MS dismantling joint (Fabricated Steel) as per IS specifications complete of the following sizes including all jointing material, cost of all labour, testing and commissioning Technical Specifications and as per direction of Engineer.		
6.18.1	80 mm dia	Each	4601.00
6.18.2	100 mm dia.	Each	5522.00
6.18.3	125 mm dia.	Each	7292.00
6.18.4	150 mm dia.	Each	9638.00
6.18.5	200 mm dia.	Each	12139.00
6.18.6	250 mm dia.	Each	15820.00
6.18.7	300 mm dia.	Each	20144.00

S. No.	Description	Unit	Amended Rate (Rs.)
6.18.8	350 mm dia.	Each	28180.00
6.18.9	400 mm dia.	Each	38877.00
6.18.10	450 mm dia.	Each	45523.00
6.18.11	500 mm dia.	Each	51892.00
6.18.12	600 mm dia.	Each	67475.00
6.18.13	700 mm dia.	Each	100635.00
6.18.14	800 mm dia.	Each	125773.00
6.18.15	900 mm dia.	Each	167645.00
6.18.16	1000 mm dia.	Each	187072.00
6.19	Providing, installation, testing and commissioning of following Stain less steel AISI 304 Expansion bellows of 10/16 bar rating with tie rods as per technical specifications and layout drawings including jointing material like nuts, bolts, rubber gaskets etc. complete in all respect as per technical specification and as per direction of Engineer.		
6.19.1	80 mm dia.	Each	7104.00
6.19.2	100 mm dia.	Each	8767.00
6.19.3	125 mm dia.	Each	9873.00
6.19.4	150 mm dia.	Each	12168.00
6.19.5	200 mm dia.	Each	12627.00
6.19.6	250 mm dia.	Each	15334.00
6.19.7	300 mm dia.	Each	19029.00
6.19.8	350 mm dia.	Each	22915.00
6.19.9	400 mm dia.	Each	30553.00
6.19.10	450 mm dia.	Each	34652.00
6.19.11	500 mm dia.	Each	55510.00
6.19.12	600 mm dia.	Each	67429.00
6.19.13	700 mm dia.	Each	92082.00
6.19.14	800 mm dia.	Each	114855.00
6.19.15	900 mm dia.	Each	136908.00
6.19.16	1000 mm dia.	Each	182530.00
6.20	Removing of existing CI/ DI Double flange sluice valves, non return valves, butterfly valves etc. in existing Distribution/ Rising Main/ Transmission Main pipe line of following sizes, works include de-jointing of valve, dewatering, taking it out of the pit with adequate safety arrangement at site and then refill the pit from excavated sand by ramming it at sides of pipe & up to ground level. Work shall be done as per specification, scope of work and direction of Engineer-in-charge. All old material shall be removed safely & all old material shall be deposited in Divisional Store. Note: Rates are exclusive of earth work and road cutting.		
6.20.1	80 mm	Each	479.00
6.20.2	100 mm	Each	520.00
6.20.3	125 mm	Each	646.00
6.20.4	150 mm	Each	688.00
6.20.5	200 mm	Each	750.00
6.20.6	250 mm	Each	959.00
6.20.7	300 mm	Each	1413.00
6.20.8	350 mm	Each	1648.00
6.20.9	400 mm	Each	1850.00
6.20.10	450 mm	Each	2513.00
6.20.11	500 mm	Each	2774.00
6.20.12	600 mm	Each	3077.00

Chapter 7

DOL / Star delta starter type LT panels

S. No.	Description	Unit	Amended Rate (Rs.)
7.1	SITC DOL Starter type LT Panel of following rating, all switchgears are of PHED approved makes, CRCA sheet of Panel enclosure is of TATA/ Essar 1.6mm/ 2.0mm thick duly Electrostatic Powder Coated with angle frame including other ancillaries (Insulators, Acrylic Sheet , Backlight Sheet, Hardware, Wire, Name Plates, Lugs, Pvc Channel , Mcb Chanel , Lock, Hing , Bidding , Connectors, Neutral Links , Spiral , Saddle & Packing Material) etc. complete as per Technical Specifications and as per direction of Engineer-In-Charge.		
7.1.1	DOL STARTER 2.2 KW (3 HP)- : For 2 motors (1 W+ 1S) I/C - MCB 25A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 30/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 16A ,TP, 10 KA, C Curve (2), Power Cont 9A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (4-6A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 2 Kvar (2)	Each	49356.00
7.1.2	DOL STARTER 3.7KW (5 HP) - : For 2 motors (1 W+ 1S) I/C - MCB 32A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 30/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 25A ,TP, 10 KA, C Curve (2), Power Cont 12A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (7-10A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 2 Kvar (2)	Each	50413.00
7.1.3	DOL STARTER 5.5 KW (7.5HP) - : For 2 motors (1 W+ 1S) I/C - MCB 40A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 30/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 25A ,TP, 10 KA, C Curve (2), Power Cont 12A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (7-10A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 2 Kvar (2)	Each	51448.00

S. No.	Description	Unit	Amended Rate (Rs.)
7.2	SITC STAR DELTA Starter type LT Panel of following rating: all switchgears are of PHED approved makes, CRCA sheet of Panel enclosure is of TATA/ Essar 1.6mm/ 2.0mm thick duly Electrostatic Powder Coated with angle frame including other ancillaries (Insulators, Acrylic Sheet , Backlight Sheet, Hardware, Wire, Name Plates, Lugs, Pvc Channel , Mcb Chanel , Lock, Hing , Bidding , Connectors, Neutral Links , Spiral , Saddle & Packing Material) etc. and 100A/ 125A ,TPN, Aluminium Bus Bar with Colour coated heat shrinkage sleeves complete as per Technical Specifications and as per direction of Engineer-In-Charge.		
7.2.1	STAR DELTA STARTER 7.5 KW (10.0 HP) - : For 2 motors (1 W+ 1S) I/C - MCB 63A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 60/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 32A ,TP, 10 KA, C Curve (2), Power Cont 18A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (7-10A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 5Kvar (2), S/D Timer(2)	Each	65077.00
7.2.2	STAR DELTA STARTER 9.3 KW (12.5 HP) - : For 2 motors (1 W+ 1S) I/C - MCB 63A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 60/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 40A ,TP, 10 KA, C Curve (2), Power Cont 18A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (7-10A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 5Kvar (2), S/D Timer(2)	Each	66938.00
7.2.3	STAR DELTA STARTER 11.0 KW (15.0 HP) - : For 2 motors (1 W+ 1S) I/C - MCB 63A ,FP, 10 KA, C Curve (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 60/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCB 40A ,TP, 10 KA, C Curve (2), Power Cont 25A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (9-13A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 7.5Kvar (2), S/D Timer(2)	Each	70561.00

S. No.	Description	Unit	Amended Rate (Rs.)
7.2.4	STAR DELTA STARTER 15.0 KW (20.0 HP) : For 2 motors (1 W+ 1S) I/C- MCCB 100A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (1), Spreaders (2), Extended Rotary Handle (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 100/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCCB 63A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (2), Power Cont 32A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (12-18A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 7.5Kvar (2), S/D Timer(2)	Each	99226.00
7.2.5	STAR DELTA STARTER 18.5 KW (25.0 HP) - : For 2 motors (1 W+ 1S) I/C- MCCB 125A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (1), Spreaders (2), Extended Rotary Handle (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 125/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCCB 100A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (2), Power Cont 32A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (16-24A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 10 Kvar (2), S/D Timer(2)	Each	108534.00
7.2.6	STAR DELTA STARTER 22.0 KW (30.0 HP) - : For 2 motors (1 W+ 1S) I/C- MCCB 125A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (1), Spreaders (2), Extended Rotary Handle (1) , Analog Voltmeter 96*96mm (0-500V) (1), Volt Selector Switch (1) , Analog Ammeter 96*96mm (0-60A) (1), Amp. Selector Switch (1), C. T. 125/5A CL 1.0 5VA (3) , Indicating Lights (Red-1, Yellow -1) (2), Indicating Lights (Blue - 1) (1), Control MCB 6A SP 10 KA C Curve (3) and O/G- MCCB 100A TPN 25 KA With T/M Based Over Current & Short Circuit Protection (2), Power Cont 40A TP AC3 Duty(2), 2 NO+2 NC Aux. Block(2), Thermal Overload Relay (23-32A)(2), Control MCB 6A SP 10 KA C Curve (2), Single Phase Preventer (2), Indicating Lights (Red- 1, Green - 1, Amber-1)(6), Push Button 22.5 (Red - 1, Green - 1)(4), Selector Switch 1 Pole, 2 Way (2), Capacitor 440VAC Heavy Duty MPP Type 12.5 Kvar (2), S/D Timer(2)	Each	122057.00

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Chapter 8

Construction of pump house and boundary wall

S. No.	Description	Unit	Amended Rate (Rs.)
8.1	Construction of Pump house of required size suitable for installation of maximum 4 no. monoblock pump sets as per approved GA drawing, scope of work and technical specification complete work in all respect including electrical works for lighting and fans, rain water drainage. The plinth area of pump house shall be area of measurement.	sqm	20291.00
8.2	Construction of boundary wall of Brick/ stone masonry as per enclosed GA drawing, scope of work and technical specifications complete work in all respect. Brief details of boundary wall parameter is as below: 1. Depth of foundation- 900 mm. 2. PCC in M-10, width -900 mm and thickness 100 mm, 3. Stone masonry in CM: 1:6 section of foundation above PCC, 600 mm (W) x 450 mm (D) and 450 mm (W) x 450 mm (D) 4. Superstructure work: Stone masonry in CM: 1:6, W-300, height-1650 mm,/ Brick work in CM: 1:6 W-230 mm, height- 1650 mm. 5. Cement mortar pointing on Stone masonry and cement mortar plaster 20 mm thick on brick masonry in CM 1:6. 6. Expansion joint shall be on every 30 mtr. 7. On top of wall there shall be CC Coping 75 mm thick (1:2:4) shall be provided. 8. Pillar for main gate 350x350 mm in size is part of boundary wall. 9. Cement paint of approved colour in 3 coat shall be done.	RMT	6045.00
8.3	Providing and fixing steel, gate, grating and grills made of angles, tees, square bars, flats or black pipe with hold fast and fitting complete as per design and drawing including cutting welding and fabrication with priming coat of red oxide and two coat of enamel paints.	Kg	122.00

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Chapter 9

Construction of Valve Chamber

S. No.	Description	Unit	Amended Rate (Rs.)
9.1	Construction of RCC Sluice valve chamber for different type of valves including earthwork excavation, 100mm PCC M15 as leveling course, RCC M25 grade for base slab, side wall & cover slab, including cost of steel reinforcement, form work, Pre-cast, Plastic encapsulated CI/MS Foot Rest, MS flats for the support of pre-cast, proper curing of concrete work complete in all respect as per specifications and standard drawings and as directed by Engineer-in-Charge.		
9.1.1.	For Class-AA loading		
9.1.1.1	Sluice valve chamber of size 1.13 m x 0.85 m x 1.325 m- for pipe size-upto 100 mm	Each	38034.00
9.1.1.2	Sluice valve chamber of size 1.17m x 0.95m x 1.47m for pipe size-from 125-to-150mm	Each	42459.00
9.1.1.3	Sluice valve chamber of size 1.26m x 1.185m x 1.88m for pipe size-from 200-to-300mm	Each	54470.00
9.1.1.4	Sluice valve chamber of size 1.39m x 1.43m x 2.245m for pipe size-from 350-to-450mm	Each	68271.00
9.1.1.5	Sluice valve chamber of size 1.61m x 1.75m x 2.85m for pipe size-from 500-to-700mm	Each	94400.00
9.1.2	For Class-A loading		
9.1.2.1	Sluice valve chamber of size 1.13m x 0.85m x 1.27m for pipe size-upto 100mm	Each	30764.00
9.1.2.2	Sluice valve chamber of size 1.17m x 0.95m x 1.415m for pipe size-from 125-to-150mm	Each	34557.00
9.1.2.3	Sluice valve chamber of size 1.26m x 1.185m x 1.82m for pipe size-from 200-to-300mm	Each	45198.00
9.1.2.4	Sluice valve chamber of size 1.39m x 1.43m x 2.185m for pipe size-from 350-to-450mm	Each	58157.00
9.1.2.5	Sluice valve chamber of size 1.61m x 1.75m x 2.795m for pipe size-from 500-to-700mm	Each	82600.00
9.1.3	For in-campus Valve Chambers		
9.1.3.1	Sluice valve chamber of size 1.13m x 0.85m x 1.225m for pipe size-upto 100mm	Each	29816.00
9.1.3.2	Sluice valve chamber of size 1.17m x 0.95m x 1.37m for pipe size-from 125-to-150mm	Each	33504.00
9.1.3.3	Sluice valve chamber of size 1.26m x 1.185m x 1.76m for pipe size-from 200-to-300mm	Each	43407.00
9.1.3.4	Sluice valve chamber of size 1.39m x 1.43m x 2.125m for pipe size-from 350-to-450mm	Each	54891.00
9.1.3.5	Sluice valve chamber of size 1.61m x 1.75m x 2.72m for pipe size-from 500-to-700mm	Each	75857.00

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S. No.	Description	Unit	Amended Rate (Rs.)
9.2	Construction of RCC Air valve chamber for different type of valves including earthwork excavation, 100mm PCC M15 as leveling course, RCC M25 grade for base slab, side wall & cover slab , including cost of steel reinforcement , form work, Pre-cast, Plastic encapsulated CI/MS Foot Rest, MS flats for the support of pre-cast, proper curing of concrete work complete in all respect as per specifications and standard drawings and as directed by Engineer-in-Charge.		
9.2.1	For Class-AA loading		
9.2.1.1	Air valve chamber of size 0.9m x 1m x 1.695m for air valve size-from 50 mm-to-80mm	Each	41195.00
9.2.1.2	Air valve chamber of size 1m x 1.1m x 1.945m for air valve size of 100mm	Each	47727.00
9.2.1.3	Air valve chamber of size 1.05m x 1.4m x 2.42m for air valve size of 150mm	Each	61529.00
9.2.1.4	Air valve chamber of size 1.325m x 1.7m x 2.875m for air valve size of 200mm	Each	85129.00
9.2.2	For Class-A loading		
9.2.2.1	Air valve chamber of size 0.9m x 1m x 1.71m for air valve size-from 50 mm-to-80mm	Each	34663.00
9.2.2.2	Air valve chamber of size 1m x 1.1m x 1.96m for air valve size of 100mm	Each	40984.00
9.2.2.3	Air valve chamber of size 1.05m x 1.4m x 2.42m for air valve size of 150mm	Each	53311.00
9.2.2.4	Air valve chamber of size 1.325m x 1.7m x 2.9m for air valve size of 200mm	Each	73961.00
9.2.3	For in-campus Valve Chambers		
9.2.3.1	Air valve chamber of size 0.9m x 1m x 1.66m for air valve size-from 50 mm-to-80mm	Each	33609.00
9.2.3.2	Air valve chamber of size 1m x 1.1m x 1.91m for air valve size of 100mm	Each	39720.00
9.2.3.3	Air valve chamber of size 1.05m x 1.4m x 2.37m for air valve size of 150mm	Each	51520.00
9.2.3.4	Air valve chamber of size 1.325m x 1.7m x 2.825m for air valve size of 200mm	Each	69852.00
9.3	Construction of RCC Scour valve chamber wet type for different type of valves including earthwork excavation, 100mm PCC M15 as leveling course, RCC M25 grade for base slab, side wall & cover slab , including cost of steel reinforcement , form work, Pre-cast, Plastic encapsulated CI/MS Foot Rest, MS flats for the support of pre-cast, proper curing of concrete work complete in all respect as per specifications and standard drawings and as directed by Engineer-in-Charge.		
9.3.1	For Class-AA loading		
9.3.1.1	Scour valve chamber of size 1.13m x 0.85m x 1.985m for connecting pipe size-upto 100mm	Each	45725.00
9.3.1.2	Scour valve chamber of size 1.175m x 0.95m x 2.285m for connecting pipe size-more than 100 mm & upto 150mm	Each	49307.00

S. No.	Description	Unit	Amended Rate (Rs.)
9.3.1.3	Scour valve chamber of size 1.2m x 1.08m x 2.485m for connecting pipe size- more than 150 mm & upto 200mm	Each	55629.00
9.3.2	For Class-A loading		
9.3.2.1	Scour valve chamber of size 1.13m x 0.85m x 1.95m for connecting pipe size- upto 100mm	Each	40246.00
9.3.2.2	Scour valve chamber of size 1.175m x 0.95m x 2.25m for connecting pipe size- more than 100 mm & upto 150mm	Each	46357.00
9.3.2.3	Scour valve chamber of size 1.2m x 1.08m x 2.45m for connecting pipe size- more than 150 mm & upto 200mm	Each	51941.00
9.4	Construction of RCC Scour valve chamber dry type for different type of valves including earthwork excavation, 100mm PCC M15 as leveling course, RCC M25 grade for base slab, side wall & cover slab, including cost of steel reinforcement, form work, Pre-cast, Plastic encapsulated CI/MS Foot Rest, MS flats for the support of pre-cast, proper curing of concrete work complete in all respect as per specifications and standard drawings and as directed by Engineer-in-Charge.		
9.4.1	For Class-AA loading		
9.4.1.1	Scour valve chamber of size 1.13m x 0.85m x 1.985m for connecting pipe size- upto 100mm	Each	39614.00
9.4.1.2	Scour valve chamber of size 1.175m x 0.95m x 2.285m for connecting pipe size- more than 100 mm & upto 150mm	Each	42143.00
9.4.1.3	Scour valve chamber of size 1.2m x 1.08m x 2.485m for connecting pipe size- more than 150 mm & upto 200mm	Each	51309.00
9.4.2	For Class-A loading		
9.4.2.1	Scour valve chamber of size 1.13m x 0.85m x 1.95m for connecting pipe size- upto 100mm	Each	38245.00
9.4.2.2	Scour valve chamber of size 1.175m x 0.95m x 2.25m for connecting pipe size- more than 100 mm & upto 150mm	Each	44145.00
9.4.2.3	Scour valve chamber of size 1.2m x 1.08m x 2.45m for connecting pipe size- more than 150 mm & upto 200mm	Each	49623.00
9.5	Construction of RCC pillar for following size of air valves including earthwork excavation, RCC M25 grade for base slab, vertical pillar, including cost of steel reinforcement, GI (class-B)/MS vertical pipe, form work, proper curing of concrete work complete in all respect as per standard specifications and drawings and as directed by Engineer.		
9.5.1	Air valve pillar for air valves size of 80mm dia	Each	21071.00
9.5.2	Air valve pillar for air valves size of 100mm dia	Each	23073.00
9.5.3	Air valve pillar for air valves size of 150mm dia	Each	32134.00
9.5.4	Air valve pillar for air valves size of 200mm dia	Each	38561.00

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Chapter 10

Solar based water supply schemes

S. No.	Description	Unit	Amended Rate (Rs.)
10.1	Supply, installation, testing and commissioning of MNRE approved Grid tied Solar Panels with inverter, meter, cable etc. suitable for Rooftop installation as well as Utility Scale Solar Power Projects with 25 years of Linear Generation warranty. Work includes designing of solar panel area and MS frame and foundation on ground/roof of Pump house or CWR, showing arrangement of panel in available space, installation of PV module on MS frame as per approved design and drawings. Mounting structure shall be suitably designed to withstand wind velocity up to 150km/hr. Grid Tie Transformer less inverters, Multiple independent MPPTs, Peak efficiency of >98%. Connect up to multiple strings PV arrays, Easy & fast connection, Built-in string-level monitoring, IP65 protection level, Wi-Fi / internet based remote monitoring with 5 years warranty. All cabling up to panel and metre, earthing etc. required accessories and taxes are inclusive. The work shall be executed as per detailed technical specifications, approved drawing and direction of Engineer in Charge. Note: There shall be 5 year service warranty for panel, inverter, meter, cable etc. and suitable provision shall be included in tender document.		
10.1.1	Solar panels up to 10 KW at a single location.	Watt	60.00
10.1.2	Solar panels more than 10 KW and up to 50 KW at a single location.	Watt	57.00
10.2	Supply, installation, testing and commissioning of MNRE approved off Grid Solar Panels for running of motor pumps with 25 years of Linear Generation warranty, Work includes designing of solar panel area and MS frame and foundation on ground/roof of Pump house or CWR, showing arrangement of panel in available space, installation of PV module on MS frame as per approved design and drawings. Mounting structure shall be suitably design to withstand wind velocity up to 150km/hr. The work shall be executed as per detailed technical specifications, approved drawing and direction of Engineer in Charge. Note: There shall be 5 year service warranty for solar panel and mounting structure and suitable provision shall be included in tender document.	Watt	43.00

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S. No.	Description	Unit	Amended Rate (Rs.)
10.3	Supply, installation, testing and commissioning of MNRE approved off Grid Solar Panels for running of motor pumps with 25 years of Linear Generation warranty, Work includes designing of solar panel area and MS fabricated structure 120 micron hot dip galvanized iron, showing arrangement of panel in available space and installation of PV module on frame structure such that minimum height of lower edge of panel shall be 4.0 mtr from ground level to safeguard against damage and theft as per indicative drawing enclosed with the bid document. The foundation of structure shall be in RCC. Mounting structure shall be suitably designed to withstand wind velocity up to 150km/hr. The work shall be executed as per detailed technical specifications, approved drawing and direction of Engineer in Charge. Note: There shall be 5 year service warranty for solar panel and mounting structure and suitable provision shall be included in tender document.	Watt	61.00
10.4	Supply, installation, testing and commissioning of MNRE approved off Grid Solar Panels for running of motor pumps with 25 years of Linear Generation warranty, Work includes designing of solar panel area and structure, showing arrangement of panel on rectangular OHSR with flat roof/ MS fabricated structure with polyethylene tank and installation of PV module on above structure as per approved design and drawings. Mounting structure shall be suitably design to withstand wind velocity up to 150km/hr. The work shall be as per detailed technical specifications, approved drawing and direction of Engineer in Charge. This item does not include cost of OHSR/ MS fabricated structure with tank but includes cost of items required for installation of solar panels on top of the tank. Note: There shall be 5 year service warranty for solar panel and mounting structure and suitable provision shall be included in tender document.	Watt	51.00
10.5	Providing, installation, testing and commissioning of AC submersible pump sets with inbuilt or individual solar pump controller with Maximum power point tracking (MPPT) for optimally use the solar panel and maximize water discharge to deliver maximum water during the day including PVC flat submersible cable from controller to motor pumps.. Solar pump shall be of Stainless steel construction and performance shall be as per scope of work and minimum lift of water shall be as per defined in scope. Pump controller shall have Adequate protection against dry operation of motor pump set, and against hails and storms. Full protection against open circuit, accidental short circuit and reverse polarity should be provided. A good reliable on/off switch be provided. The cable shall be ISI marked three core PVC flat submersible cable as per IS 694:1990 or amended up to date (standard insulation) and conductor as per class 5 of IS 8130:1980 or amended up to date. The duty condition of pump set shall be as per scope of work and entire work shall be executed as per technical specification and direction of Engineer in charge.		
10.5.1	0.75 KW (1.0 HP)	Each	73440.00
10.5.2	1.5 KW (2.0 HP)	Each	78984.00
10.5.3	2.2 KW (3.0 HP)	Each	113863.00

S. No.	Description	Unit	Amended Rate (Rs.)
10.5.4	3.7 KW (5.0 HP)	Each	145415.00
10.5.5	5.5 KW (7.5 HP)	Each	186620.00
10.5.6	7.5 KW (10.0 HP)	Each	203624.00
10.5.7	9.3 KW (12.5 HP)	Each	228406.00
10.5.8	11 KW (15.0 HP)	Each	250196.00
10.6	<p>Supply, installation, testing and commissioning of DC submersible pump sets with inbuilt or individual solar pump controller with Maximum power point tracking (MPPT) for optimally use the solar panel and maximize water discharge to deliver maximum water during the day including PVC flat submersible cable from controller to motor pumps.</p> <p>Solar pump shall be of Stainless steel construction and performance shall be as per scope of work and minimum lift of water shall be as per defined in scope.</p> <p>Pump controller shall have Adequate protection against dry operation of motor pump set, and against hails and storms. Full protection against open circuit, accidental short circuit and reverse polarity should be provided. A good reliable on/off switch suitable for DC use is to be provided. The cable shall be ISI marked three core PVC flat submersible cable as per IS 694:1990 or amended up to date (standard insulation) and conductor as per class 5 of IS 8130:1980 or amended up to date.</p> <p>The duty condition of pump set shall be as per scope of work and entire work shall be as per technical specification and direction of Engineer in charge.</p>		
10.6.1	0.75 KW (1.0 HP)	Each	111031.00
10.6.2	1.5 KW (2.0 HP)	Each	129667.00
10.6.3	2.2 KW (3.0 HP)	Each	162446.00
10.7	Supply, installation, testing and commissioning of Remote monitoring unit on off grid solar controller for remote ON/OFF, parameter setting, monitoring and troubleshooting through mobile etc. complete. Web charges and data charges for 5 year during service warranty etc. complete in all respect as per technical specification and as per direction of Engineer.	Each	45830.00
10.8	<p>Providing, installation, testing and commissioning structural steel work riveted or bolted in built up sections, trusses and framed work, including cutting, hoisting for following staging and capacity of Rotational Moulded Polyethylene water storage tank on it as per indicative drawing given in the bid document. On the Polyethylene tanks, there shall be provision of suitable space for installation of solar panels up to 5.0 KW and further additional 2.5 KW on the side of Steel structure if required as per indicative drawing. Cost of solar panels is not included in this item.</p> <p>The structural steel shall be 120 micron hot dip galvanized iron and foundation of structure shall be in RCC with minimum depth as 2.0 mtr</p>		

S. No.	Description	Unit	Amended Rate (Rs.)
	(other than rocky strata). The work includes P&F of Polyethylene Water Storage Tank(IS: 12701, ISI marked, indicating the BIS license No.) of approved make with cover. Providing & fixing 50 mm dia ISI marked G.I. class B pipe for inlet, outlet and over flow pipe and 32 mm GI class B pipe for wash out with GM gate valves at inlet and outlet pipe Including making connection etc. complete as per drawing, technical specification and direction of Engineer in In charge. The scope includes inlet GI pipe from ground level to water tank and outlet pipe from water tank to ground and up to 2.0 mtr away from foundation and overflow pipe is to be interconnected in distribution pipe line. Wash out pipe shall be taken up to a suitable point minimum 5.0 mtr away from tank. Water level controller shall installed to monitor level in tank and shall automatically shut off motor when tank is filled .		
	Note: There shall be 5 year service warranty for structure, tank, fittings etc. and suitable provision shall be included in tender document.		
10.8.1	5000 Litre X 2 Nos. PE water tank, staging 10 meter.	Each	683885.00
10.8.2	7500 Litre X 2 Nos. PE water tank, staging 10 meter.	Each	747900.00
10.8.3	5000 Litre X 2 Nos. PE water tank , staging 12 meter.	Each	769570.00
10.8.4	7500 Litre X 2 Nos. PE water tank, staging 12 meter.	Each	833585.00

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Chapter 11

Instrumentation

S. No.	Description	Unit	Amended Rate (Rs.)
Electromagnetic Flow meter			
11.1	<p>SITC of D/F Full bore type Electromagnetic Flow Meter of approved make of following dia and specifications complete: Media : Water (Raw/ Chlorinated) , Pressure : up to 1.5MPa, Process temp: - 50 deg C, Flow/Meter Tube : SS 304, Electrode : SS AISI 316L / Hastelloy C276/ Tantalum, Lining Material : Hard Rubber/ Neoprene / Poly-urethane (PU) , Flange : SS / CS, Flange Standard & Rating : ANSI 150, Coil housing : SS AISI 304/ Carbon Steel/ Die Cast Aluminium, with anticorrosive paint & provide completely sealed (leak proof) construction as per requirement of IEC 60529, Accuracy : ± 0.5 % M.V.- velocity 0.3 to 10 m/s, Transmitter/ signal convertor Enclosure : Die Cast Aluminium, Power Supply : 80-240 V AC - 50Hz, Output 1 : 4-20 mA, Output 2: Pulse, Communication Output : RS 485/ Heart, Display Type : LCD/ LED Display, Cable Entry : M20 X 1.5, Provision of RAM/PROM to store calibration and configuration parameters and totalizer value during power failure, Protection category- IP 68 for sensor (flow tube) and IP 67 for transmitter/ convertor, including Surge Arrester, if required, and all materials required for making connection with existing pipeline including cutting the existing pipeline etc. complete in all respect as per technical specification and as per direction of Engineer In-Charge.</p> <p>Note: Rates are exclusive of tail piece / dismantling joints and earth work.</p>		
11.1.1	EFM 50 mm	Each	93140.00
11.1.2	EFM 80 mm	Each	103887.00
11.1.3	EFM100 mm	Each	113701.00
11.1.4	EFM 125 mm	Each	126772.00
11.1.5	EFM 150 mm	Each	139989.00
11.1.6	EFM 200 mm	Each	142267.00
11.1.7	EFM 250 mm	Each	177788.00
11.1.8	EFM 300 mm	Each	219760.00
11.1.9	EFM 400 mm	Each	275777.00
11.1.10	EFM 450 mm	Each	388012.00
11.1.11	EFM 500 mm	Each	425245.00
11.1.12	EFM 600 mm	Each	558809.00

S. No.	Description	Unit	Amended Rate (Rs.)
ULTRASONIC FLOW METER			
11.2	SITC of Ultrasonic Flow Meter of approved make of following dia sized pipelines and specifications complete: Media : Water (Raw/Clear), Pressure : up to 1.5MPa, Process temp: - 50 deg C, Flow velocity range: - 10 m/s to +10m/s (bidirectional), Power supply- 80 to 240 v/ AC, 50 Hz., Output 1 : 4-20 mA, Communication Output : RS 485, Display Type : LCD/ LED Display, Cable Entry : M20 X 1.5, Acoustic path: single/ dual, Accuracy : $\pm 1\%$ of M.V (max.) for size 50-300mm and $\pm 2\%$ of M.V (max.) for size 350-2000mm (single path) , Transmitter Enclosure: Cast Aluminium, Sensor cable: encapsulated, Sensor mounting method: V / Z type, Protection type: IP 67, including all materials required for Ultrasonic Flow Meter complete in all respect as per technical specification and as per direction of Engineer In-Charge. Note: Rates are exclusive of tail piece / dismantling joints and earth work.		
11.2.1	UFM 200mm -600 mm (CLAMP ON TYPE)	Each	346225.00
11.2.2	UFM 200mm -600 mm (INSERTION TYPE)	Each	404560.00
BULK FLOW METER (MECHANICAL TURBINE TYPE)			
11.3	SITC of Bulk Flow Meter with removable mechanism class "B" confirming to ISO:4064:2005/ IS: 2373 of approved make of following dia sized pipelines and specifications complete: Media : Water (Clear), Temp. 50 deg., Pr. rating: PN16, Protection type: IP- 68, Body Material : IS-210 Gr. FG-200, Accuracy Class :Class B ($\pm 2\%$ @ Nominal flow rate), Magnetic Drive, Dry Dial, Epoxy powder coated, Pulse out put option, Anti-magnetic protection including all materials and making connection with existing pipeline required for Bulk Flow Meter including cutting the existing pipeline etc. complete in all respect as per technical specification and as per direction of Engineer In-Charge. Note: Rates are exclusive of tail piece / dismantling joints and earth work.		
11.3.1	BFM 80 mm	Each	13283.00
11.3.2	BFM100 mm	Each	16934.00
11.3.3	BFM 125 mm	Each	23657.00
11.3.4	BFM 150 mm	Each	26054.00
11.3.5	BFM 200 mm	Each	32570.00
11.3.6	BFM 250 mm	Each	64380.00
11.3.7	BFM 300 mm	Each	86669.00
11.3.8	BFM 400 mm	Each	145263.00
11.3.9	BFM 450 mm	Each	166459.00
11.3.10	BFM 500 mm	Each	247657.00
11.3.11	BFM 600 mm	Each	255545.00

S. No.	Description	Unit	Amended Rate (Rs.)
ULTRASONIC LEVEL SENSOR			
11.4	SITC of Ultrasonic Level Transmitter suitable for measuring water level in reservoir, Normal Powered 24VDC, Type of Transmitter: Two Wire (4-20 mA), Cable Entry:1/2" NPT (F), Sensor Material: PP, slip-on Flange: 2 ½" Flange, Material of Construction for Slip-on flange: PP, output 4~20mA, HART compatible, accuracy +/- 0.2 % as per detailed Technical specification, scope of work and direction of Engineer in charge.		
11.4.1	Measuring range 0.0 to 6.0 mtr	Each	65789.00
11.5	SITC of Ultrasonic Level Transmitter suitable for measuring water level in reservoir, powered by solar panel with minimum 48 power back up or internal installed battery (5 years battery life with replacement warranty), with out put as GSM/GPRS + data logger , Sensor Material: PP, accuracy +/- 0.2 % , as per detailed Technical specification, scope of work and direction of Engineer in charge.		
11.5.1	Measuring range 0.0 to 6.0 mtr	Each	119106.00

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Chapter 12

Earth Work & Civil Works related to Storage Tank, Filter media work

S. No.	Description	Unit	Amended Rate (Rs.)
STORAGE TANKS			
12.1	Earth work in excavation over area (for Sedimentation cum storage tank) Exceeding 30 cm in depth 1.5 Mtrs in width as well as 10 Sqm on plan) including disposal of excavated earth lead up to 50 M and all lift. Disposed earth to be levelled and neatly dressed including stacking of useful material if any available during excavation for all kind of soil. Earth work to be carried out by means of mechanical system i.e. Tractor craw or any other mechanical system. No extra payment shall be done for lift of any limit. This work also involves dressing of sides & bottom for lining purpose which is to be done manually, slope of sides to be maintained as per specification. Work is to be done as per direction of Engineer In Charge and technical specifications.	Cum	92.00
12.2	Silt clearance from Sedimentation cum storage tank with all lift and lead up to 50 Mtr. Silt to be disposed outside the Headworks boundaries. Disposed silt to be levelled and neatly dressed including stacking of useful material if any available during excavation for all kind of soil. Silt clearance is to be carried out by means of mechanical system i.e. Tractor craw/Trolley or any other mechanical system. No extra payment shall be done for lift . This work also involves dressing of bottom which is to be done manually and there shall be no damage to lining and LDPE film of tank. Work is to be done as per direction of Engineer In Charge and technical specifications.	Cum	115.00
	NOTE :- For additional lead, beyond 50M, every additional lead will be paid as per PWD BSR. But for lead of 500M, 1 km. and onward; initial rate of 50M will be deducted from concern rates of above said leads		
12.3	SINGLE FLAT BRICK LINING WITH 250 MICRON LDPE FILM:- Preparing surface levelled & dressed to proper slope & laying over it on sand properly rammed and watered in 2 Layers of 5 cm each. Providing and laying 250 micron LDPE film as per ISS:2506-1984 including overlapping on the finished surface of compacted sand. Over LDPE film 15 mm thick cement sand mortar 1:3 shall be provided and laid which shall be cured properly. Over the base mortar single layer 1 st class brick lining in cement sand mortar 1:3 shall be provided with joints not more than 8 mm wide and curing shall be done for 14 days. This also includes providing weedcides & anti-termite treatment, complete work as per technical specifications.	Sqm	551.00
12.4	Providing and fixing PVC float in Raw Water Storage tank with CI tail piece 150mm dia-2 Nos, CI puddle collar-150mm dia- 1.20 M- 1 No. and PVC hose pipe- 150mm dia -6 M & all accessories complete in all respect as per Instructions of Engineer In Charge. Complete Job	Job	15804.00

S. No.	Description	Unit	Amended Rate (Rs.)
FILTER MEDIA			
12.5	Providing and placing of new graded gravel as (i) Size of Gravel vary from 50 mm at the bottom to 2. to 5 mm at the top as detailed: (a) Passing 80 mm screen but held on 10 mm- 150 mm layer (b) Passing 25 mm screen but held on 10 mm- 50 mm layer (c) Passing 10 mm screen but held on 5 mm- 50 mm layer (d) 5 mm screen but held on 2 mm- 50 mm layer (ii) The filter gravel shall be as spherical as possible, hard, clean and uniform in quality and also shall not contain such impurities as dirt and clay as per IS: 8419 (Part-I) for filter gravel specifications. The work also includes washing the gravel with required concentration of HCL acid and finally with water and placing the same in filter beds as per direction of Engineer- In- Charge and technical specification complete in all respect. The gravel shall not contain more than 5% acid soluble matter as determined by solubility test in Appendix B of IS: 8419 (Part-I) amended up to date. (For RGF)	Cum	3582.00
12.6	Supply and charging of filter media (Gravel) as per department specification including screening, washing with 5% HCL solution to make Gravel (Size 4 to 6mm, 8 to 12mm, 10 to 20mm - Hard Coarse grit from approved quarry) free from silt, clay and other all impurities work to be executed as per scope of work fixed by the department at the time of tendering (for SSF)	Cum	2048.00
12.7	Providing and Placing of new filter media as (i) Sand shall be hard and resistant quartz or quartzite and free of clay, fine particles, soft grains and dirt of any description. (ii) Effective size shall be 0.45 to 0.70 mm. (iii) Uniformity Coefficient not be more than 1.70 nor less than 1.30. (iv) Ignition loss should not exceed 0.70% by weight. (v) Soluble fraction in HCL acid shall not exceed 5.0% by weight, (vi) Silica content should not be less than 95% (vii) Specific Gravity shall be in the range between 2.55 to 2.65 (viii) Wearing loss shall not exceed 3.0%. and as per specifications given in IS: 8419 (Part-I). Filter media (fine sand and coarse sand) should be processed through disintegrator and dust separator in automatic plant including screening of sand to desired specification and washing and cleaning of sand with water by aqua wash technology at quarry site. (For RGF)	Cum	4047.00

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S. No.	Description	Unit	Amended Rate (Rs.)
12.8	Providing and Placing of new filter media as (i) Sand shall be hard and resistant quartz or quartzite and free of clay, fine particles, soft grains and dirt of any description. (ii) Effective size shall be 0.20 to 0.30 mm. (iii) Uniformity Coefficient not be more than 5.0 nor less than 3.0. (iv) Ignition loss should not exceed 0.70% by weight. (v) Soluble fraction in HCL acid shall not exceed 7.0% by weight, (vi) Silica content should not be less than 95% (vii) Specific Gravity shall be in the range between 2.55 to 2.65 (viii) Wearing loss shall not exceed 3.0%. and as per specifications given in IS: 8419 (Part-I). (ix) The sand should not contain more than 2% of calcium and manganese calculated as carbonate. Filter media (fine sand and coarse sand) should be processed through. Disintegrator and dust separator in automatic plant including screening of sand to desired. Specification and washing and cleaning of sand with water by aqua wash technology at quarry site. The sand shall not contain more than 5% acid soluble matter as determined by solubility test in Appendix B of IS: 8419 (Part-I) (Fine sand 0.2 to 0.3mm and coarse sand 1.0 to 1.7mm) (For SSF)	Cum	4047.00
12.9	Fixing of pipes for under drainage system including plugging pipes with CM 1:4 on one end and fixing other end in collecting channel with CM 1:4 with all Material etc.(Excl.cost of pipes) This job, also, includes Making 4mm dia holes in pipes @15 cm c/c in zig-zag pattern and testing of under drainage system as per instruction of Engineer-in-charge.	RM	32.00
12.10	Removing & Re-fixing of pipes for under drainage system including cleaning of one end plugged pipes and fixing /embedded in CM 1:4 on one end and fixing other end in collecting channel with CM 1:4 with all Material etc.(Excl.cost of pipes) This job, also, includes Making 4mm dia holes if required in pipes @15 cm c/c in zig-zag pattern.	RM	26.00
12.11	Making 4mm dia hole in pipes of under drainage system of filters duly drilled. Carriage of pipe from stacks to filter site, making two per rows on pipe and points of making holes in Zig-Zag pattern in two hold raw. Making 4mm dia holes with drill machine @ 15cm c/c in zig-zag pattern.	Each	2.00
12.12	Labour charges for screening of old sand (received from filter beds) through the standard sieves, washing the sand with HCL acid of required concentration as directed by the Engineer- In- Charge, so as to remove all the mud and other deposits from sand grains and then clean with water till the sand is as neat and clean that it impart no colour to clean while washing. It also includes placing this washed filter media (sand) in filter beds in layer as instructed by the Engineer- In- Charge. (RGF, SSF)	Cum	906.00

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S. No.	Description	Unit	Amended Rate (Rs.)
12.13	Labour charges for screening of old gravel (received from filter beds) through the standard different sizes sieves for required sizes of gravel, washing the gravel with HCL acid of required concentration as directed by the Engineer- In- Charge, so as to remove all the mud and other deposits from gravel grains and then clean with water till the gravel is as neat and clean that it impart no colour to clean while washing. It also includes placing this washed gravel in filter beds in layer as instructed by the Engineer- In- Charge. (RGF, SSF)	Cum	674.00

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Chapter 13

Miscellaneous

S. No.	Description	Unit	Rate (Rs)
13.1	Survey by Electronic Total station/DGPS of villages with a view of preparing "village index plan "indicating roads/ streets, surface and width of road/ streets along with places of importance such as Panchayat Bhawan, Hospital, School, Post office, Temple Water Supply structures (GLRs, PSPs, pumping station physical boundary of village north etc. including levels at some important points as per instruction of engineer in charge. Hydraulic Design of Distribution network in Loop/Water Gem/EPANET or any other compatible software. Preparation of Auto CAD Drawing (A-3/A-2) with complete hydraulic design out put details, such as pipe no, node no, pipe length, pressure at node etc. Submission of three sets of colour print prepared in Auto CAD. For Length Up to 2.5 KM		
13.1.1	Rate for length up to 2.5 km	No.	8000.00
13.1.2	Add extra for length more than 2.5 km	Km	2000.00
13.2	Survey of all properties, preparation of GIS based consumer mapping of consumer water connection database, plotting assets on GIS map etc. (Satellite image will be provided by the Department)	FHTC	42.50
13.3	Data entry of existing FHTCs in rural area under JJM on website ejaishakti.gov.in; work includes visiting the village for collecting basic data consumers like i.e. Aadhar no./ration card/voter ID/BPL card/ PAN card/driving license/passport/Antyodaya card/mobile no. etc. and entering the details on the above website. The cost also includes computer and operator.	FHTC	30.00
13.4	Preparation of DPRs for single and small multi village rural water supply schemes under JJM for Administrative & Financial Sanction and Technical sanction, the work includes: Survey by Electronic Total station/DGPS of villages with a view of preparing village index plan, existing HW plan and survey for route of rising/ trunk mains, indicating roads/ streets, surface and width of road/ streets along with places of importance such as Panchayat Bhawan, Hospital, School, Post office, Temple Water Supply structures (GLRs, PSPs, pumping station physical boundary of village north etc. including levels and TBM at important places as per instruction of engineer in charge. Preparation of technical report, forecasting of population and design demand, source design, techno-economic design of rising mains, selection and design of pumps sets, capacities of CWR, OHSR etc. complete work as per departmental prevailing guidelines and practice. Hydraulic Design of Distribution network in Loop/Water Gem/EPANET or any other compatible software. Preparation of Auto CAD Drawing (A-3/A-2) with complete hydraulic design output details, such as pipe no, node no, pipe length, pressure at node etc.		

S. No.	Description	Unit	Rate (Rs)
	Preparation of estimate of various components based on prevailing BSRs in PHED and non BSR if any with detailed analysis. Preparation of conceptual drawings, L-sections for rising mains, HW plan, GA drawings of P.S., ESR, CWR, GLSR, valve chambers etc. Printing of DPR in 6 copies, including drawings in appropriate size of paper for A&F and technical sanctions separately as per direction of EIC. Reply of observation raised by department for A&F and TS shall be submitted within timeframe as per scope of work. Work excludes preparation of Bid document and rates are including GST and all other taxes applicable. The DPR shall include all other habitation and main village in a unit.		
13.4.1	For present population 100-500 souls	Per village	28000.00
13.4.2	For present population 501-1500 souls	Per village	32398.00
13.4.3	For present population 1501-4000 souls	Per village	43661.00
13.4.4	For present population above 4001 souls	Per village	44943.00

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"SAVE WATER "



Office of Chief Engineer (Technical) and
TM, RWSSMB

Public Health Engineering Department,
Jal Bhawan, 2, Civil Lines, Jacob Road, Jaipur
Tel: 0141-2222342, Fax: 0141-2222585
Email: rj_tm@nic.in

No. D&S/BSR/2022-23/8928-8990

Date: 03/02/2023

Amendment No.02/BSR-2022

Basic Schedule of Rates (BSR) for year 2022-23 was issued by this office vide office order No. D&S/BSR/2022-23/382-492 dated 05.05.2022 and first amendment was issued vide Amendment No.01/BSR-2022 dated 02.08.2022. Further Amendments in following items are hereby issued:

1. Item of PVC-O pipe of Class 500 PN-12.5 (S No 1.29.2) is added in existing item No. 1.29 of the BSR as below:

S. No.	Description	Unit	Rate	Remarks
1.29	Providing, lowering, laying and jointing in trenches, standard lengths ISI marked Rigid PVC-O S/S Pipes (push on joints) as per IS-16647: 2017 (amended upto date) with EPDM Gasket seals on joints including all taxes, transportation and freight charges, inspection charges, loading/unloading charges, stacking of pipes, laying of pipes, including cost of labour and material, specials (Tee, bend etc.), satisfactory hydraulic testing, disinfection etc. complete as per technical specifications and direction of Engineer-in-charge of following class and diameter. (Excluding earth work).			
1.29.2	PVC-O pipe Class 500 PN-12.5			
1.29.2.1	110 mm dia	RMT	840.00	New
1.29.2.2	160 mm dia	RMT	1440.00	New
1.29.2.3	200 mm dia	RMT	1703.00	New

03/02/2023

2. In item no. 1.23 of chapter 1 the words "moulded in single piece" shall be replaced by "moulded in single piece / fusion welded"

This order shall be effective with immediate effect.

Dalip Kumar Gaur 03.02.2023

(Dalip Kumar Gaur)
Chief Engineer (Technical) and
TM, RWSSMB, PHED, Raj. Jaipur

No. D&S/BSR/2022-23/ 8928-8990

Date: 03/02/2023

Copy to following:

1. SA to Hon'ble Minister, PHED, Govt. of Rajasthan, Jaipur.
2. PS to Addl. Chief Secretary, PHED& GWD, Govt. of Rajasthan, Jaipur.
3. MD, JJM, Govt. of Rajasthan, Jaipur.
4. Chief Engineer (Rural)/(U&NRW)/(SP)/(Adm.)/JJM/QC, PHED, Jaipur.
5. Chief Engineer (P) Jodhpur/ (PMU),RRWS&FMP PHED Nagaur.
6. FA&CAO, RWSSMB, PHED, Jaipur.
7. Secretary, RWSSMB, PHED Jaipur.
8. Addl. Chief Engineer, PHED, (All)
9. Superintending Engineer, PHED,(All)

Dalip Kumar Gaur 03/02/2023

Superintending Engineer (D&S)
O/O Chief Engineer (Technical) and
TM, RWSSMB, PHED, Raj. Jaipur