

GOVERNMENT OF ANDHRA PRADESH
RURAL WATER SUPPLY & SANITATION DEPARTMENT
OFFICE OF THE EXECUTIVE ENGINEER, RWS&S DIVISION, NELLORE

A.P REVISED S.S.R - 2024-25



**MINI STANDARD
SCHEDULE OF RATES OF
ENGINEERING WORKS
FOR THE YEAR 2024-25**

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A.P. REVISED STANDARD DATA FOR THE YEAR 2024 - 25 (Effective from 1st June, 2024)					
Sl.No.	MATERIALS			2024-25	
	Seigniorage charges G.O.Ms.No: 11, Dated: 11.02.2020			Steel Coefficients	
				6mm	0.222
	Seigniorage Charges : From 11.02.2020			8mm	0.395
	Metal	Cum	90	10mm	0.617
	Sand	Cum	100	12mm	0.888
	Murram/Gravel / Earth	Cum	45	16mm	1.578
	Bricks	1000 Nos	80	20mm	2.466
	MATERIAL RATES				
5	CEMENT 43 Gr / 53 Gr (Rate as fixed by the Government)	(MAT-00005)		1 MT	4220/-
62	Reinforcement (HYSD/TMT)(FE-450) Steel (As per monthly rate fixed by Sub-Committee)	(MAT-00063)		1 MT	59000/-
63	Reinforcement (HYSD/TMT) (FE-500/FE-500D/FE-550) Steel (As per monthly rate fixed by Sub-Committee)	(MAT-00063)		1 MT	60000/-
63	Structural Steel angle / channel / beam /bars (As per monthly rate fixed by Sub-Committee march-24)	(MAT-00069)		1 MT	60000/-
69	a) Structural Steel flats (As per monthly rate fixed by Sub-Committee March-24)	(MAT-00070)		1 MT	61000/-
	b) Structural Steel plate (As per monthly rate fixed by Sub-Committee March -24)			1 MT	66000/-
27	(a) Fine aggregate / sand (un - screened) for concrete items & filtering items	(MAT-00027)		Cum	605
27	(b) Fine aggregate/Sand for filling (excluding Seigniorage charges)	(MAT-00028)		Cum	460
28	Fine aggregate / sand (screened) for mortar, plastering items and sand blasting charges (Rs. 116/- is added towards screening Charges)	(MAT-00029)		Cum	728
M-050	Aggregates 6mm nominal size (684 + 70 + 171)	(MAT-00215)		Cum	925
M-051	Aggregates 10mm nominal size (860 + 70 + 215)	(MAT-00216)		Cum	1145
M-052	Aggregates 13.2 / 12.5 mm nominal size (12mm) (1024 + 70 + 256)	(MAT-00217)		Cum	1350
M-053	Aggregates 20 mm nominal size (1285 + 70 + 321.25)	(MAT-00218)		Cum	1676
M-054	Aggregates 25 mm nominal size (1230 + 70 + 307.50)	(MAT-00219)		Cum	1608
M-055	Aggregates 40 mm nominal size (770+ 70 + 192.5)	(MAT-00220)		Cum	1033
Note:-	The above rates are excluding seigniorage charges but Including Blasting charges of Rs. 70/- and machine crushing charges of 25% (for M-050 to M-055)				
35 b	HBG stone chips 2.36mm and below	(MAT-00068)		Cum	588
M-008	Gravel / Quarry Spall (Excluding Seigniorage charges)	(MAT-00177)		Cum	165
91	Quarry Rubbish	(MAT-00473)		Cum	99

56	Murum	(MAT-00057)	Cum	250
M-148/ 12-g	Random Rubble Stone (Including Loading Charges but excluding seig.charges)	(MAT-00302)	Cum	315
64	Rough Stone 20x20x75Cm	(MAT-00065)	Each	31
75	Through Stones 20x20x30 to 45 Cm	(MAT-00076)	Each	29
76	Through Stones 25x25x45 to 60 Cm	(MAT-00077)	Each	50
77	Through Stones 30x30x65 to 75 Cm	(MAT-00078)	Each	72
28.a	Bond Stone 600x600x200mm	(MAT-00417)	Each	47.60
A.SECTION BRICKS & BUILDING BLOCKS (ex-quarry price - excluding cost of conveyance, loading & unloading)				
B.MT.A.01	Bricks 2nd Class of size 230 X 110 X 70 mm (Excluding Seigniorage charges)	(MAT-00721)	1000 Nos	8480
Flyash Cement / Lime Solid blocks				
BMT-AO.03	Flyash Cement / Lime Solid blocks 290X225X140 mm	MAT-00749	Each	30
BMT-AO.04	Flyash Cement / Lime Solid blocks 290X200X140 mm	MAT-00750	Each	30
BMT-AO.05	Flyash Cement / Lime Solid blocks 290X150X140 mm	MAT-00751	Each	25
BMT-AO.06	Flyash Cement / Lime Solid blocks 290X112 / 100X140 mm	MAT-00752	Each	20
BMT.B.01	Kadapa Slabs 40mm not less than 0.457x0.457M	MAT-00768	Sqm	130
BMT.B.02	Kadapa Slabs 50mm not less than 0.457x0.457M	MAT-00769	Sqm	151
NON PORCELAIN CERAMIC FLOOR TILES				
BMT.C.03	Non-skid red or white fully body Ceramic floor tiles of size 600x600mm and thickness 8-10mm I st quality confirming to IS:13711, IS:13712, IS13630 (Parts 1 to 15) of any colour and finish in all shades and designs	MAT-00787	1 Sqm	520
CERAMIC WALL TILES				
BMT.C.23	Glazed red or white fully body Ceramic wall tiles of size 300x600mm and thickness between 6-8mm, I st quality confirming to IS:13711, IS:13712, IS13630 (Parts 1 to 15) of any colour and finish in all shades and designs	MAT-00807	1 Sqm	556
101	White Cement -	(MAT-00478)	1 Kg	27.95
BMS-W-68	White cement	(MAT-01638)	Kg	32
VITREOUS CHINAWARE- SANITARY APPLIANCES				
BMW-D.05	Supply and fixing of Orissa pan white glazed W.C I st quality ISI marked conforming to SI:2556-Part-3-1981 with "P" or "S" trap 630mm x 450mm	(MAT-01784)	Each	1626
BMW-D.06	Labour charges only for fixing of Orissa pan white glazed W.C with "P" or "S" trap	(LAB-00165)	Each	454
BMW-D.13	Supply and fixing of European W.C I st quality ISI marked conforming to SI:2556-Part-2-1973 of white glazed with 'P' trap	(MAT-01789)	Each	1979
BMW-D.14	--do-- with 'S' trap	(MAT-01790)	Each	1889
BMW-D.15	Labour charges only for fixing of European Water closet with "P" or "S" trap as per standard practice	(LAB-00168)	Each	318
M-189(a)	Water Charges (Urban)	(MAT-00332)	KI	135.00
M-189(b)	Water Charges (Rural)	(MAT-00333)	KI	105.00
4	Diesel	(MAT-00691)	Ltr	97.42
10	Petrol	(MAT-00697)	Ltr	109.58
3/173	Binding Wire	(MAT-00003)	Kg	64
M-063	Barded Wire	(MAT-00227)	Kg	76

	SAL/COUNTRY WOOD WORK				
BMT-E15	Sal wood scantling any length	(MAT-00860)	1 cum	53228	
BMT-E16	Sal wood Plancks any thickness	(MAT-00861)	1 cum	78753	
	Average rate of Sal wood (For Doors, windows, Ventilator works)		131981/2	65990.50	
	FIXTURES OF DOORS & WINDOWS				
BMT-G.08	Alluminium tower bolts 10mm (IS 204) 150mm long	MAT-00913	each	90	
BMT-G.10	Alluminium tower bolts 10mm (IS 204) 250mm long	MAT-00915	each	142	
BMT-G.24	Alluminium Butt hinges (IS 205) 100mm long	MAT-00929	each	113	
BMT-G.26	Alluminium Butt hinges (IS 205) 150mm long	MAT-00931	each	145	
BMT-G.32	Alluminium Door handles (IS 208) 100mm long	MAT-00937	each	75	
BMT-G.36	MS-Powder Coated Door Handles (IS :208) 150mm long	MAT-00941	each	54	
BMT-G.42	Alluminium Aldrop (IS :2681) 300mm long	MAT-00947	each	350	
BMT-G.68	Brass latch heavy 300mm	MAT-00973	each	675	
BMT-G.53	MS Powder coated - door stoppers	MAT-00958	each	51	
BMT-G.57	Heavy duty Alluminium Door stopper	MAT-00962	each	66	
BMT-G.56	Delux window stay Alluminium	MAT-00961	each	139	
BMS-W-69	MS Z Hold fasts - 300mm long of 40x 40 x 5mm ISA	MAT-01639	each	41	
BMS-W-70	Rubber/Nylong door stop bushes	MAT-01640	each	11	
BMS-W-71	Nylon rollers for sliding glasses/ alluminium windows	MAT-01641	each	18	
	FABRICATION & LABOUR FOR WOOD WORK				
BMM-V.14	Labour charges for fabricating steel works like window grills, compound wall grills, Iron doors, windows including cost of welding rods, power charges, excluding cost of fixing in position	LAB-00420	1 Kg	35	
BMM-V.15	labour charges for fixinf iron doors, iron windows and window grills in position	LAB-00421	1 Kg	6	
BMM-V.38	Labour charges for wrought and putup including fixing in position of frames of any size , shutters for doors, windows, ventilators including fixing all fixtures etc., for other than teak wood fully panelled Doors external or internal ncluding frame	LAB-00444	1 Sqm	1983	
BMM-V.44	Labour charges for wrought and putup including fixing in position of frames of any size , shutters for doors, windows, ventilators including fixing all fixtures etc., for other than teak wood Windows panelled including outer frame and shutter frame	LAB-00450	1 Sqm	1205	
BMM-V.50	Labour charges for wrought and putup including fixing in position of frames of any size , shutters for doors, windows, ventilators including fixing all fixtures etc., for other than teak wood GI or AC sheer door & Windows including outer frame and shutter frame	LAB-00456	1 Sqm	298	
	AC SHEETS/ ROOFING MATERIALS				
BMT-E17	AC sheet corrugated 6mm thick	MAT-00862	1 sqm	245	
BMT-E18	AC sheet plain 4mm thick	MAT-00863	1 sqm	171	
BMT-E19	AC sheet plain 6mm thick	MAT-00864	1 sqm	180	
BMT-E20	Plain or Corrugated Galvanized iron sheets as per IS 277 (0.1 mm to 0.8 mm thickness)	MAT-00865	1 Kg	76	
BMT-E21	Supply of UV resistant multi-wall polycarbonate sheets for roofing of any colour - 6mm thick	MAT-00866	1 sqm	1300	

39	G.I.Sheet (Plain)	(MAT-00040)	Tonne	62116
46	J-Bolt 30 Cm Long	(MAT-00047)	Each	46
BMS-W-61	75mm long screws	(MAT-01631)	each	4
BMS-W-62	GI scam bolts & nuts	(MAT-01632)	each	6
BMS-W-63	GI bolts & nuts	(MAT-01633)	each	6
BMS-W-64	GI J bolts 8mm dia	(MAT-01634)	each	11
BMS-W-65	GI Washers	(MAT-01635)	each	2
BMS-W-66	Limpet washers (for scam & J bolts)	(MAT-01636)	each	2
BMS-W-67	Bitumen washers	(MAT-01637)	each	2
BMS - W.45	ROOFING - Roofing will be provided with 0.50mm thick galvanized / pre painted G.I. profiled sheets fixed to the purlins with 14 size self drilling screws with neoprene washer. Side laps are stitched with self tapping / drilling screws. End laps are to be sealed with 25x3mm Butyl tape. The sheets are provided with anti capillary groove.	MAT-01615	1 Sqm	868
	POLYETHYLENE WATER STORAGE TANKS			
	PVC Pipes & Fittings (Materials shall be procured from the list of approved Brands / Manufactures / Suppliers)			
BMW-G-01	a). Providing & Placing on Terrace (at all floor levels) polythylene water storage tank with Double layer approved brand & Manufacture with cover and suitable locking arrangement & making necessary holes for inlet & outlets and over flow pipes but without fittings & base support for Tanks	MAT-01889	1 Ltr	8.50
BMW-G-02	b). - do - labour charges only	LAB-00258	1 Ltr	1
	PAINTS			
BMT-J.01	Water based Cement primer of Interior Grade - 1	MAT-01073	1 Kg	175
BMT-J.02	Water based Cement primer of Exterior Grade - 2	MAT-01074	1 Kg	205
BMT-J.03	Red oxide primer paint for iron works of Grade - 1	MAT-01075	1 Kg	160
BMT-J.05	Wood primer	MAT-01077	1 Kg	180
BMT-J.08	White Lead	MAT-01080	1 Kg	122
	Thinner	MAT - 00343	1 Litre	113
80	Water proofing compound	(MAT-00081)	Kg	89
BMT-J.21	Acrylic based oil bound washable distemper	(MAT-01093)	1 Kg	85
BMT-J.26	Paint grade white lime for wash	(MAT-01099)	25 Kg	505
BMT-J.25	Water proof cement paint pack	(MAT-01098)	25 Kg	1070
BMT-J.24	Acrylic emulsion paint Interior grade having VOC (Volatile Organic Compound) content less than 50 grams/ liter	(MAT-01097)	1 Litre	200
BMT-J.35	Acrylic emulsion paint Weather proof weather based, modified acrylic with silicon additives exterior grade VOC (Volatile Organic Compound) content less than 50 grams/ liter	(MAT-01108)	1 Litre	245
BMT-J.29	Ready mixed Synthetic Enamel paints in all shades Grade - 1 having VOC (Volatile Organic Compound) content less than 50 grams/liter 1st quality (MAT-00071)	(MAT-01102)	Ltr	285
BMS - W.10	Soft brush	(MAT-01582)	each	161
	EPOXY			
BMT-H.113	Two component Water thinnable Food Neutral Epoxy coating (Compiles with ASTM-C-881/EN 13813) Coverage " 70 to 80 SFT per Ltr/coat ideal to use as internal coatings for potable water tanks, reservoirs, sumps and walls Part - I 1 Kg : Part - II 1/2 Kg dilute with 1 Ltr of water	MAT-05400	1 Kg	486
	ROLLING SHUTTER			

BMT - F.29	S/F of Rolling shutter made of 80 x 1.25mm machine rolled CRCA laths, interlocked together through their entire length and jointed together at the ends by end locks, mounted on specially designed pipe shaft of 50mm dia nominal bore MS B class pipe with brackets, plates, guide channels, stoppers, bottom locking plates and arrangements for inside & outside locking with push-pull operations including cost of hood cover and springs complete, painted with one coat of approved steel primer, locks, ball bearings, all accessories etc., complete for finished item of work as per special spn: 1108				
	MAT-00895	BMT-F.29	1 Sqm	4481	
25	Cutting road surface including stacking of excavated materials for pipe line trench				
	a) Cutting open B.T.Road surface (as well as asphalt concrete upto 75 mm thick)	(LAB-00647)	10 sqm	1081	
	b) Cutting open C.C Road surface with concrete saw cutter	(LAB-00648)	1 Cum	3502	
	c) Cutting open water bound macadam road including soiling	(LAB-00649)	1 Cum	339	
40	Removal of wet silt and sludge by manual means from sullage drains with aid of baskets and vessels	(LAB-00676)	10 Cum	3531	
BMS-W-52	Hoisting or Lowering of slab	MAT-01622	1 Cum	135	
	RO PLANTS				
	Cost, Supply, Erection and 1 Month trial run of LPH capacity R.O Plant machinery as per IS 10500-2013 with required capacity UV Lamp and containing all required fixtures. The membrane should be flimtech or of any standard make, sand and carbon filters should be as per BIS Specifications, The raw water container of Ltr capacity and the fresh water container of Lts capacity with SS material 4μ thick (4 Microns thick) and fixed at elevated platform stand as per BIS specification, it should be fixed with bulk meter of required dia with stainer. All the inter connections should be made as per standard BIS specifications. The units shall be fixed with raw water pumping motors of required capacity. Necessary arrangement for drawing of fresh water with raw water with atleast one month without interruptions and the unit shall be inspected by the supplier for one year, at two months interval / at break down. The supplier shall provide all consumables and spares necessary for one year. The rate excluding any taxes, duties etc., complete				
					NEW RATE
	250 LPH capacity RO plant machinery with raw water container of 1000 Lts capacity and fresh water container of 500 Lts capacity		1 No	129661.00	
			GST at 18%	23339.00	
	500 LPH capacity RO plant machinery with raw water container of 2000 Lts capacity and fresh water container of 1000 Lts capacity		1 No	165254.00	
			GST at 18%	29746.00	
	1000 LPH capacity RO plant machinery with raw water container of 3000 Lts capacity and fresh water container of 2000 Lts capacity		1 No	209746.00	
			GST at 18%	37754.00	
	2000 LPH capacity RO plant machinery with raw water container of 5000 Lts capacity and fresh water container of 3000 Lts capacity		1 No	271186.00	
			GST at 18%	48814.00	
	Note : The above Cost excludes VAT and all other taxes, duties etc., complete				
	SOLVENT CEMENT				
479	50 ml solvent cement	BMW-G.145	MAT - 02032	Each	15.00
480	100 ml solvent cement	BMW-G.146	MAT - 02033	Each	23.00
481	250 ml solvent cement	BMW-G.147	MAT - 02034	Each	55.00
482	500 ml solvent cement	BMW-G.148	MAT - 02035	Each	107.00
483	1000 ml solvent cement	BMW-G.149	MAT - 02036	Each	210.00
	CEMENT JALI's				

952	Cement Jali 25mm thick	BMS-W.15	MAT - 01587	Sqm	226.00
953	Cement Jali 40mm thick	BMS-W.16	MAT - 01588	Sqm	294.00
954	Cement Jali 50mm thick	BMS-W.17	MAT - 01588	Sqm	403.00
12 b)	Laying, Jointing of PVC / HDPE pipes as per BIS No. 7634 part-III / 75 for PVC and BIS No. 7634 part-II / 75 for HDPE Pipes including trench excavation & refilling (2024-25)				
	50	LAB - 00606	1 RM	49	
	40	LAB - 00607	1 RM	49	
	32	LAB - 00608	1 RM	49	
	25	LAB - 00609	1 RM	44	
	20	LAB - 00610	1 RM	41	
	Note :- (i) The above rates are applicable for the works in District only				
	(ii) If the depth of excavation is more than 0.5M separate rates to be worked out				
17	Labour charges for fixing <u>Air valves</u> including boring the mains and threading the bore fixing nipple etc., complete (2024-25)				
	50	LAB - 00613	Each	244	
	65	LAB - 00614	Each	258	
	80	LAB - 00615	Each	280	
	100	LAB - 00616	Each	331	
	125	LAB - 00617	Each	517	
	150	LAB - 00618	Each	566	
18	Labour charges for fixing Kinetic Air Valves with Isolating Sluice valves, Double Air valves / Air Cushion valve excluding cost of jointing materials such as bolts, nuts and rubber insertions etc., complete. (2024-25)				
	25	LAB - 00619	Each	234	
	40	LAB - 00620	Each	264	
	50 (Double Air Valves)	LAB - 00621	Each	281	
	65	LAB - 00622	Each	301	
	80	LAB - 00623	Each	329	
	100	LAB - 00624	Each	383	
	125	LAB - 00625	Each	600	
	150	LAB - 00626	Each	656	
PHE-CISP-14(sub analysis)	Labour charges for laying in position S&S for Flanged C.I Sluice Valves (2024-25)				
	a) 80mm dia CI Sluice Valve		Each	129.11	
	b) 100 mm dia CI Sluice Valve		Each	171.44	
	c) 125 mm dia CI Sluice Valve		Each	224.84	
	d) 150 mm dia CI Sluice Valve		Each	290.58	
	e) 200 mm dia CI Sluice Valve		Each	479.38	
	f) 250 mm dia CI Sluice Valve		Each	681.26	
PHE-JCIF-2	Lowering and jointing C.I / D.I pipes (all classes) and specials (Fittings) with planges ends carefully in to trench and laying them true to alignment and gradient including all sundries but excluding cost and conveyance of pipes.				
	a) 80mm dia C.I. D/F Pipes		1Mtr	44.76	
	b) 100mm dia C.I. D/F Pipes		1Mtr	56.62	
	c) 125mm dia C.I. D/F Pipes		1Mtr	73.53	
	d) 150mm dia C.I. D/F Pipes		1Mtr	92.48	
	e) 200mm dia C.I. D/F Pipes		1Mtr	133.05	

	f) 250mm dia C.I. D/F Pipes			1Mtr	180.15
PHE-JCIF-5	Jointing CI pipes, fitting and valves with flanged ends including cost of jointing materials such as bolts, rubber insertion, white lead including filling with water, with lead upto 500 metres and testing to required pressure complete. (reference to specifications BIS No. 3114/1994)				
	a) 80mm dia C.I. D/F Pipes			1Mtr	189.57
	b) 100mm dia C.I. D/F Pipes			1Mtr	306.96
	c) 125mm dia C.I. D/F Pipes			1Mtr	318.08
	d) 150mm dia C.I. D/F Pipes			1Mtr	474.62
	e) 200mm dia C.I. D/F Pipes			1Mtr	518.11
	f) 250mm dia C.I. D/F Pipes			1Mtr	735.46
BMW-G-152	Labour charges for laying, fixing and commissioning the PVC pipes including couplers/ bends/ tees etc any diameter including fixing necessary fittings like bends, plugs, couplers, junctions, tees etc with solvent jointing as per standard practice	LAB-00259		1 RM	84

ELEVATED SERVICE RESERVOIRS

43	Rates for OHSRs / ELSRs including fixtures with a staging of 15m, without Seismic analysis.			
a	500 Kili litres	LAB - 00677	Per litre	24.11
b	1000 Kili litres	LAB - 00678	Per litre	20.03
c	1500 Kili litres	LAB - 00679	Per litre	18.05
d	2000 Kili litres	LAB - 00680	Per litre	15.71
e	2500 Kili litres	LAB - 00681	Per litre	14.73
44	Rates for OHSRs / ELSRs including fixtures with a staging of 10m, without Seismic analysis.			
a	Upto 10,000 Litres capacity	LAB - 00682	Per litre	74.32
b	15,000 Litres capacity	LAB - 00683	Per litre	55.51
c	20,000 Litres capacity	LAB - 00684	Per litre	50.22
d	40,000 Litres capacity	LAB - 00685	Per litre	42.56
e	60,000 Litres capacity	LAB - 00686	Per litre	32.26
f	90,000 Litres capacity (CALCULATED PROPORTIONATE RATE)		Per litre	29.9725
g	1,00,000 Litres capacity	LAB - 00687	Per litre	29.21
h	1,20,000 Litres capacity (CALCULATED PROPORTIONATE RATE)		Per litre	28.474
g	2,00,000 Litres capacity	LAB - 00688	Per litre	25.53
h	3,00,000 Litres capacity	LAB - 00689	Per litre	24.02
i	4,00,000 Litres capacity	LAB - 00690	Per litre	21.15
j	4,50,000 Litres capacity	LAB - 00691	Per litre	18.29
	NOTE :- 1) All Concrete members shall be designed with M30 grade design mix			
	2) For intermediate ranges proportional rates may be adopted			
	3) The above rates are applicable for Elevated Level Services reservoirs / OHSRs with Raft Foundation and a rate of Rs.4220/- per tonne for cement (as per GO Rt No.2029 Water resources (Reforms) Dept, , dt: 06.10.2022) & Steel Rs. 60000/- per MT. (Fe 500) (BoCE rates for the month of March - 2024)			
	4) The above rates are applicable for Elevated Level Services reservoirs / OHSRs for SBC of 15T/Sqm			
	a) For every decrease of <u>2.50 T/Sqm</u> of <u>SBC</u> , the rate shall be <u>increased by 2.50%</u> on basic rate			
	b) For every increase of <u>2.50 T/Sqm</u> of <u>SBC</u> , the rate shall be <u>decreased by 1.00%</u> on basic rate			
	c) For SBC <u>10 T/Sqm</u> to <u>7.50 T/Sqm</u> , <u>solid raft shall be provided and for solid raft of SBC</u> , the rate shall be <u>increased by 10%</u> on basic rate			
	d) For SBC <u>7.5 T/Sqm</u> to <u>5 T/Sqm</u> , <u>solid raft shall be provided and for solid raft of SBC</u> , the rate shall be <u>increased by 15%</u> on basic rate			
	e) For SBC value less than <u>5 T/Sqm</u> , <u>soil improvement shall be adopted, for which additional payment shall be made as per field condition.</u>			
	5) For every metre of staging less than 10m, the rate shall be reduced by Rs. 0.05 paise per litre per every meter of difference in staging			
	6) For every metre of staging above 10m, the rate shall be increased by Rs. 0.10 paise per litre per every meter of additional in staging			
	7) The above rates shall be increased / decreased due to increase / decrease in the cost of cement by Basic rate x {(RC - 4220) / 4220} x 0.07, RC - Rate of Cement (Rs per MT) at the time of preparation of estimate.			
	8) The above rates shall be increased / decreased due to increase / decrease in the cost of steel by Basic rate x {(RS - 60000) / 60000 x 0.20, Rs = Rate of steel (Rs per Mt) at this time of preparation of estimate.			

	9) Rate inclusive of three coats of epoxy paint Food Grade of best quality to inner surface of the reservoir including roof			
	10) The above rates shall be adopted for estimate purposes for construction of ELSR for a finished work including 2 coats of weather proof emulsion painting for external surfaces, lettering, all required fixtures, pipes, bends, valvells etc., for pipe connections but excluding cost of pipes, bends and valves as per departnetal designs and drawings.			
	11) The above rates are applicable for wind pressures upto 250kg / sqm for decrease in wind presure the rate has to be decreased by 5% per every 100 kg/ sqm. If the ELSR / OHSR is to be designed for seismic forces also, cost shall be arrived by working out detailed quantities based on the designs.			
	12) a) For Tribal / Agency / Rural area, the above rates as arrived upto shall be increased by 10%.			
	b) An Additional increase of 7.50% shall be allowed for OHSRs/ELSRs located in agency areas over the above rates for RWS Department works			
	13) If the ELSR is to be designed for seismic forces cost shall be arrived by working out detailed quantities based on the design & difference to be paid extra.			
	14) If the ELSR is to be designed for seismic forces a) The above rates are applied upto Zone-II earth quake. b) for Zone-III earth quake the above rates are to be increased by 15%.			
13	FIXTURES INCLUDE :			
	a) RCC or Aluminium ladder inside 0.60 m wide.			
	b) Spiral staircase on the outside shall be provided upto 200 KL. Above 200 KL capacity dog legged staircase shall be provided with staircase flight width of 1.0 mts and landing width of 1.20mts with S.S hand railing upto 1.0 height.			
	c) Lightening arrestor, including conductor and earthing etc.,			
	d) RCC ventilators with copper or stainless steel fly proof mesh.			
	e) D.I Manholes frame and cover 0.60 x 0.60 m as per IS specifications (light duty) - 2Nos.			
	f) Water level indicator of good quality with ebonite / copper float approved pattern - 1No.			
	g) The ladder shall be with M.S ladder and Vericlas with HDPE of 10kg /sqcm shall be provided for single column OHSRs only.			
	h) Minimum staging for all ELSR / OHSR shall be 10.0mts.			
	i) The increase in staging shall be at 1.0mt interval.			
	j) The railing provided to the gallery and staircase shall be with stainless steel of grade 304 for a height of 1.20 mts.			
	k) The dog legged staircase shall be enclosed with brick / CRS wall on three sides and front side with M.S collapsible gate upto 1st brace level from ground level to prevent unauthorized entry.			
	l) D.I swan neck ventilators shall be provided in top dome and slab.			
	m) The above rates are exclusive of all inlet, out let conenction and valves. All valves near inlet , outlet and for scour of ELSRs shall be D.I valves of heavy duty confirming to the specification of SOR item No.28			
BMT-H.37	Anti-corrosion CRPPC (Corrosion Resistant) inhibitive admixture (Note : The user departments who ever are preparing the estimate, have to satisfy themselves with the performance and result of the product before proposing the item) (DELETED)	(MAT-01021)	Litre	365

31	SO RATES FOR SFRC MAN-HOLE FRAME WITH COVERS FOR THE YEAR 2023-24			
1	Manufacture as per BIS : 12592 (Part 1&2) Supply & delivery of manhole covers and frames with ISI marking anywhere in A.P., F.O.R. destination including, loading, un-loading & Stacking at site but excluding central excise duty, sales tax, octroi and other Govt levies etc., as applicable.			
a)	M.D - 10 with 500 mm dia clear opening	MAT-08221	Each	1543
b)	H.D.-20 with 500 mm dia clear opening	MAT-08222	Each	1989
c)	H.D. - 10 with 560 mm dia clear opening (New item)	MAT-08223	Each	1560
d)	H.D. - 20 with 560 mm dia clear opening	MAT-08224	Each	2133
e)	H.D. - 35 with 560 mm dia clear opening	MAT-08225	Each	2286
f)	24x24 MD 10	MAT-08226	Each	1682
g)	24x18 MD 10	MAT-08227	Each	1548
h)	24x24 HD 20	MAT-08228	Each	1890
i)	24x18 HD 20	MAT-08229	Each	1927
j)	Deviders 0.9 mtr.	MAT-08230	Each	3957
687	Supplying & fixing 50.80 cm dia C.I. Manhole frame & Cover for 914.4 mm dia Chamber (Medium weight) as per IS :1726-40 Kgs			
	BMW-I-93	MAT-02200	Each	2579
33	OTHER ITEMS FOR THE YEAR 2022-23			
1	SUPPLY AND DELIVERY OF PIG LEAD 99.99% PURE INCLUDING TAXES AND CONVEYANCE ETC., COMPLETE.	MAT-08257	Per Kg	316
2	SUPPLY AND DELIVERY OF LEAD WOOL BEST QUALITY INCLUDING TAXES AND CONVEYANCE ETC., COMPLETE.	MAT-08258	Per Kg	286
3	SUPPLY AND DELIVERY OF SPUN YARN OF BEST QUALITY INCLUDING TAXES AND CONVEYANCE ETC., COMPLETE.	MAT-08259	Per Kg	128
4	SUPPLY AND DELIVERY OF RUBBER PACKING INCLUDING TAXES AND CONVEYANCE ETC., COMPLETE.			
	a) 3 mm thick	MAT-08260	Per Kg	102
	b) 6 mm thick	MAT-08261	Per Kg	102
5	SUPPLY AND DELIVERY OF BOLTS AND NUTS WITH DOUBLE WAHSERS INCLUDING TAXES AND CONVEYANCE ETC., COMPLETE. (1/2" TO 1")	MAT-08262	Per Kg	122
26	Bailling out water (for PH item)			
	a) Bailling out water from the pipe line trenches with oil engine driven pumpsets, including hire charges, fuel charges and wages for driver and helper upto 5HP capacity pumps (2018-19 SSR)	HP / Hour		64.00
	b) Bailling out water from the pipe line trenches with Electric Driven pumpset. Including hire charges, current charges and wages for driver and helper upto 5HP capacity pumps (2018-19 SSR)	HP / Hour		45.00
	NOTE :- The rate is payable on the total H.P hours ignoring fractions less than 0.5 HP hour and rounding off 0.5 HP hour or more to the next higher integer.			
32	Lift or delift of materials			
LAB-00674	a) Lifting of cement concrete for RCC elevated reservoir, for every 1 m height or part there of over the initial lift of 3 m	1 Cum		208
LAB-00675	b) Delifting the materias such as stones, concrete below ground level for construction of machinery ground level reservoir, construction of ground level reservoir, inspection wells, test wells and sump wells etc., for every 1 m depth or part thereof beyond the initial depth of 3 m from ground level.	1 Cum		63

EARTHWORK EXCAVATION FOR PVC PIPES (2024-25) - (Coefficient 1.62)

S.No.	Rate Analysis :				Rate	Laying	
1	E/W Rate - Using machinery				110.48	63mm	10.65
	E/W Rate - Manual (as per std. data)				216.58	75mm	12.68
						90mm	15.21
						110mm	18.59
	Extra Allowance for trench cutting				75%	125mm	21.13
	Coefficient for Lowering, Laying, Jointing & HF testing				1.62	140mm	23.66
2	Earthwork excavation in all soils upto SDR except hard rock requiring blasting for P.V.C pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., MANUALLY						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 0.70m ³ X 216.58/m ³	151.61	151.61	151.61	151.61	151.61	151.61
2	Extra allowance 75%	113.71	113.71	113.71	113.71	113.71	113.71
3	Lowering, Laying, Jointing & HF testing	10.65	12.68	15.21	18.59	21.13	23.66
	(Co.eff - 1.62)						
	Total	275.97	278.00	280.53	283.91	286.45	288.98
3	Earthwork Excavation in all soils upto SDR except hard rock requiring blasting for P.V.C pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., complete for 2/3rd machinery & 1/3rd MANUAL						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 1/3 -(216.58*0.7*1/3=216.58*0.233)	50.54	50.54	50.54	50.54	50.54	50.54
2	Extra allowance at 75%	37.91	37.91	37.91	37.91	37.91	37.91
3	Earthwork 2/3 -(110.48*0.7*2/3=110.48*0.467)	51.56	51.56	51.56	51.56	51.56	51.56
4	Lowering, Laying, Jointing & HF testing	10.65	12.68	15.21	18.59	21.13	23.66
	(Co.eff - 1.62)						
	Total	150.66	152.69	155.22	158.60	161.14	163.67
4	Earthwork excavation in all soils upto SDR except hard rock requiring blasting for P.V.C pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., complete for MACHINERY - 108.45						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 0.70 m ³ x110.48	77.34	77.34	77.34	77.34	77.34	77.34
2	Lowering, Laying, Jointing & HF testing	10.65	12.68	15.21	18.59	21.13	23.66
	(Co.eff - 1.62)						
	Total	87.99	90.02	92.55	95.93	98.47	101.00

**16(1). SO RATES FOR H.D.P.E FOR THE YEAR 2024-25 . (PE - 100 Grade) with Resin cost Rs.104280/- per MT
(excluding all taxes)**

No	Description	Code	6.0 kg /	Code	8.0 kg /	Code	10.0 kg /	Code	16.0 kg /
1	Manufacture, Supply & delivery of HDPE pipes conforming to IS 4984 - 1995 including transportation to any where in A.P , excluding excise duty, sale tax and specials etc., complete. (supply upto 90mm dia in coil & above 90 mm dia straight length in 6M.								
	OD 20 mm							MAT-07355	25
	OD 25 mm							MAT-07356	37
	OD 32 mm					MAT-07309	43	MAT-07357	60
	OD 40 mm			MAT-07285	54	MAT-07310	66	MAT-07358	116
	OD 50 mm	MAT-07261	68	MAT-07286	84	MAT-07311	102	MAT-07359	148
	OD 63 mm	MAT-07262	110	MAT-07287	135	MAT-07312	168	MAT-07360	237
	OD 75 mm	MAT-07263	158	MAT-07288	195	MAT-07313	237	MAT-07361	338
	OD 90 mm	MAT-07264	225	MAT-07289	274	MAT-07314	340	MAT-07362	485
	OD 110 mm	MAT-07265	342	MAT-07290	412	MAT-07315	502	MAT-07363	728
	OD 125 mm	MAT-07266	437	MAT-07291	529	MAT-07316	648	MAT-07364	936
	OD 140 mm	MAT-07267	546	MAT-07292	665	MAT-07317	812	MAT-07365	1177
	OD 160 mm	MAT-07268	716	MAT-07293	873	MAT-07318	1064	MAT-07366	1534
	OD 180 mm	MAT-07269	901	MAT-07294	1095	MAT-07319	1347	MAT-07367	1938
	OD 200 mm	MAT-07270	1116	MAT-07295	1352	MAT-07320	1657	MAT-07368	2398

20	So RATES FOR PVC PIPES FOR THE YEAR 2024-25 with Resin cost Rs.80030/- per MT (excluding all taxes)								
1	Manufacture, Supply and delivery of Unplasticised PVCs Pipes for potable water supplies conforming to IS : 4985 / 2000 (Third revision) with bell ends (Socket) as per specification in light Grey / Natural Ivory Grey / Any other Color (except white) inclusive of transportation to the sub-divisional stores anywhere in AP excluding Excise duty and Sales Tax etc.,								
		Code	4.0 Kgs	Code	6 Kgs ²	Code	10 Kgs		
			Rate/Metre		Rate/Metre		Rate/Metre		
	20					MAT-07664	16		
	25					MAT-07665	25		
	32					MAT-07666	38		
	40			MAT-07647	36	MAT-07667	57		
	50			MAT-07648	53	MAT-07668	89		
	63	MAT-07632	58	MAT-07649	84	MAT-07669	125		
	75	MAT-07633	84	MAT-07650	115	MAT-07670	182		
	90	MAT-07634	116	MAT-07651	166	MAT-07671	258		
	110	MAT-07635	168	MAT-07652	241	MAT-07672	387		
	125	MAT-07636	221	MAT-07653	308	MAT-07673	504		
	140	MAT-07637	275	MAT-07654	396	MAT-07674	625		
	160	MAT-07638	362	MAT-07655	512	MAT-07675	821		
	180	MAT-07639	462	MAT-07656	660	MAT-07676	1052		
	200	MAT-07640	560	MAT-07657	803	MAT-07677	1280		
	225	MAT-07641	748	MAT-07658	1081	MAT-07678	1719		
	250	MAT-07642	870	MAT-07659	1316	MAT-07679	2084		
	280	MAT-07643	1131	MAT-07660	1660	MAT-07680	2626		
	315	MAT-07644	1434	MAT-07661	2104	MAT-07681	3323		
	355	MAT-07645	1892	MAT-07662	2743				
	400	MAT-07646	2385	MAT-07663	3493				

25	SOR RATES FOR CI PIPES AND VALVES FOR THE YEAR 2024-25								
	MANUFACTURE, SUPPLY AND DELIVERY OF CAST IRON PIPES AND FITTINGS (Spls.) CONFORMING TO I.S. No. 7181 / 1986, 5531 / 1988, 3950 / 1979 AND C.I.D JOINTS CONFIRMING TO IS No. 8794 / 1988 AT SITE OF WORK ANYWHERE IN A.P. INCLUDING, LOADING, UNLOADING, TRANSPORTATION TO SITE OF WORK STACKING AT SITE TRANSIT RISK AND PACKAGE, EXCLUDING TAXES AND DUTIES.								
	I.S. No. 7181 / 1986 , 5531 / 1988, 3950 / 1979 & 8794 / 1988						MAT-07982	81.48	
27	SO RATES FOR C.I. D/F VALVES FOR THE YEAR 2012-13 (SSR)								
	Manufacture, Supply and delivery of CI D/F Sluice valves conforming to IS 14846 / 2000 eith amendments No. 1&2 hevey duty with CI grade FG 260 as per IS: 210. Two coats of primer suitable for EPOXY PAINTS finish shall be applied to all metal surface and finally two coats of Epoxy Paint. The valves shall be tested for (Closed end Test) against Hydrostatic test requirement. The rates are excluding transportation, Central Excise duty and sale tax etc., The operation can be done with hand wheel / ca[. ISI Marked. (SSR 2012-13)								
	DIA IN MM	Rate / Each				P.N - 1.0		P.N.1.6	
	50					3,822		4,586	
	65					4,223		5,068	
	80					4,468		5,360	
	100					5,957		7,147	
	125					7,445		8,934	
	150					8,934		10,721	
	200					15,660		18,472	
3	Manufacture, Supply and delivery of CI D/F Non Return Valve Heavy Duty Round Body conforming to IS 5312 / Part 1 / 1984. excluding transportation, Central Excise duty and sales tax etc., complete (SSR 2012 - 13).								
	DIA IN MM	P.N.0.6				P.N - 1.0		P.N.1.6	
	50							2,348	
	65							2,935	
	80							3,523	
	100							4,696	
	125							5,870	
	150					7,043		8,803	
	200					14,049		17,561	
4	Manufacture, Supply and delivery of CI D/F Kinetic Air valve hevey duty suitable for working pressure up to 16kg/cm ² without isolating valve, conforming to IS 14845 exluding transportation, Central Excise duty and sale Tax etc., Complete.(SSR - 2012-13)								
	DIA IN MM	Rate / Each				P.N - 1.0		P.N.1.6	
	40					2,770		3,034	
	50					3,347		3,666	
	80					4,477		5,504	
	100					6,000		6,571	
	150					13,517		14,804	
	200					22,383		24,515	

30	S O RATES FOR VALVES FOR HEAVY USAGE IN WTPs, STPs, PUMPHOUSES, PUMPING MAINS & ELSRs.THE YEAR-2024-25								
1	Supply and delivery of "Resilient Seated Soft Sealing" Gate valves (Sluice Valves) with Body and Bonnet of Ductile Iron GGG-40 / SG-400/15 or GGG-50/ SG-500/7 or Equivalent as per IS 1865, IS:3896-2 and Wedge fully Rubber Lined with food grade quality grade W270 grade EPDM, Replaceable Spindle Nut without gland packing with 3-O ring Protection system on the Shaft and Seals of NBR. The Valves should be Vacuum tight and 100% leak proof with face to face dimensions as BS:5163 Type A/IS:14846. All the valves should be with fusion bonded Electrostatic Powder coating both inside and outside (Min 250 Microns) - RAL 5005 with pocket Less Straight through body passage conforming to Design standards of DIN-3202F4/BS:5163 Type A Flange drilling as per IS - 1538 excluding all taxes, duties and transportation								
	DIA IN MM	Code	PN 1.0 (Mpa)	Code	PN 1.6 (Mpa)	Code	PN 2.5 (Mpa)		
	A) Without By-pass								
	50	MAT-08058	7,669	MAT-08067	7,669	MAT-08076	13,865		
	80	MAT-08059	9,922	MAT-08068	9,922	MAT-08077	17,094		
	100	MAT-08060	11,880	MAT-08069	12,957	MAT-08078	19,381		
	150	MAT-08061	18,480	MAT-08070	20,401	MAT-08079	32,327		
	200	MAT-08062	23,980	MAT-08071	29,975	MAT-08080	54,524		
	250	MAT-08063	30,580	MAT-08072	38,225	MAT-08081	80,987		
	300	MAT-08064	56,980	MAT-08073	70,965	MAT-08082	131,363		
	350	MAT-08065	78,980	MAT-08074	98,725	MAT-08083	384,409		
	400	MAT-08066	100,980	MAT-08075	126,225	MAT-08084	390,996		
	SO RATES for DI Flanged Signle Chamber Air Release Valves for the year 2024-25								
2	Supply and delivery of Tamper proof DI Flanged Signle Chamber Air Release Valves with body & cover made of Ductile Iron Grade GGG-40/SG-400/15 or GGG-50/SG-500/7 or Equivalent as per ISI 1865, IS:3896-2 with Food Grade Epoxy powder coating(EP-P) (Min:250 Micron) inside and outside of Color Blue RAL 5005. All internal parts such as float, Shell, cove Bolts etc., made of Austenitic alloy steel of SS AISI 304/316 and DN 50 float of and other components with ABS / PTFE / E{DM/ NBR and generally conforming to DIN/BIS/AWWA standards (or) combination Flange drilling as er IS - 1538 and exclusive of all taxes and transportation.								
	DIA IN MM	Code	PN 1.0 (Mpa)	Code	PN 1.6 (Mpa)	Code	PN 2.5 (Mpa)		
	25	MAT-08085	4,180	MAT-08093	5,225				
	40	MAT-08086	7,480	MAT-08094	9,350	MAT-08101	53,890		
	50	MAT-08087	10,780	MAT-08095	13,475	MAT-08102	44,092		
	80	MAT-08088	18,480	MAT-08096	23,100	MAT-08103	45,715		
	100	MAT-08089	23,980	MAT-08097	29,975	MAT-08104	61,378		
	150	MAT-08090	45,980	MAT-08098	57,475	MAT-08105	74,257		
	200	MAT-08091	66,538	MAT-08099	66,538	MAT-08106	82,766		
	300	MAT-08092	108,680	MAT-08100	111150				
3	Supply and delivery of D.I.Double flanged Swing Check type Reflux valves (Non Return valves) confirming to IS-5312 (Pts-1&2) (with amendments upto date, if any) having Body, Cover, Door, Bearing holder with D.I: hinge pin, Door pin, Door suspension pin with Stainless steel (IS 6603): Body seat ring, Door face ring, Bearing bushes, Plugs for hinge pin with leaded Tin Bronze (IS 318): bolts, nuts with Carbon steel: Gaskets with Rubber:Hinges with Cast steel: excluding of all taxes and transportation.								
	DIA IN MM	Code	PN 1.0 (Mpa)	Code	PN 1.6 (Mpa)				
	50	MAT-08034	10,780	MAT-08046	13,475				
	100	MAT-08035	15,180	MAT-08047	18,975				
	Note:- All the prices are ex-go down / ex-factory. Packing and Transportation <u>Extra at 5%</u> on basic cost. The grade of DI & conformation to specifications shall be certified by a third party Quality Control Agency approved by indenting authority at the cost of supplier.								

EARTHWORK EXCAVATION FOR HDPE PIPES (2024-25)

S.No.	Rate Analysis :				Rate	Laying	
1	E/W Rate - Using machinery				110.48	63mm	42.36
	E/W Rate - Manual (as per std. data)				216.58	75mm	45.80
						90mm	51.72
						110mm	62.43
	Extra Allowance for trench cutting				75%	125mm	76.62
	Coefficient for Lowering, Laying, Jointing & HF testing					140mm	90.38
2	Earthwork excavation in all soils upto SDR except hard rock requiring blasting for HDPE pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., MANUALLY						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 0.70m ³ X 216.58/m ³	151.61	151.61	151.61	151.61	151.61	151.61
2	Extra allowance 75%	113.71	113.71	113.71	113.71	113.71	113.71
3	Lowering, Laying, Jointing & HF testing	42.36	45.80	51.72	62.43	76.62	90.38
	Total	307.68	311.12	317.04	327.75	341.94	355.70
3	Earthwork Excavation in all soils upto SDR except hard rock requiring blasting for HDPE pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., complete for 2/3rd machinery & 1/3rd MANUAL						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 1/3 -(216.58*0.7*1/3=203.84	50.54	50.54	50.54	50.54	50.54	50.54
2	Extra allowance at 75%	37.90	37.90	37.90	37.90	37.90	37.90
3	Earthwork 2/3 -(110.48*0.7*2/3=108.45	51.56	51.56	51.56	51.56	51.56	51.56
4	Lowering, Laying, Jointing & HF testing	42.36	45.80	51.72	62.43	76.62	90.38
	Total	182.36	185.80	191.72	202.43	216.62	230.38
4	Earthwork excavation in all soils upto SDR except hard rock requiring blasting for HDPE pipes and filling with excavated soils including laying jointing testing of pipe line but excluding cost of materials etc., complete for MACHINERY - 108.45						
	Trench size	0.70 m X 1.00 m					
	Pipe dia in mm =	63mm	75mm	90mm	110mm	125mm	140mm
1	Earthwork 0.70 m ³ x110.48	77.34	77.34	77.34	77.34	77.34	77.34
2	Lowering, Laying, Jointing & HF testing	42.36	45.80	51.72	62.43	76.62	90.38
	Total	119.70	123.14	129.06	139.77	153.96	167.72

CI DF PIPES & SPECIALS (Kgs) = Rs.81.48 per Kg											
Dia in mm	0.60	0.90	1.00	2.00	0.60 TP	0.90 TP	1.00 TP	Duck foot bend	BELL Mouth	SEMI Circular	Flanged spigot
80	19.28	25.22	27.20	47.00	15.58	21.52	23.50	21.00	7.00	25.00	7.40
100	23.64	31.26	33.80	59.20	19.44	27.06	29.60	26.00	9.00	35.00	9.10
125	30.46	40.39	43.70	76.80	25.16	35.09	38.40	36.00	12.00	45.00	11.70
150	38.36	50.84	55.00	96.60	31.66	44.14	48.30	47.00	15.00	65.00	15.30
200	54.66	72.69	78.70	138.80	45.36	63.39	69.40	74.00	23.00	100.00	22.70
REDUCERS			TEES				AIR TEES				
Dia	P/E	D/F	Dia	P/E	B/F	A/F	Dia	P/E	A/F		
100x80	8.30	12.00	80x80x80	9.70	13.40	21.00	80x80x40	10.73	18.13		
125x80	9.60	20.00	100x100x80	12.10	15.80	25.00	80x80x50	11.73	19.13		
125x100	10.60	22.00	100x100x100	13.50	17.70	26.00	100x100x40	13.65	22.05		
150x80	11.10	23.00	125x125x80	15.70	19.40	32.00	100x100x50	14.65	23.05		
150x100	12.10	25.00	125x125x100	17.10	21.30	34.00	125x125x40	17.90	28.56		
150x125	13.40	27.00	125x125x125	18.90	24.20	36.00	125x125x50	18.90	29.56		
200x80			150x150x80	22.20	25.90	41.00	150x150x40				
200x100	16.00	31.00	150x150x100	23.10	27.30	42.00	150x150x50	24.60	38.00		
200x125	17.30	34.00	150x150x125	24.40	29.70	45.00	200x200x40	38.20	56.80		
200x150	18.80	37.00	150x150x150	26.00	32.70	47.00	200x200x50	39.20	57.80		
			200x200x80	37.30	41.00	62.00					
			200x200x100	38.30	42.50	63.00					
			200x200x125	39.70	45.00	66.00					
			200x200x150	41.40	47.50	68.00					
			200x200x200	45.90	55.20	74.00					
RATES FOR PVC PIPES & SPECIALS (PIPELINE)											
	15mm	20mm	25mm	32mm	40mm	50mm	63mm	75mm	90mm	110mm	125mm
PVC End Cap (Dummy)		3.00	3.60	6.00	10.00	14.00	20.00	30.00	43.00	70.00	117.00
PVC Elbow		4.80	6.00	10.00	16.00	30.00	42.00	54.00	104.00	144.00	264.00
PVC FTA		4.00	6.00	8.00	16.00	24.00	40.00	50.00	77.00	145.00	205.00
PVC MTA		4.50	6.00	8.00	14.00	22.00	32.00	48.00	60.00	110.00	190.00
PVC Bend		19.00	22.00	24.00	30.00	54.00	62.00	87.00	139.00	218.00	490.00
Any dia PVC reducers			10.00	16.00	19.00	20.00	26.00	70.00	79.90	113.00	203.00
PVC Tee		6.00	10.00	14.00	24.00	30.00	45.00	60.00	120.00	145.00	210.00
Any dia PVC reducing Tees			8.00	14.00	20.00	26.00	56.00	85.00	130.00	190.00	250.00
PVC Saddle						48.00	70.00	76.00	87.00	105.00	150.00
PVC Tank Nipple		80.00	100.00	120.00							
PVC Ball Valve		300.00	450.00								
PVC Couplings		4.00	6.00	9.00	14.00	18.00	25.00	60.00	84.00		

42. RATES FOR GI PIPES 2024-25									
		Manufacture , supply & delivery of GI pipes of various sizes and transportation any where in Andhra Pradesh,excluding GST							
		SIZE	RATE		SIZE	RATE		SIZE	RATE
		15mm	178.1		40mm	475.65		100mm	1454.13
		20mm	226.5		50mm	649.30		125mm	2000.75
		25mm	324.65		65mm	818.42		150mm	2289.16
		32mm	403.17		80mm	1023.78			

GI SPECIAL RATES

SIZE	15MM	20MM	25MM	32MM	40MM	50MM	65MM	80MM	100MM	125MM	150MM
GI Socket (coupling)	20.00	30.00	51.00	66.00	120.00	140.00	180.00	195.00	275.00		
GI Elbow	16.00	40.00	42.00	54.00	72.00	113.00	216.00	288.00	513.00		
GI Bend	17.60	27.00	39.00	100.00	150.00	200.00	300.00	450.00	700.00		
GI Tee	30.00	43.00	51.00	71.00	113.00	196.00	384.00	545.00	1440.00		
GI Dummy	8.00	10.00	14.00	20.00	30.00	40.00	64.00	86.00			
GI Union Joint	40.00	53.00	75.00	114.00	144.00	215.00	262.00	359.00			
GI Hex Nipple	10.00	14.00	24.00	37.00	46.00	69.00	143.00	210.00			
GM Ball Valve		300.00	429.00								
GM Gate Valve		208.00	377.00		1200.00	1300.00	1500.00	1750.00			
GI 3" Nipple		7.00	10.00	12.00							
GI 6" Nipple			20.00	24.00							
GI 9" Nipple	32.00	38.00	52.00	80.00	96.00	150.00	200.00	232.00	248.00		
GI Tank nipple		50.00	60.00	68.00	90.00	145.00					
MS U clamps (pipe clips)		7.00	9.00	14.00	18.00	24.00	26.00	30.00	34.00		

RATES FOR HDPE SPECIALS (PIPELINE)

RATES FOR HDPE SPECIALS (PIPELINE)											
PIPE LONG NECK/ COLLARS		CFMS CODE		RATE		MS FLANGES		CFMS CODE		RATE	
OD 50mm		MAT-07471		85		OD 50mm		MAT-07488		104	
OD 63mm		MAT-07472		108		OD 63mm		MAT-07489		131	
OD 75mm		MAT-07473		129		OD 75mm		MAT-07490		168	
OD 90mm		MAT-07474		181		OD 90mm		MAT-07491		181	
OD 110mm		MAT-07475		250		OD 110mm		MAT-07492		190	
OD 125mm		MAT-07476		449		OD 125mm		MAT-07493		261	
OD 140mm		MAT-07477		421		OD 140mm		MAT-07494		284	
END CAPS						REDUCERS					
OD 50mm		MAT-07507		63		OD 50mm X 63mm		MAT-07525		85	
OD 63mm		MAT-07508		74		OD 63mm X 75mm		MAT-07526		124	
OD 75mm		MAT-07509		93		OD 75mm X 90mm		MAT-07527		205	
OD 90mm		MAT-07510		124		OD 90mm X 110mm		MAT-07528		281	
OD 110mm		MAT-07511		141		OD 110mm X 125mm		MAT-07529		429	
OD 125mm		MAT-07512		197		OD 125mm X 140mm		MAT-07530		595	
OD 140mm		MAT-07513		230		OD 140mm X 160mm		MAT-07531		830	

TEES					BENDS				
OD 50mm	MAT-07542	119		OD 50mm	MAT-07560	74			
OD 63mm	MAT-07543	189		OD 63mm	MAT-07561	167			
OD 75mm	MAT-07544	230		OD 75mm	MAT-07562	217			
OD 90mm	MAT-07545	402		OD 90mm	MAT-07563	369			
OD 110mm	MAT-07546	476		OD 110mm	MAT-07564	488			
OD 125mm	MAT-07547	717		OD 125mm	MAT-07565	722			
OD 140mm	MAT-07548	919		OD 140mm	MAT-07566	950			

FHTCS (TAPS) MATERIALS									
			15mm	20mm	25mm		63mm PVC saddles		70.00
	Brass/GM Ferrule		146.00	239.00	416.00		75mm PVC saddles		76.00
	Steel Taps		185.00	259.00			90mm PVC saddles		87.00
	waste not/CI Tap		65.00	79.00			110mm PVC Saddle		105.00
	PVC taps			30.00			20mm PVC Pipe 10kg /cm2		19
	PVC Elbow		5.00	6.00			25m PVC Pipe 10kg /cm2		29
	PVC Bend		19.00	22.00			32mm PVC Pipe 10kg /cm2		44
	PVC FTA		4.00	6.00					
	GI pipe		178.10	226.50	324.65				
	GI elbow		16.00	40.00	42.00				
	GI bend		18.00	45.00	50.00				
	GI coupling		20.00	30.00	51.00				
	GI nipple 0.30M		45.00	55.00	75.00				
	GI nipple 0.23M		35.00	45.00	55.00				
Supply and fixing of premium make CPVC Pipes and fittings to meet requirement of ASTM-D 2846 and are produced in CTS (Copper Tube sizes 1/2" ton 2" SDR 11 and SDR 13.5 pipes are made from identical CPVC compound having the same physical properties for Hot and Cold water (IS : 15778 : 2007)									
	15.90mm OD CPVC pipe - SDR 13.5					MAT-02312	BMW-I.220	1 RM	157.00
	22.20mm OD CPVC pipe - SDR 13.5					MAT-02313	BMW-I.221	1 RM	184.00
	28.60mm OD CPVC pipe - SDR 13.5					MAT-02314	BMW-I.222	1 RM	222.00
	34.90mm OD CPVC pipe - SDR 13.5					MAT-02315	BMW-I.223	1 RM	288.00
	41.30mm OD CPVC pipe - SDR 13.5					MAT-02316	BMW-I.224	1 RM	390.00
	54mm OD CPVC pipe - SDR 13.5					MAT-02317	BMW-I.225	1 RM	522.00
	15.90mm OD CPVC pipe - SDR 11					MAT-02318	BMW-I.226	1 RM	168.00
	22.20mm OD CPVC pipe - SDR 11					MAT-02319	BMW-I.227	1 RM	198.00
	28.60mm OD CPVC pipe - SDR 11					MAT-02320	BMW-I.228	1 RM	245.00
	34.90mm OD CPVC pipe - SDR 11					MAT-02321	BMW-I.229	1 RM	321.00
	41.30mm OD CPVC pipe - SDR 11					MAT-02322	BMW-I.230	1 RM	438.00
	54mm OD CPVC pipe - SDR 11					MAT-02323	BMW-I.231	1 RM	600.00

Supply and fixing of House service connections (PP Saddle) PP Clamp saddles - PP clamp Saddles shall be manufactured by injection moulding using virgin polypropylene. Mechanical tapping saddles for water works purposes and designed for use with PVC / PE pipe as per IS4985/IS 4984 respectively. These saddles should be contoured to fit around the pipe. PP saddles shall be Blue / Black moulded in with Nickel plated Brass / SS 304 metal female threaded outlets. Seal shall be thermo plasticelastomer rubber suitable for drinking water and nut-bolt-washer with SS. The PP Clampsaddle fittings shall be moulded with SS 304/Nickel plated Brass female threaded outlet inserted to connect necessary fittings. Thread dimension shall confirm to IS-554 / ISO-7. Adequate thickness of PP shall be provided to hold brass insert in place and avoid leakage while pressure applications. Fasteners shall be threaded type, with SS. Fasteners of size 125 mm and above. The grade of raw material used must be certified by WRAS, UK for type test as per BS 6920 from their certified laboratories like NSF International Ltd. UK and certificate of compliance to be produced for the following parameters: i) Odour & Flavour of water, ii) Appearance of water, iii) Growth of Micro Organism, iv) Extraction of substances that may be of concern to public health (Cytotoxicity), v) Extraction of metals (as per SoR 22-23) excluding GST									
63x1/2"	MAT-08314	each	127.00		90x1/2"	MAT-08320	each	169.00	
63x3/4"	MAT-08315	each	127.00		90x3/4"	MAT-08321	each	169.00	
75x1/2"	MAT-08317	each	148.00		110x1/2"	MAT-08323	each	203.00	
75x3/4"	MAT-08318	each	148.00		110x3/4"	MAT-08324	each	203.00	
Cost and supply of tamer proof house hold Non return cum Flow control valve (with all three parts made by using solid steel bars of SS 319) with CNC machine make and of 15 mm dia designed for 5 LPM discharge @ 0.5 bar pressure loss, not exceeding the flow of 7 LPM at 1 bar pressure and working on float principle (as per CPHEO manual) including cost of materials, manufacturing, loading, unloading, stacking, transit insurance, transportation but excluding GST.									
Cost, Supply and fixing of compression fittings shall comply with ISO 17885 2015, PN-16 rating and manufacture from virgin resin of PE-80 having blue colour. Raw material must be WRAS approved as per BS 6920 for effect on water quality intended for human consumption. Compression fittings should have moulded in SS 304 threaded insert outlet with thread dimension conforming to IS 554/ISO7. The cost shall include testing of all materials, labour all taxes (central and state) inspection charges, transportation up to site, transit insurance, loading, unloading, stacking and fixing etc complete as specified and directed by the department engineer incharge excluding GST									
Compression male / female threaded adaptor with SS insert D20 mmx 1/2"	each	MAT-08296	103.00						
Compression male / female threaded adaptor with SS insert D25 mmx 3/4"	each	MAT-08297	137.00						
Compression male / female threaded adaptor with SS insert D32 mmx 1"	each	MAT-08298	191.00						
Compression male / female threaded elbow with SS insert D20 mmx 1/2"	each	MAT-08299	106.00						
Compression male / female threaded elbow with SS insert D25 mmx 3/4"	each	MAT-08300	143.00						
Compression male / female threaded elbow with SS insert D32 mmx 1"		MAT-08301	198.00						
Supply of PPR female threaded Adaptor confirming to DIN standards 8077/8092									
20mm x 1/2"	BMW-I.346	MAT-02438	each	104.00					
25mm x 1/2"	BMW-I.347	MAT-02439	each	106.00					
25mm x 3/4"	BMW-I.348	MAT-02440	each	186.00					
32mm x 1/2"	BMW-I.349	MAT-02441	each	190.00					
32mm x 3/4"	BMW-I.350	MAT-02442	each	195.00					
Supply of PPR female threaded Elbow confirming to DIN standards 8077/8092									
20mm x 1/2"	BMW-I.365	MAT-02457	each	111.00					
25mm x 1/2"	BMW-I.366	MAT-02458	each	116.00					
25mm x 3/4"	BMW-I.367	MAT-02459	each	179.00					
32mm x 1/2"	BMW-I.368	MAT-02460	each	171.00					
32mm x 3/4"	BMW-I.369	MAT-02461	each	200.00					

	House Serice connections (Regulating Ferrule)								
	The Ferrule of pressure rating PN 10 and shall comply with IS 2692 : 1989. The Cost shall include testing of all materials, labour, inspection charges, transport upto site, transit insurance, loading, unloading, stacking and fixing etc., complete as specified and directed by the Engineer in charges, but excluding all taxes								
	1/2"		each	MAT-08311	146.00				
	3/4"		each	MAT-08312	239.00				
	1"		each	MAT-08313	416.00				
	Supply and fixing of 12.7 mm brass bib cock (long body)								
	Indian make heavy duty			MAT-01818	BMW-E.17	each	222.00		
	-do- Labour charges only			LAB-00184	BMW-E.18	each	35.00		
	Labour charges for fixing of dia RCC precast ring/Cover slab for Tap /Valve chambers including hiring private vehicle, labour charges for loading at souce, transportaion to site of work, unloading and fixing in position etc., complete								
	RCC PRECASTED RINGS/COVER SLABS			DIA	600mm	750mm	900/1000 mm	1200mm	
	RCC precasted rings/Cover slabs				350.00	450.00	600.00	800.00	
	Loading and Conveyance charges				75.00	100.00	125.00	150.00	
	Unloading and lowering,laying and fixing				75.00	100.00	125.00	150.00	
					500.00	650.00	850.00	1100.00	

Sno	Description of item	Nos	Measurements			Quantity	Rate	Per	Amount
			L	B	D				
1	2	3	4	5	6	7	8	9	10
	38. BORE WELL DRILLING RATES FOR THE YEAR 20224-25								
	Drilling of Borewell with DTH Rig								
1	Drilling of Bore well by down the hole hammer drilling to a finished dia of 112/165mm in all formations, such as medium hard rock formation to hard rock formation, all consolidated formation etc., and drilling in over burden to dia not less than 200mm etc and reaming the bore well to suit insertion of suitable casing pipe etc., with couplings, caps any other relevant materials upto required depth as directed by the department including transportation of drilling rigs and supporting vehicle and including bore development (Flushing of borewell at an average pressure of 150PSI) conducting yield test, consumables charges, Crew charges required in fixation of pipe assembly completely done to the satisfaction of the department and including all labour charges and all taxes, but excluding the cost of casing pipe, couplings, cap etc.; The entire work should be carried out as per IS - 2800 Part I & II 1979 and amended from time to time.								
	The entire work to be carried out as per I.S. 2800 Part - I & II of								
	Drilling of Borewell 112mm dia. Upto 150.00M depth								
		1	x	1		1 RM	383.89		
	Drilling of Borewell 112mm dia. beyond 150.00M depth								
		1	x	1		1 RM	438.02		
	Drilling of Borewell 112mm dia for Agency area								
		1	x	1		1 No	10% over plain area rate		
	Drilling of Borewell 165mm dia upto 90.00M depth								
						1 RM	492.16		
	Drilling of Borewell 165mm dia above 90.00M upto 150.00M								
						1 RM	526.55		
	Drilling of Borewell 165mm dia above 150.00M upto 250.00M depth								
						1 RM	590.61		
	Drilling of Borewell 165mm dia above 250.00M upto 350.00M depth								
						1 RM	718.50		
	Drilling of Borewell 165mm dia beyond 350.00M depth								
						1 RM	777.60		
	Drilling of Borewell 165mm dia for Agency area								
						1 No	10% over plain area		
	Drilling of Borewell with Rotary Rig								
2	Drilling of Bore hole (which may be carried out by pilot bore hole) to a finished dia of 200/225/300/350/450mm hole (for insertion of 110/140/160/180/200mm PVC pipe / 175/200mm PVC blue casing pipe) by Rotary drilling rig in all formations suitable for Rotary drilling such as alluvium, loamy, clayey, sand burried channels, highly disturbed and bouldary zones, high sheared and fractured zones followed by jointed to massive soft, medium rock, all formations typical and suitable for rotary drilling etc. including insertion of casing pipe, couplings, cap, plug fixation, and including filling the peripheral gap with rebulted pebbled gravel packing, bore development, conducting yield test, and all other required in fixation of pipes assembly etc., but excluding the cost of casing pipe, couplings, dummys clamps etc., as recommended by the departmental Geologist. The bore should be developed with compressor air until clear water free from sand and other materials continuously discharged. The size of gravel used for gravel packing should be as								
	The entire work to be carried out as per I.S. 2800 Part - I & II of 1979 and including cost of all materials and all labour charges and all taxes etc.,								
	Drilling of Borewell of 200/225/300mm dia for insertion of								
		1	x	1		1 RM	1102.50		
	Drilling of Borewell of 350/450mm dia for insertion of dia								
		1	x	1		1 RM	1427.30		
	Drilling of Borewells for Agency area								
						1 RM	10% over plain area		
	Drilling of Bore wells with Hand Bore set								

3	Drilling of Borewell with Hand bore set to a finished dia of 112/165/175/180mm justify both sides in all kinds of formations suitable for hand bore set drilling such as black cotton soils, sandy and alluvial soils and insertion of PVC/PVC blue casing pipe with couplings including slotting of pipe where ever required and fixing of bore well with cap and ball plug as per directions of the department for a finished item of work including conducting yhiel test, crew charges , cost of consumables, transportation charges and bore development charges and all other charges required in fixation of pipe assembly, Flushing of bore with required pressure excluding cost of all									
	Drilling of Borewell of finished dia of 112mm							1 RM	442.88	
	Drilling of Borewell of finished dia of 112mm for Agency							1 RM	10% over plain area	
	Drilling of Borewell of finished dia of 165/175/180mm dia							1 RM	634.93	
	Drilling of Borewell of finished dia of 165/175/180mm dia for							1 RM	10% over plain area	
4	Construction of Bore well platform									
	Construction of bore well platform of 1.85M dia and 3.00 M length drain and foot rest of 1.00 x 1.00 M with CC (1:2:4) using 20mm HBG metal including cost and conveyance of all materials , labour charges, centering, curing, seigniorage charges & excluding taxes etc., complete as per UNICEF									
	for Plain Areas							1 No	9702.00	
	for Agency Areas							1 No	10% over plain area	
5	Flushing of Borewell									
	Flushing of bore well of dia 165/150 mm with power rig at an average pressure of 150 PSI, including crew charges, completely done to the satiswfaction of the department including detachable of all accessories and refix all materials as per the original condition including all labour charges, but excluding cost of materials & excluding taxes etc., complete									
	for 112 mm dia Bore wells							1 job	8820.00	
	for 165/150 mm dia Bore wells							1 job	10473.75	
	for Agency Areas							1 No	10% over plain area	
6	Deepening of existing bore wells									
	Deepening of existing bore wells of dia 165/150mm by using DTH rig including flushing the bore well, conducting yield etc., excluding taxes									
	for depth up to 150 M							1 RM	578.81	
	for depth from 150 M to 250 M							1 RM	661.50	
	for depth from 250 M to 350 M							1 RM	804.82	
	above 350 M depth							1 RM	870.97	
7	Supply , Delivery of ISI marked fully hot dipped galvanized deep well India Mark - II Hand pump assembly complete unit with 10 Nos of connecting rods (bright bar of 12mm dia and 3.00M length each confirming to IS 9301/1990 & IS 14101 to 14104:1994 with their amendments /revisions but excluding taxes									
	India Mark - II Hand pump assembly set							1 No	12017.25	
8	Labour charges for erection of IM-II Hand Pump Assembly with all its accessories and with the required number of 32mm dia CI-B GI pipes including all taxes and as per the directions of the department officers but excluding taxes									
	for plain area							1 No	1102.50	
	for Agency Areas							1 No	10% over plain area	
9	Casing pipes, bore caps excluding taxes									
	175mm dia PVC blue casing pipe							1 RM	1178.10	
	Slotting charges for 175mm dia PVC blue casing pipe							1 RM	385.87	
	180mm dia PVC Casing pipe perforation charges							1 RM	358.31	
	175mm dia MS casing pipe perforation charges							1 RM	435.49	

	Supply and fixing of 180mm dia PVC Bore cap							1 No	330.75
10	Cost and supply of 32mm dia GI - B class pipes							1 RM	400.00
	Geological Survey charges excluding taxes								
11	Survey & Investigation charges payable to Geologist for identifying sustainable source including hiring of zep for conducting survey, engaging man mazdoor for helping during survey, fuel charges, crew charges etc., complete								
	for plain areas							1 No	1323.00
	for Agency areas							1 No	10% over plain area rate

PUMP SETS					
SINGLE PHASE SUBMERSIBLE MOTOR PUMPSETS					
213	Supply and Transportation of HP 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding, Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 240V \pm 10% , Single Phase 50 Hz AC supply,etc complete for 4" Bore well.	ELEC-5.4.1			
	Makes : Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/PSG/Aryan varsha				
a	0.75 HP 8 Stage	MAT-03639		1 No	17122
b	1.00 HP 10 Stage	MAT-03640		1 No	19602
c	1.00 HO 15 Stage	MAT-03641		1 No	20207
d	1.50 HP 21 Stage	MAT-03642		1 No	24503
e	2.00 HP 25 Stage	MAT-03643		1 No	29403
214	Supply and Transportation of HP 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding, Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 240V \pm 10% , Single Phase 50 Hz AC supply,etc complete for 4" Bore well.	ELEC-5.4.2			
	Makes : Pluga / Sterling / Falcon / Kumar / Unnati zen / Duke / Lada /Ellen / Suguna / UNitek /KSP (Karunya) /Anco / Sabar /Fit well/Deccan/Karvel/SILVER				
a	0.75 HP 8 Stage	MAT-03644		1 No	15367
b	1.00 HP 10 Stage	MAT-03645		1 No	17545
c	1.00 HO 15 Stage	MAT-03646		1 No	18150
d	1.50 HP 21 Stage	MAT-03647		1 No	22022
e	2.00 HP 25 Stage	MAT-03648		1 No	26439
THREE PHASE SUBMERSIBLE MOTOR PUMPSETS					
215	Supply and Transportation of 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding, Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 415V \pm 10% , Three Phase 50 Hz AC supply,etc complete for 4" Bore well.	ELEC-5.4.3			
	Makes: Kirloskar / Crompton / Texmo / CRI / KSB/ Lubi/ PSG/Aryen Varsha				
a	3.00 HP 15 Stage	MAT-03649		1 No	23837
b	4.00 HP 20 Stage	MAT-03650		1 No	27830
c	5.00 HP 25 Stage	MAT-03651		1 No	32912
216	Supply and Transportation of 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding,Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 415V \pm 10% , Three Phase 50 Hz AC supply,etc complete for 4" Bore well.	ELEC-5.4.4			
	Makes : Pluga / U-Neel/Sterling / Falcon / Kumar / Unnati Zen / Duke / Lada /Ellen / Suguna / UNitek /KSP (Karunya) /Anco / Sabar /Fit well/Deccan/Karvel/SILVER				
a	3.00 HP 15 Stage	MAT-03652		1 No	22385
b	4.00 HP 20 Stage	MAT-03653		1 No	26136
c	5.00 HP 25 Stage	MAT-03654		1 No	30976

217	Supply and Transportation of 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding, Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 415V \pm 10% , Three Phase 50 Hz AC supply,etc complete for 6" Bore well.	ELEC-5.4.5			
	Makes: Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/PSG/Aryen Varsha				
a	3.00 HP 5-10 Stage	MAT-03655		1 No	36300
b	5.00 HP 5-10 Stage	MAT-03656		1 No	40838
c	5.00 HP 12-16 Stage	MAT-03657		1 No	46585
d	7.50 HP 5 - 10 Stage	MAT-03658		1 No	45859
e	7.50 HP 12 - 16 Stage	MAT-03659		1 No	50820
f	7.50 HP 20 - 24 Stage	MAT-03660		1 No	52030
g	10.00 HP 5 - 10 Stage	MAT-03661		1 No	53845
h	10.00 HP 12 - 16 Stage	MAT-03662		1 No	55660
i	10.00 HP 20 - 24 Stage	MAT-03663		1 No	62920
j	12.50 HP 8 -12 Stage	MAT-03664		1 No	55660
k	12.50 HP 16 -24 Stage	MAT-03665		1 No	65340
l	15 HP 8 -12 Stage	MAT-03666		1 No	70059
m	15 HP 16 -24 Stage	MAT-03667		1 No	72358
n	20 HP 10 -20 Stage	MAT-03668		1 No	84095
o	20 HP 30 -40 Stage	MAT-03669		1 No	87725
p	25 HP 20 -25 Stage	MAT-05510		1 No	95590
218	Supply and Transportation of 5 Star rated Submersible motor pumpset, confirming to IS 8034 and motor confirming to IS 9283 with water proof winding, Pump shall be suitable for various delivery head and discharge with stainless steel shaft.Motor suitable for working on 415V \pm 10% , Three Phase 50 Hz AC supply,etc complete for 6" Bore well.	ELEC-5.4.6			
	Makes : Plugra / U-Neel/Sterling / Falcon / Kumar / Unnati zen / Duke / Lada /Ellen / Suguna / UNitek /KSP (Karunya)/ Anco / Sabar /Fit well/Polycab/ Deccan/ Karvel/SILVER				
a	3.00 HP 5-10 Stage	MAT-03670		1 No	32670
b	5.00 HP 5-10 Stage	MAT-03671		1 No	36663
c	5.00 HP 12-16 Stage	MAT-03672		1 No	41927
d	7.50 HP 5 - 10 Stage	MAT-03673		1 No	41261
e	7.50 HP 12 - 16 Stage	MAT-03674		1 No	45738
f	7.50 HP 20 - 24 Stage	MAT-03675		1 No	46827
g	10.00 HP 5 - 10 Stage	MAT-03676		1 No	48400
h	10.00 HP 12 - 16 Stage	MAT-03677		1 No	50215
i	10.00 HP 20 - 24 Stage	MAT-03678		1 No	56628
j	12.50 HP 8 -12 Stage	MAT-03679		1 No	50215
k	12.50 HP 16 -24 Stage	MAT-03680		1 No	58806
l	15 HP 8 -12 Stage	MAT-03681		1 No	63041
m	15 HP 16 -24 Stage	MAT-03682		1 No	65098
n	20 HP 10 -20 Stage	MAT-03683		1 No	75625
o	20 HP 30 -40 Stage	MAT-03684		1 No	78892

	SINGLE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMPSETS					
219	Supply and Transportation of Single phase Openwell Submersible motor pumpset, confirming to IS 14220 : 1994		ELEC-5.4.7			
	Makes : Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/PSG/Aryan varsha					
a	1.00 HP	MAT-03685			1 No	14907
b	1.50 HP	MAT-03686			1 No	16771
c	3.00 HP	MAT-03687			1 No	22893
220	Supply and Transportation of Single phase Openwell Submersible motor pumpset, confirming to IS 14220 : 1994		ELEC-5.4.8			
	Makes : Plugra / U-Neel/Sterling / Falcon / Kumar / Unnati Zen / Duke /LDK/Ellen / Suguna / UNltek /KSP (Karunya) /Anco / Sabar /Fit well/Karvel/SILVER					
a	1.00 HP	MAT-03688			1 No	13976
b	1.50 HP	MAT-03689			1 No	15972
c	3.00 HP	MAT-03690			1 No	21762
	THREE PHASE OPEN WELL SUBMERSIBLE MOTOR PUMPSETS					
221	Supply and Transportation of Three phase Openwell Submersible motor pumpset, confirming to IS		ELEC-5.4.9			
	Makes : Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/PSG/Aryan varsha					
a	3.00 HP (65x50)	MAT-03691			1 No	22893
b	5.00 HP (75x65)	MAT-03692			1 No	28617
c	7.50 HP (100x75)	MAT-03693			1 No	33941
d	10.00 HP (100x75)	MAT-03694			1 No	43258
222	Supply and Transportation of Three phase Openwell Submersible motor pumpset, confirming to IS		ELEC-5.4.10			
	Makes : Plugra / U-Neel/Sterling / Falcon / Kumar / Unnati zen / Duke /LDK /Ellen / Suguna / UNltek /KSP (Karunya)/Polycab/ Anco / Sabar /Fit well/ Deccan/ Karvel/SILVER					
a	3.00 HP (65x50)	MAT-03695			1 No	21962
b	5.00 HP (75x65)	MAT-03696			1 No	26886
c	7.50 HP (100x75)	MAT-03697			1 No	31944
d	10.00 HP (100x75)	MAT-03698			1 No	41261
	SINGLE PHASE MONOBLOCK MOTOR PUMPSETS					
223	Supply and Transportation of Single phase Monoblock CI body motor pumpset confirming to IS 9079 : 2002		ELEC-5.4.11			
	Makes : Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/Havells Hi-flow V2/PSG/Aryan varsha					
a	0.50 HP (25x25)	MAT-03699			1 No	6655
b	1.00 HP (25x25)	MAT-03700			1 No	9517
c	1.50 HP (32x25)	MAT-03701			1 No	12778
224	Supply and Transportation of Single phase Monoblock CI body motor pumpset confirming to IS 9079 :		ELEC-5.4.12			
	Makes : Plugra / U-Neel/Sterling / Falcon / Kumar / Unnati zen / Ellen / LDK/Suguna / UNltek /Polycab/ Anco / Sabar /Fit well/Deccan/Karvel/SILVER					
a	0.50 HP (25x25)	MAT-03702			1 No	6256
b	1.00 HP (25x25)	MAT-03703			1 No	9051
c	1.50 HP (32x25)	MAT-03704			1 No	12179

225	Supply and Transportation of Three phase ISI self priming Mono block IM44 motor pumpset	ELEC-5.4.13			
	Makes : Kirloskar / Crompton / Texmo / CRI / KSB/Lubi/Aryan varsha				
a	2.00 HP (40x40mm) MAT-03705			1 No	18900
b	3.00 HP (50x50mm) MAT-03706			1 No	25555
c	5.00 HP (80x80mm) MAT-03707			1 No	30879
226	Supply and Transportation of Three phase ISI self priming Mono block IM44 motor pumpset	ELEC-5.4.14			
	Makes : Plugra /U-Neel/Sterling / Falcon / Kumar / Unnati zen /Ellen / LDK/Suguna / UNitek /Polycab/ Anco / Sabar /Fit well/Deccan/Karvel/SILVER				
a	2.00 HP (40x40mm) MAT-03708			1 No	17969
b	3.00 HP (50x50mm) MAT-03709			1 No	24357
c	5.00 HP (80x80mm) MAT-03710			1 No	29548
	CONTROL PANEL BOARD FOR MOTOR PUMPSETS				
227	Fabrication ,transportationand and supply of suitable size panel board for Single phase submersible motor upto 1.50 HP consisting of relay, Contactor, starting and running capacitors, Voltmeter, Ammeter, Indicator lamps, MCB, on/off switch including suply and fixing of DOL starter of	ELEC-5.4.15			
	C&S/LTLK/Seimens/BCH/Cr MAT-03711			1 No	5445
228	Fabrication ,transportationand and supply of suitable size panel board for Single phase submersible motor upto 2.00 to 3.00 HP consisting of relay, Contactor, starting and running capacitors, Voltmeter, Ammeter, Indicator lamps, MCB, on/off switch including suply and fixing of DOL starter of	ELEC-5.4.16			
	C&S/LTLK/Seimens/BCH/Cr MAT-03712			1 No	7260
229	Fabrication ,transportationand and supply of wall mounted Control panel board of size 600x600x 250mm made of 18 SWG CRCA sheet steel enclosure, 14 SWG mounting plate for cable entry fabricated , painted with two coats of Red oxide primer and two coats of Grey paint, lock and key arrangements two side lovures with weld mesh inside etc., complete consisting of the following equipment with all internal wiring using L&T / Finolex copper FRLS cables of suitable size and capacity and cable clamp etc complete for 3 phase motor pump sets -	ELEC-5.4.17			
	Voltmeter ; 0-500 V 96x96mm size.				
	Makes: L&T / C&S/SALZAR / HPL/ AEI / Meco / Rishab - 1No				
	0 to 20 Amps / 0 50 Amps Ammeter (96x96mm size).				
	Makes: L&T / C&S / SALZAR / HPL/ AEI / Meco /Rishab- 1 No				
	Single phase preventor of suitable range				
	Makes: L&T / Minilec / Powertec. - 1No.				
	32 A TP, 10KA MCB.				
	Makes: Legrand / Schneider / - 1No				
	Indication lamps (R-Y-B) with switch control - 1set				
	Voltmeter & Ammeter selector switch - 2 Nos				
	Supply and fixing of ISI Mark suitable capacitor Makes:				
	L&T / Siemens / Schneider / Epcos/Havells.				
230 a	Upto 7.5 HP with DOL Starter of.				
	Make C&S.Crompton / L&T / Siemens/BCH.	MAT-03713		1 No	9680.00
231 b	above 7.50 HP to 12.50 HP with Star Delta Starter of				
	Make C&S.Crompton / L&T / Siemens/BCH.	MAT-03714		1 No	16940.00
232 c	above 15.00 HP to 20.00 HP with Auto matic				
	Star Delta Starter of				
	Make C&S.Crompton / L&T / Siemens/BCH.	MAT-03715		1 No	22385.00

233	Supply & Fixing of D.O.L Starter 250 V, Single phase, 50 Hz with SS enclosure comprising of contactor with bi-metallic relay with necessary push buttons, etc., complete suitable for		ELEC-5.4.18				
	Makes : Siemens /Crompton / L&T (MF 1)						
a	up to 3.00 HP		MAT-03716			1 No	1265.00
234	Supply & Fixing of D.O.L Starter 415 V, 3 phase, 50 Hz with no volt coil and overload protection with necessary materials, etc complete suitable for		ELEC-5.4.19				
	Makes : Siemens /Crompton / L&T (MK2 DOL)						
a	up to 3.00 HP		MAT-03717			1 No	2263.00
b	5.00 to 7.50 HP		MAT-03718			1 No	2529.00
c	10 HP		MAT-03719			1 No	2795.00
235	Supply & Fixing of D.O.L Starter 415 V, 3 phase, 50 Hz with no volt coil and overload protection and single phase preventor, etc. complete suitable for		ELEC-5.4.20				
	Makes : Siemens /Crompton / L&T (MU 1 DOL)						
a	12.50 to 15.00 HP		MAT-03720			1 No	8228.00
b	25.00 to 30.00 HP		MAT-03721			1 No	13576.00
236	UPVC PIPES AND FITTINGS						
	Supply and delivery of for submersible motors with both ends square threaded, with rubber 'O' rings with smooth inner surface which can take the minimum load of 2100 to 4000 Kgs weights.		ELEC-5.4.21				
	Makes : Ashirvad / Finolex / Waterflo /Sudhakar						
a	42 / 32mm dia UPVC raising column pipe, with standing upto 20 Kgs / CM2 upto 200 Mts		MAT-03722			1 RM	157.00
b	48 / 40mm UPVC pipe with standing upto 20 Kgs / CM2 upto 200 Mts		MAT-03723			1 RM	194.00
c	60/50 mm UPVC pipe with standing upto 20 Kgs / CM2 upto 200 Mts		MAT-03724			1 RM	278.00
d	75/65 mm UPVC pipe with standing upto 20 Kgs / CM2 upto 200 Mts		MAT-03725			1 RM	375.00
e	88/80 mm UPVC pipe with standing upto 20 Kgs / CM2 upto 200 Mts		MAT-03726			1 RM	539.00
237	Supply and delivery of heavy duty couplings 42/32 mm UPVC pipe (27 Kgs / CM 2) capable of with standing upto 27 Kgs / CM2 above 200 mts and upto 300 mts		ELEC-5.4.22			1 No	48.00
			MAT-03727				
238	Supply and delivery of heavy duty couplings 48/40 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts		ELEC-5.4.23			1 No	67.00
			MAT-03728				
239	Supply and delivery of heavy duty couplings 60/50 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts		ELEC-5.4.24			1 No	73.00
			MAT-03729				
240	Supply and delivery off heavy duty couplings 75/65 mm UPVC pipe (27 Kgs / CM 2) capable of with standing up to 27 Kgs / CM2 above 200 mts and upto 300 mts		ELEC-5.4.25			1 No	85.00
			MAT-03730				

	Supply of Single core 25 sqmm PVC insulated and sheathed FRLS copper round cable for voltage upto 1100 V as per IS 694/1990 (BANJAR CABLE)	ELEC-1.5.4 a	MAT-05466	1 RM	298.00
	Supply of Single core 35 sqmm PVC insulated and sheathed FRLS copper round cable for voltage upto 1100 V as per IS 694/1990 (BANJAR CABLE)	ELEC-1.5.4 b	MAT-05467	1 RM	420.00
	Supply of 48" (1200mm) Sweep 5 star rated ceiling fan, with double ball bearings, air delivery more than 200 cubic metre/min but without Regulator (Maker : As per list of recommended brands)	ELEC-5.1.3	MAT-03599	1 No	2405.00
	Supply of 45A to 63A ISI marked HRC Fuse Links as per IS 13703-Part2/iec 60269-Part 2	ELEC-2.6.1 b	MAT-02939	1 No	96.00
	Supply of ISI marked PVC Conduit 20mm outer dia (1.95 - 2.10)mm thickness heavy grade with IS:9537-part - 3 rigid PVC Conduit	ELEC-1.2.1 a	MAT-02673	1 RM	36.00
	Supply of ISI marked PVC Conduit 25mm outer dia (2.00 - 2.20)mm thickness heavy grade with IS:9537-part - 3 rigid PVC Conduit	ELEC-1.2.1 b	MAT-02674	1 RM	46.00
	PUMP SET REPAIRS				
	Removal of Submersible pumpset	1 No	2500.00	Mex starter	1 No 2500
	Removal of Monoblock pumpset	1 No	1000.00	Impellers	1 No 550
	Conveyance charges of pumpset from workspot to workshop for attending repairs	1 No	500.00	bearing	1 No 475
				Oil seal bushes	1 No 1200
				Oil seal rubber rings	1 No 250
	Conveyance charges of pumpset from workshop to workspot after attending repairs	1 No	500.00	Thrust bearing	1 No 1050
	submersiblemonoblock pump only	(Half of the pumpset cost)	submersible/monoblock pump repair	1 No	1000

REWINDING OF MOTORS SSR 2024-25				CID JOINTS RATE CALCULATION FOR THE YEAR 2024-25		
Cost of Copper Winding Wire - 934/1 kg (Sno. 521,item Code-ELEC-8.3.2)						
Cost of Old copper winding wire Scrap = 197/1 kg (Sno. 535, item Code-ELEC-8.4.12)						
S NO	HP OF MOTOR WITH 2800 RPM		NET TOTAL COST (ROUNDED)	S No.	Dia of CID Joint	Cost of each Set
1	2		3	1	2	3
MAT-03869	Up to1	HP	1050.00	1	80	381.23
MAT-03870	2	HP	1725.00	2	100	472.96
MAT-03871	3	HP	2550.00	3	125	604.20
MAT-03872	5	HP	3600.00		150	753.10
MAT-03873	7.50	HP	3900.00	5	200	1062.47
MAT-03874	10	HP	5250.00	6	250	1353.43
MAT-03875	12.5	HP	5550.00	7	300	1609.00
MAT-03876	15	HP	6750.00	8	350	2506.34
				9	400	2993.56
				10	450	3541.89
				11	500	5115.09
				12	600	7777.92

IMPORTANT NOTES								
		AREA ALLOWANCE (CORPORATIONS & MUNICIPALITIES)						
A	Allow 25% extra over basic rates on labour component of works is allowed in all Municipal Corporation limits of aP except Greater Visakhapatnam and Vijayawada Municipal corporations (upto a belt of 12KM from the Municipal Corporation limits)							
B	Allow 20% extra over the rate on labour component of woks in all District Head Quarters and remaining Municipal limits (upto a belt of 12KM from the Municipal limits)							
		EXTRA ALLOWANCES FOR PIPELINES						
PH 39 a	Extra allowance for isolated scattered works viz., valve pits /chambers, public fountains, meter pits and man holes, delivery cisterns complete					30% extra		
		30% extra over the cost of chamber						
PH 39 b	Repairs to existing mains,interconnections, replacement of valves/ specials etc., including the cutting, jointing, bailingout water, drying, earthwork excavation 100% extra over the cost of chamber					100% extra		
		EXCAVATION IN RESTRICTED PLACES						
a		Foundation of Building				75% extra		
b		For the pipeline where the depth is less than 1.5 times the width				75% extra		
c		For pipelines where the depth is 1.5 times or more more than the width				120% extra		
d		Excavation of field channels				75% extra		
e		Narrow trenches not more than 2 metres in width and depth not less than twice the width and for excavation of road boundary drains, model sections of canals				75% extra		
f		The above percentages in respect of excavation in hard rock for restricted places are to be allowed for (2/3) rd of the cost				2/3 of the cost		
	BREAK UP OF PAYMENT TO ELEVATED SERVICE RESERVOIRS							
	ITEM						BREAK UP (%)	
1	Earth work excavation of foundation Footing, Lean concrete RCC footing					15%		
2	RCC Column and Brace upto base slab of container upto staging					25%		
3	Floor slab / dome with ring beam					10%		
4	Vertical wall, Roof slab, Plastering and finishings					15%		
5	Stair case					10%		
6	Erection of inlet, outlet, overflow, bypass pipes, specials & valves and							
7	Water level indicator, lightening conductor and internal ladder					15%		
8	Painting and miscellaneous works such as chambers							
9	Giving satisfactory hydraulic test					10%		
	BREAK UP OF PAYMENT TO SUMPS							
	ITEM						BREAK UP (%)	
1	Earth work excavation, PCC foundation, Bottom slab					30 ,%		
2	Vertical walls					40 ,%		
	BREAKUP OF PAYMENT FOR PIPELINE							
	GO Rt No. 314, Dt: 07.03.2007 of PR & RD (RWS-I) DEPT							
1	Manufacture and supply of pipes and stacked at site after inspection by the Dept					65 ,%		
2	After laying and jointing including earth work excavation and refilling					25 ,%		
3	After satisfactorily testing of the pipeline					10 .%		

1. R.C.C. PLAIN ENDED PIPES

Manufacture, Supply and delivery of R.C.C Plain ended pipes conforming to B.I.S 458/2003, Ex-factory, excluding transportation and all taxes.

Size	unit	Code	NP-2 Class	Code	NP-3 Class	Code	NP-4 Class
80mm dia	Meter	MAT-05615	147				
100mm dia	Meter	MAT-05616	169				
150mm dia	Meter	MAT-05617	201				
200mm dia	Meter	MAT-05618	237				
225mm dia	Meter	MAT-05619	257				
250mm dia	Meter	MAT-05620	272				
300mm dia	Meter	MAT-05621	393	MAT-05636	917	MAT-05651	941
350mm dia	Meter	MAT-05622	488	MAT-05637	1097	MAT-05652	1120
400mm dia	Meter	MAT-05623	565	MAT-05638	1208	MAT-05653	1238
450mm dia	Meter	MAT-05624	691	MAT-05639	1388	MAT-05654	1405
500mm dia	Meter	MAT-05625	758	MAT-05640	1507	MAT-05655	1745
600mm dia	Meter	MAT-05626	1120	MAT-05641	2281	MAT-05656	2723
700mm dia	Meter	MAT-05627	1432	MAT-05642	2843	MAT-05657	3671
800mm dia	Meter	MAT-05628	1766	MAT-05643	3763	MAT-05658	4796
900mm dia	Meter	MAT-05629	2238	MAT-05644	4738	MAT-05659	5988

2. R.C.C COLLARS

Manufacture, Supply and delivery of R.C.C Collars conforming to B.I.S 458/2003 (rate per each Collar) suitable for R.C.C. Plain ended Pipes ,including transportation, but excluding all taxes.

Size	unit	Code	NP-2 Class	Code	NP-3 Class	Code	NP-4 Class
80mm dia	Each	MAT-05666	46				
100mm dia	Each	MAT-05667	46				
150mm dia	Each	MAT-05668	47				
200mm dia	Each	MAT-05669	65				
225mm dia	Each	MAT-05670	69				
250mm dia	Each	MAT-05671	76				
300mm dia	Each	MAT-05672	99	MAT-05687	141	MAT-05702	141
350mm dia	Each	MAT-05673	123	MAT-05688	177	MAT-05703	177
400mm dia	Each	MAT-05674	135	MAT-05689	202	MAT-05704	202
450mm dia	Each	MAT-05675	212	MAT-05690	269	MAT-05705	269
500mm dia	Each	MAT-05676	241	MAT-05691	321	MAT-05706	321
600mm dia	Each	MAT-05677	328	MAT-05692	420	MAT-05707	420
700mm dia	Each	MAT-05678	427	MAT-05693	567	MAT-05708	567
800mm dia	Each	MAT-05679	606	MAT-05694	721	MAT-05709	721
900mm dia	Meter	MAT-05680	723	MAT-05695	839	MAT-05710	839

6. CONVEYANCE OF R.C.C. PLAIN ENDED PIPES

S.NO.	Description	Rate upto 5 Kms Lead including loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof	Rate upto 5 KM lead including loading, unloading and stacking	Rate for every additional 1 KM lead or part thereof		
		NP-2 Class		NP-3 Class & NP -4 Class			
	80mm dia	4.92	0.21				
	100mm dia	6.54	0.21				
	150mm dia	9.83	0.40				
	200mm dia	13.09	0.40				
	225mm dia	14.73	0.63				
	250mm dia	16.37	0.63				
	300mm dia	22.93	0.83	63.84	1.67		
	350mm dia	32.74	1.87	68.76	1.87		
	400mm dia	36.02	2.07	81.86	2.48		
	450mm dia	47.47	2.48	88.4	2.90		
	500mm dia	50.76	2.90	96.58	2.90		
	600mm dia	73.66	4.57	145.68	6.45		
	700mm dia	93.31	6.45	162.06	7.47		
	800mm dia	109.68	6.45	194.80	7.47		
	900mm dia	126.04	6.45	255.36	14.11		
11a	Lowering the RCC plain ended pipes carefully into the trench, laying them true to alignment and gradient, jointing RCC pipes with cement joints including curing, the cost of jointing materials i.e., Cement mortar (1:1.5). hemp yarn etc., and testing including filling with water with a water lead upto 500M excluding cost of rubber rings as per BIS No. 783/85						
	for every 25mm dia				LAB-00601	1 RM	30.00
30	Laying and jointing perforated RCC pipes inclusive of bailing out water and jointing with cement fillets and all other incidental charges for infiltration gallery inclusive of bailing out water by pumping to keep the trench reasonably dry to facilitate the work excluding cost of perforated pipes and collars						
	for every 25mm dia				LAB-00662	1 RM	52.00

CENTERING CHARGES 2024-25								
HIRE CHARGES FOR CENTERING & SCAFFOLDING - Unsupported Height upto 3.66 M Casurina Ballies, Bamboos, Wooden Reapers, Runners, Wood Posts, Wall Plates etc.,								
	ITEM		Hire charges		Labour Charges		Unit	Centering charges
a	Footings		301.00		672.00		Cum	973.00
b	Bed Blocks / bands		67.00		363.00		Cum	430.00
c	Pedastals		343.00		1069.00		Cum	1412.00
d	Plinth beam		1453.00		1620.00		Cum	3073.00
e	Lintels		826.00		1332.00		Cum	2158.00
f	Chajjas /sunshades		163.00		204.00		Sqm	367.00
g	Columns		249.00		1871.00		Cum	2120.00
h	Beems		1458.00		1569.00		Cum	3027.00
i	Slab upto 150mm thick		165.00		186.00		Sqm	351.00
j	Slab above 150mm upto 300mm thick		170.00		193.00		Sqm	363.00
k	Slab above 300mm thick		178.00		201.00		Sqm	379.00
p	Dome slab		2681.00		2884.00		Cum	5565.00
q	Helical Staircase		205.00		220.00		Sqm	425.00
	HIRE CHARGES FOR ACCESS SCAFFOLDING - upto 3.66 M using Casurina Ballies, Bamboos, Wooden Reapers, Runners, Wood posts, Wall plates etc., for BRICK/STONE masonry - 1sqm (wall area)							
	Name of the structural member				Material hire charges	Labour charges	Unit	Centering charges
	1 st floor				10.78	84.62	1 Sqm	95.40
	2nd floor				10.78	121.18	1 Sqm	131.96
	3 rd floor				10.78	157.72	1 Sqm	168.50
	4 th floor				10.78	194.27	1 Sqm	205.05
	5 th floor				10.78	230.81	1 Sqm	241.59
	6 th floor				10.78	267.35	1 Sqm	278.13
	HIRE CHARGES FOR ACCESS SCAFFOLDING - upto 3.66 M using Casurina Ballies, Bamboos, Wooden Reapers, Runners, Wood posts, Wall plates etc., for PLASTERING TO WALLS - 1sqm							
	1 st floor				1.08	8.47	1 Sqm	9.55
	2nd floor				1.08	12.12	1 Sqm	13.20
	3 rd floor				1.08	15.77	1 Sqm	16.85
	4 th floor				1.08	19.43	1 Sqm	20.51
	5 th floor				1.08	23.08	1 Sqm	24.16
	6 th floor				1.08	26.73	1 Sqm	27.81
	HIRE CHARGES FOR ACCESS SCAFFOLDING - upto 3.66 M using Casurina Ballies, Bamboos, Wooden Reapers, Runners, Wood posts, Wall plates etc., for CEILING PLASTERING - 1sqm							
	1 st floor				2.57	16.94	1 Sqm	19.51
	2nd floor				2.57	24.04	1 Sqm	26.61
	3 rd floor				2.57	31.13	1 Sqm	33.70
	4 th floor				2.57	38.23	1 Sqm	40.80
	5 th floor				2.57	45.33	1 Sqm	47.90
	6 th floor				2.57	52.42	1 Sqm	54.99
31	CENTERING AND SCAFFOLDING CHARGES FOR RCC MEMBERS INCLUDING ALL MATERIALS AND LABOUR CHARGES FOR FORMATION & DISMANTLING							
31,b)	FOR GROUND LEVEL WORKS							
	4) a) R C C Vertical walls of plane surface (rate is for both sides centering) including open drains OF 600MM SIZE AND ABOVE				LAB-00671		One Sqm of Centering area	500
	4) b) V C C Vertical walls of plane surface (rate is for both sides centering) including open drains OF 600MM SIZE AND ABOVE				LAB-00672			490
	5) R C C Vertical walls of circular faces (rate is for both sides centering)				LAB-00673			635

CENTERING AND SCAFFOLDING CHARGES FOR RCC MEMBERS INCLUDING ALL MATERIALS AND LABOUR CHARGES FOR FORMATION & DISMANTLING									
a)	FOR RCC ELEVATED SERVICE RESERVOIRS OF STAGING UPTO 15 METRES BELOW L.W.L								
	1) Slabs for thickness (150 mm to 300 mm)			LAB-00663		One Sqm of Centering area		4725	
	2) Slabs for thickness above (300 mm)			LAB-00664				extra for every 50mm thickness increase Rs.473/-	
	3) Side walls curved surfaces			LAB-00665				3536	
	4) Side wall Straight surfaces.			LAB-00666				3181	
	5) Dome			LAB-00667				3876	
	6) Roof slab			LAB-00668				2168	
	7) Column braces and beams			LAB-00669				1596	
	8) Circular braces, ring beams & circular column.			LAB-00670				1752	
	Note:- for RCC ELSR of staging above 15 m, the % increase in these rates shall be as follows								
	Note :- The Centering charges for item No's 3 & 4 are for both the faces of the respective numbers. The measurement of centering charges shall be in "Sqm" for one face only and the centering charges given are for two faces of centering.								
	Note:- Scaffolding for every extra height of 1 m or part thereof but not less than 0.5 m. The above centering charges are applicable for water retaining structures only.								
HIRE CHARGES OF PLANT & MACHINERY FOR ROAD & BRIDGE WORKS FOR THE YEAR 2024-25									
S. No.	Description of Machinery	Unit	code	Hire charges	code	Fuel charges	code	Crew charges	Total Rate
2	Air Compressor 5cmm (Electric)	Hour	HIR-00002	105.73	HIR-00136	285.52	LAB-00318	260.33	651.58
3	Air Compressor 7cmm (diesel)	Hour	HIR-00003	237.70	HIR-00137	1205.58	LAB-00319	333.22	1776.50
9	Batching plant 0.5cum (6 cum/hour)	Hour	HIR-00009	112.00	HIR-00143	126.90	LAB-00325	535.28	774.18
10	Batching plant 2 x 1.00 cum (15 cum/hr)	Hour	HIR-00010	396.19	HIR-00144	380.69	LAB-00326	535.28	1312.16
16	Concrete mixer 300/200 (diesel)	Hour	HIR-00016	54.70	HIR-00150	133.95	LAB-00329	347.10	535.75
17	Concrete mixer 300/200 (electric)	Hour	HIR-00017	53.42	HIR-00151	42.30	LAB-00330	347.10	442.82
18	Concrete mixer 600/400 (diesel) 0.28 cum	Hour	HIR-00018	93.08	HIR-00152	267.90	LAB-00331	347.10	708.08
19	Concrete mixer 600/400 (electric)	Hour	HIR-00019	91.19	HIR-00153	84.60	LAB-00332	347.10	522.89
23	Diesel Generating set 30 KVA	Hour	HIR-00023	67.95	HIR-00157	1071.63	LAB-00336	208.26	1347.84
40	Needle Vibrator 40mm (petrol)	Hour	HIR-00040	8.39	HIR-00174	30.14	LAB-00352	249.86	288.39
41	Needle Vibrator 40mm (electric)	Hour	HIR-00041	8.01	HIR-00175	8.46	LAB-00353	249.86	266.33
51	Shovel 0.50 cum 75 HP Hydraulic Excavator	Hour	HIR-00051	1048.36	HIR-00185	803.71	LAB-00361	369.20	2221.27
52	Shovel 0.85 cum 110 HP Hydraulic Excavator	Hour	HIR-00052	1751.36	HIR-00186	1473.48	LAB-00362	369.20	3594.04
4	Hydraulic Excavator	Hour	HIR-00052						3594.04
54	Tipper - 5/5.50 Cum	Hour	HIR-00054	483.37	HIR-00188	506.34	LAB-00363	276.90	1266.61
6	Tipper - 5/5.50 Cum (for transportation of soil, GSB, WMM, hot mix etc.,	Hour	HIR-00054					8.60 per T/KM	1266.61
64/ 9	Water Tanker 8000 Lts (for water transport)	Hour	HIR-00064	448.93	HIR-00198	506.34	LAB-00371	273.98	1229.25
64/10	Water Tanker 6000 Lts (for water transport)	Hour	HIR-00076						822.00
11	Tractor for pulling	Hour	HIR-00077						536.00
14	Air Compressor (general purpose)	Hour	HIR-00002	105.73	HIR-00136	285.52	LAB-00318	260.33	651.58
58	Truck 5.5 cum per 10 tonnes for material transport	Hour	HIR-00058	437.69	HIR-00192	506.34	LAB-00365	273.98	1218.01
36									

	ITEM	Metal	Sand	Cement	1st Class	2nd class	Mazdoor
BLD-CSTN-2-6	PCC Hand mix (1:5:10)	0.90	0.45	129.60	0.10		2.36
BLD-CSTN-2-7	PCC Machine mix (1:5:10)	0.90	0.45	129.60	0.10		1.39
BLD-CSTN-2-4	PCC Hand mix (1:4:8)	0.90	0.45	162.00	0.10		2.36
BLD-CSTN-2-5	PCC Machine Mix (1:4:8)	0.90	0.45	162.00	0.10		1.39
BLD-CSTN-2-10	Plain Cement concrete - (1:3:6)	0.90	0.45	220.00	0.10		2.36
BLD-CSTN-2-1	PCC Hand mix (M 20)	0.90	0.45	400.00	0.10		2.36
BLD-CSTN-2-11	PCC Grade (M 20)	0.90	0.45	330.00	0.10		1.39
BLD-CSTN-2-2	PCC Grade (M 10) (Machine Mix)	0.90	0.45	220.00	0.10		1.39
BLD-CSTN-2-3	PCC Grade (M15) - 1:2, 5:5 (Hand Mix)	40mm - 0.54					
		20mm - 0.27					
		10mm - 0.09	0.48	275	0.10		2.36
BLD-CSTN-2-12	PCC M15 - Concrete mix 1:2, 5:5 (Nominal Mix)	40mm - 0.54					
		20mm - 0.27					
		10mm - 0.09	0.48	275	0.10		1.39
BLD-CSTN-2-13	RCC M20 Footing	0.90	0.45	400.00	0.13	0.27	3.60
	RCC M20 Columns	0.90	0.45	400.00	0.17	0.17	4.70
	RCC M20 Beams	0.90	0.45	400.00	0.07	0.13	2.50
BLD-CSTN-2-14	Design mix Footing	0.80	0.40		0.13	0.27	4.60
	Design mix Columns	0.80	0.40		0.17	0.17	5.60
	Design mix Beams	0.80	0.40		0.07	0.13	3.08
BLD-CSTN-3-1	CBM (1:3)	512.00	0.20	96.00	0.24	0.56	1.89
	CBM (1:6)	512.00	0.20	48.00	0.24	0.56	1.89
	CBM (1:8)	512.00	0.20	36.00	0.24	0.56	1.89
BLD-CSTN-3-4	RRM	512.00	0.21	7.56	0.06	0.06	0.28
	Plastering (1:5 12 mm		0.15	4.32	0.45	1.05	2.80
	Plastering (1:5) 20mm		0.21	6.05	0.45	1.05	2.80
	Imperious (1:3) 20mm		0.21	10.08	0.45	1.05	2.80
	Plastering (1:6) 8mm		0.10	2.40	0.45	1.05	2.80
	Plastering (1:4) 4mm						
	Plastering (1:6) 4mm						
	Plastering (1:4) 4mm						
	Flooring Kadapa	11.00	0.12	5.46	3.10	1.10	0.86
	Skirting kadapa	10.10	0.12	57.60	0.96	2.24	3.10
	Ceramic Tiles	1.05	0.01	2.16	0.10	0.22	0.33
	Dadoing	1.05	0.01	3.46	0.08		0.08
BLD-CSTN-1-1	CM (1:1)			1440			
BLD-CSTN-1-2	CM (1:1.5)			960			
BLD-CSTN-1-3	CM (1:2)			720		M 20	350
BLD-CSTN-1-4	CM (1:3)			480		M 25	380
BLD-CSTN-1-5	CM (1:4)			360		M 30	400
BLD-CSTN-1-6	CM (1:5)			288		M 35	420
BLD-CSTN-1-7	CM (1:6)			240		M 40	430
BLD-CSTN-1-8	CM (1:8)			180		M 40	430

	WOOD REQUIREMENT FOR DIFFERENT SIZE DOORS, WINDOWS VENTILATORS						
	1. FULLYPANELLED DOORS EXTERNAL AS PER M.D.S.S						
S.NO.	SIZE		AREAIN SQM	WOOD REQUUREMENT QUANTITY IN CUM			STEEL IN KGS
	IN FEET	IN METRES		FRAMES	SHUTTERS	TOTAL	
1	2	3	4	5	6	7	8
1	5' - 6" X 7' - 0"	1.68 X 2.13	3.57	0.0445	0.1158	0.1603	
2	5' - 0" X 7' - 0"	1.52 X 2.13	3.25	0.0518	0.0986	0.1504	
3	4' - 6" X 7' - 0"	1.37 X 2.13	2.92	0.0496	0.0844	0.1340	
4	4' - 0" X 7' - 0"	1.22 X 2.13	2.60	0.0473	0.0756	0.1229	
5	3' - 6" X 7' - 0"	1.06 X 2.13	2.28	0.0456	0.0677	0.1133	
6	5' - 6" X 6' - 6"	1.68 X 1.98	3.32	0.0507	0.0988	0.1495	
7	5' - 0" X 6' - 6"	1.52 X 1.98	2.55	0.0490	0.0912	0.1402	
8	4' - 6" X 6' - 6"	1.37 X 1.98	2.72	0.0473	0.0748	0.1221	
9	4' - 0" X 6' - 6"	1.22 X 1.98	2.41	0.0450	0.0674	0.1124	
10	3' - 6" X 6' - 6"	1.06 X 1.98	2.11	0.0433	0.0598	0.1031	
11	3' - 0" X 7' - 0"	0.90 X 2.10					
12	2' - 6" X 7' - 0"	0.75 X 2.10					
	FLUSH DOORS						
13	2' - 6" X 7' - 0"	0.75 X 2.10					
14	3' - 6" X 7' - 0"	1.05 X 2.10					
15	4' - 0" X 7' - 0"	1.20 X 2.10					
16	3' - 0" X 7' - 0"	0.90 X 2.10					
17	2' - 6" X 7' - 0"	single leaf door	1.51	0.0800	0.0393	0.0407	
18	2' - 6" X 7' - 0"	Almyrahs	1.53	0.0643	0.0234	0.0409	
	HYDERABAD TYPE DOORS						
19	4' - 0" X 7' - 0"	1.22 X 2.13	2.60	0.0520	0.082	0.1340	
20	3' - 6" X 6' - 6"	1.06 X 1.98	2.11	0.0433	0.072	0.1153	
	2. FULLY PANELLED WINDOWS						
1	3' - 6" X 4' - 0"	1.06 X 1.22	1.30	0.0280	0.0333	0.0613	16.87
2	3' - 0" X 4' - 0"	0.91 X 1.22	1.11	0.0266	0.0288	0.0554	14.45
3	2' - 6" X 4' - 0"	0.76 X 1.22	0.93	0.0252	0.0246	0.0498	12.05
4	1' - 10" X 4' - 0"	0.55 X 1.22	0.68	0.0172	0.0164	0.0336	8.83
5	3' - 0" X 4' - 6"	0.91 X 1.37	1.25	0.0320	0.0334	0.0654	15.90
6	5' - 0" X 4' - 6"	1.50 X 1.37	2.09	0.0457	0.0596	0.1053	26.50
7	6' - 0" X 4' - 6"	1.80 X 1.37	2.50	0.0607	0.064	0.1247	31.80
8	4' - 0" X 4' - 6"	1.22 X 1.35					
9	4' - 6" X 6' - 6"	1.35 X 1.35					
10	5' - 0" X 4' - 6"	1.50 X 1.35					
11	2' - 0" X 4' - 6"	0.60 X 1.35					
	HYDERABAD TYPE WINDOWS						
12	3' - 0" X 4' - 0"	0.91 X 1.22	1.11	0.0270	0.039	0.0660	14.45
13	3' - 0" X 4' - 6"	0.91 X 1.37	1.25	0.0286	0.0357	0.0643	15.90
14	0.90 X 0.30	VENTILATOR	0.27	0.0065	0.007	0.0135	-

LABOUR CHARGES 2024-25

I	CFMS CODE	SKILLED CATEGORY	
1	LAB-00001	Bar bender	850
2	LAB-00002	Black smith / Tin Smith / Rivetor	670
3	LAB-00003	Blaster (Licensed)	780
4	LAB-00004	Carpenter CI - I	795
5	LAB-00005	Electrician (Licensed)	790
6	LAB-00006	Fitter CI-I	750
7	LAB-00007	Floor Polisher / Tile Layer	670
8	LAB-00008	Forman	780
9	LAB-00009	Gauge reader	665
10	LAB-00010	Maistry/Work Inspector with Non-technical Qualification SSLC / SSC / HSC	775
11	LAB-00011	Mason CI-I Brick Layer CI-I	710
12	LAB-00012	Mechanic CI-I	720
13	LAB-00013	Operator Air compressor / DG set	695
14	LAB-00014	Operator Batching Plant	790
15	LAB-00015	Operator Bus / Ambulance /Lorry / Tanler	765
16	LAB-00016	Operator Concrete / Asphalt mixer	695
17	LAB-00017	Operator Concrete / Asphalt Paver	695
18	LAB-00018	Operator Concrete pump / Placer / Ice plant	695
19	LAB-00019	Operator core drilling machine	780
20	LAB-00020	Operator Crane / Tower crane Cable way	780
21	LAB-00021	Operator Drilling jumbo / Loco / Winch	695
22	LAB-00022	Operator Grouting / Guniting / Shortcreting	695
23	LAB-00023	Operator Jackhammer / Pneumatic tamper	695
24	LAB-00024	Operator pump / Ventilation fan	695
25	LAB-00025	Operator Lathe / Drilling / shearing machine	780
26	LAB-00026	Operator Bending / Planing machine	695
27	LAB-00027	Operator Road roller	720
28	LAB-00028	Operator Shovel / Scraper / Dozer	780
29	LAB-00029	Operator Spillway / Sluice gate	695
30	LAB-00030	Operator Crusher / Conveyor / Mucker	695
31	LAB-00031	Operator Tipper / Dumper / Transit Mixer	780
32	LAB-00032	Operator Concrete vibrator	695
33	LAB-00033	Operator Vibratory plain / pad foot roller	695
34	LAB-00034	Operator Wagon drill / drifter	780
35	LAB-00035	Painter CI- I	795
36	LAB-00036	Plumber / pipe fitter	795
37	LAB-00037	Sarang / Khalasi	695
38	LAB-00038	Spun pipe moulder	695
39	LAB-00039	Stone chiseller CI-I / Stone Cutter CI-I	700
40	LAB-00040	Struct, steel Fabricator / Maker / Erector	850
41	LAB-00041	Welder / Gas Cutter	695
42	LAB-00042	Welder (X-ray quality)	780
II	CFMS CODE	SEMI SKILLED CATEGORY :	
1	LAB-00057	Asphalt Sprayer / Boiler attendant	640
2	LAB-00058	Bhisti	640
3	LAB-00059	Boatman with boat	640
4	LAB-00060	Carpenter CI- II / Erector shuttering	640
5	LAB-00061	Cartman with double bullock cart	710
6	LAB-00062	Cartman with single bullock cart	670
7	LAB-00063	Chavali / Navagani	640
8	LAB-00064	Crowbarman / Jumper man	640
9	LAB-00065	Fitter CI- II	640
10	LAB-00066	Gang man / Head / Survey mazdoor	640
11	LAB-00067	Gardener / Trained mail	640
12	LAB-00068	Helper Air Compresor / DG Set	640
13	LAB-00069	Helper Batching Plant	640
14	LAB-00070	Helper Blasting	640

15	LAB-00071	Helper Bus / Ambulance / Lorry / Tanker	640
16	LAB-00072	Helper Bending / Shearing / Planing machine	640
17	LAB-00073	Helper Carpenter	640
18	LAB-00074	Helper Concrete / Asphalt mixer	640
19	LAB-00075	Helper concrete / Asphalt paver	640
20	LAB-00076	Helper Core drilling machine	640
21	LAB-00077	Helper Crane / Tower crane / cable way	640
22	LAB-00078	Helper Drilling jumbo / Loco / Winch	640
23	LAB-00079	Helper Fitter / Fabrication / Electrician	640
24	LAB-00080	Helper Grouting / Guniting / Shotcreting	640
25	LAB-00081	Helper Jack hammer / Pneumatic tamper	640
26	LAB-00082	Helper Laboratory / Instrumentation	640
27	LAB-00083	Helper Road roller	640
28	LAB-00084	Helper Shovel / Scraper / Dozer	640
29	LAB-00085	Helper Crusher / Conveyor / Mucker	640
30	LAB-00086	Helper Tipper / Dumper / Transit mixer	640
31	LAB-00087	Helper Vibrator	640
32	LAB-00088	Helper Vibratory Plain / pad foot roller	640
33	LAB-00089	Helper Wagon drill / Drifter	640
34	LAB-00090	Lineman Electric / Telephone	640
35	LAB-00091	Mason CI-II / Brick Layer CI-II	640
36	LAB-00092	Mechanic CI-II	640
37	LAB-00093	Painter CI-II	640
38	LAB-00094	Patkari / Neeraganti / Sowdy	640
39	LAB-00095	Stone Chiseller CI-II	640
40	LAB-00096	Stone breaker / Hammer man	640
41	LAB-00097	Valve man / Canal Sluice operator	640
III		UN-SKILLED CATEGORY:	
1	LAB-00118	Cement / Asphalt handling mazdoor	595
2	LAB-00119	Civic worker	595
3	LAB-00120	Man mazdoor	595
4	LAB-00121	Woman mazdoor	595
5	LAB-00122	Watchman	595
IV		OTHER CATEGORY :	
1	LAB-00124	Care-Taker / conductor / Lift Attender	640
2	LAB-00125	Cook / Mess man	640
3	LAB-00126	Dhobi	640
4	LAB-00127	Diploma Engineer / Surveyor	1100
5	LAB-00128	Driver with headgear	815
6	LAB-00129	Graduate / Laboratory Assistant	815
7	LAB-00130	Graduate Engineer / Geologist	1420
8	LAB-00131	Horticulture Assistant / Photographer	660
9	LAB-00132	ITI Certificate holder / Trace / Printer	795
10	LAB-00133	Literate mazdoor	610
11	LAB-00134	Stenographer / Computer Operator	870
12	LAB-00135	Telephone / Wireless operator	780
13	LAB-00136	Typist / Job Typist	780
14	LAB-00137	CAD operator with Diploma in Engineering	1100
15	LAB-00138	Jeep Driver	775
16	LAB-00139	Data Processing Operator	1065

CONVEYANCE OF MATERIALS EXCLUDING LOADING & UNLOADING FOR THE YEAR 2024-25

Lead in Km	Earth	Stone	Wood	Bricks	Lead in KM	Earth	Stone	Wood	Bricks
1	2	3	4	5	6	7	8	9	10
50M					51	747.40	718.72	1056.66	1352.86
100M					52	760.07	730.90	1074.57	1373.16
150M					53	772.74	743.08	1092.48	1393.46
1	38.00	36.54	53.54	216.06	54	785.41	755.26	1110.39	1413.76
2	53.20	51.16	75.23	240.42	55	798.08	767.44	1128.30	1434.06
3	70.93	68.21	100.31	268.84	56	810.75	779.62	1146.21	1454.36
4	86.13	82.82	121.80	293.20	57	823.42	791.80	1164.12	1474.66
5	101.33	97.44	143.30	317.56	58	836.09	803.98	1182.03	1494.96
6	116.53	112.06	164.79	341.92	59	848.76	816.16	1199.94	1515.26
7	131.73	126.68	186.28	366.28	60	861.43	828.34	1217.85	1535.56
8	146.93	141.30	207.77	390.64	61	874.10	840.52	1235.76	1555.86
9	162.13	155.92	229.26	415.00	62	886.77	852.70	1253.67	1576.16
10	177.33	170.54	250.75	439.36	63	899.44	864.88	1271.58	1596.46
11	192.53	185.16	272.24	463.72	64	912.11	877.06	1289.49	1616.76
12	207.73	199.78	293.73	488.08	65	924.78	889.24	1307.40	1637.06
13	222.93	214.40	315.22	512.44	66	937.45	901.42	1325.31	1657.36
14	238.13	229.02	336.71	536.80	67	950.12	913.60	1343.22	1677.66
15	253.33	243.64	358.20	561.16	68	962.79	925.78	1361.13	1697.96
16	268.53	258.26	379.69	585.52	69	975.46	937.96	1379.04	1718.26
17	283.73	272.88	401.18	609.88	70	988.13	950.14	1396.95	1738.56
18	298.93	287.50	422.67	634.24	71	1000.80	962.32	1414.86	1758.86
19	314.13	302.12	444.16	658.60	72	1013.47	974.50	1432.77	1779.16
20	329.33	316.74	465.65	682.96	73	1026.14	986.68	1450.68	1799.46
21	344.53	331.36	487.14	707.32	74	1038.81	998.86	1468.59	1819.76
22	359.73	345.98	508.63	731.68	75	1051.48	1011.04	1486.50	1840.06
23	374.93	360.60	530.12	756.04	76	1064.15	1023.22	1504.41	1860.36
24	390.13	375.22	551.61	780.40	77	1076.82	1035.40	1522.32	1880.66
25	405.33	389.84	573.10	804.76	78	1089.49	1047.58	1540.23	1900.96
26	420.53	404.46	594.59	829.12	79	1102.16	1059.76	1558.14	1921.26
27	435.73	419.08	616.08	853.48	80	1114.83	1071.94	1576.05	1941.56
28	450.93	433.70	637.57	877.84	81	1127.50	1084.12	1593.96	1961.86
29	466.13	448.32	659.06	902.20	82	1140.17	1096.30	1611.87	1982.16
30	481.33	462.94	680.55	926.56	83	1152.84	1108.48	1629.78	2002.46
31	494.00	475.12	698.46	946.86	84	1165.51	1120.66	1647.69	2022.76
32	506.67	487.30	716.37	967.16	85	1178.18	1132.84	1665.60	2043.06
33	519.34	499.48	734.28	987.46	86	1190.85	1145.02	1683.51	2063.36
34	532.01	511.66	752.19	1007.76	87	1203.52	1157.20	1701.42	2083.66
35	544.68	523.84	770.10	1028.06	88	1216.19	1169.38	1719.33	2103.96
36	557.35	536.02	788.01	1048.36	89	1228.86	1181.56	1737.24	2124.26
37	570.02	548.20	805.92	1068.66	90	1241.53	1193.74	1755.15	2144.56
38	582.69	560.38	823.83	1088.96	91	1254.20	1205.92	1773.06	2164.86
39	595.36	572.56	841.74	1109.26	92	1266.87	1218.10	1790.97	2185.16
40	608.03	584.74	859.65	1129.56	93	1279.54	1230.28	1808.88	2205.46
41	620.70	596.92	877.56	1149.86	94	1292.21	1242.46	1826.79	2225.76
42	633.37	609.10	895.47	1170.16	95	1304.88	1254.64	1844.70	2246.06
43	646.04	621.28	913.38	1190.46	96	1317.55	1266.82	1862.61	2266.36
44	658.71	633.46	931.29	1210.76	97	1330.22	1279.00	1880.52	2286.66
45	671.38	645.64	949.20	1231.06	98	1342.89	1291.18	1898.43	2306.96
46	684.05	657.82	967.11	1251.36	99	1355.56	1303.36	1916.34	2327.26
47	696.72	670.00	985.02	1271.66	100	1368.23	1315.54	1934.25	2347.56
48	709.39	682.18	1002.93	1291.96					
49	722.06	694.36	1020.84	1312.26	Loading	26.60	53.10		73.00
50	734.73	706.54	1038.75	1332.56	Unloading	13.30	26.55		73.00

HOW MANY BOLTS AND NUTS ,RUBBER PACKING FOR C.I D/F PIPES, C.I SLUICE VALVES AND CI SPECIALS

S.No	Dia	CI item			Rubber Packing (Rubber sheet)		Remarks
		No.of Bolts&nuts in each flange	Each Bolt weight	Total Weight	Dia	Each flange Weight	
1	80mm	4	0.130	0.520	80mm	0.530	
2	100mm	8	0.145	1.160	100mm	0.630	
3	125mm	8	0.145	1.160	125mm	0.810	
4	150mm	8	0.155	1.240	150mm	1.080	
5	180mm	8	0.290	2.320	180mm	1.420	
6	200mm	8	0.290	2.320	200mm	1.420	
7	225mm	12	0.290	3.480	225mm	1.920	
8	250mm	12	0.290	3.480	250mm	1.920	
9	300mm	12	0.290	3.480	300mm	2.430	
10	350mm	16	0.325	5.200	350mm	3.060	
11	380mm	16	0.325	5.200	380mm	-	
12	400mm	16	0.325	5.200	400mm	-	
13	450mm	20	0.325	6.500	450mm	-	
14	500mm	20	0.620	12.400	500mm	-	
15	530mm	20	0.660	13.200	530mm	-	
16	560mm	20	0.660	13.200	560mm	-	
17	600mm	20	0.660	13.200	600mm	-	

RATES OF BOLTS & NUTS & RUBBER WASHERS

35.4	Rubber Packing			
	3 mm thick		Kg	93.00
	6 mm thick		Kg	93.00
35.5	Bolts & Nuts with double washers (1/2" x 1")		Kg	111.00