GENERAL ABSTRACT

Jal Jeevan Mission (JJM)-WSS to Arakkulam and Velliyamattom (part) panchayath-JJM -WSS to Arakkulam and Velliyamttom Panchayaths in Idukki District- Supply and Laying Clear Water Pumping Mains,Construction of GLSR at various zones,Supplying,erecting,testing and commissioning of Clear water pump sets(Low Level Zone)- Package VIII-General Civil Work

Sl No	Head Description		Amount
1	Supply and laying of Clear water pumping ma	ains.	57695725.85
2	Road Restoration Charges (MORD ROAD)		4313793.60
3	Construction of 3.8 LL capacity Sump cum pu Filter House	Imp house near KSEB	7663445.94
4	Construction of 0.3LL capacity steel tanks at 1	Pathipally	784821.64
5	Construction of 0.5 LL capacity steel tanks No Church(Asramam) and Elappally	ear St.Antony's	1958932.32
6	Supply, Erection, Testing and commissioning Pumpsets from KSEB filter house to Lourde M St.Antony's Church Discharge 6 lps, He	Mount	1425191.98
7	Supply, Erection, Testing and commissioning Pumpsets from KSEB filter house to Pathipall Head 212m	of CF type CW ly Discharge 4 lps,	1512536.78
8	Supply, Erection, Testing and commissioning Pumpsets from KSEB Filter House to Elappal Head 280m	of CF type CW ly Discharge 6 lps,	2532099.68
	Т	otal Estimation PAC	77886547.79
Sl No	Description	Percentage/LS	Amount
L	Lumsum Heading		
L.001	Restoration charges (PWD)		
		@LS	17034690.60
L.002	Connection charges - KSEB		
		@LS	2000000.00
	То	tal Lumsum Amount	19034690.60
С	Extra Charges		
C.001	Provision for GST		
	77886547.79	18.00%	14019578.60
		Grand Total	110940816.9 9
		Round off	59183.01
		Rounded Total(Rs)	111000000.0 0

Sl No	Head Description	Amount					
	Rupees Eleven Crore Ten Lakh						

Approved By **Pradeep V.K.** (PEN:G14136), Chief Engineer



DETAILED ESTIMATE

Jal Jeevan Mission (JJM)-WSS to Arakkulam and Velliyamattom (part) panchayath-JJM -WSS to Arakkulam and Velliyamttom Panchayaths in Idukki District- Supply and Laying Clear Water Pumping Mains,Construction of GLSR at various zones,Supplying,erecting,testing and commissioning of Clear water pump sets(Low Level Zone)- Package VIII-General Civil Work

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
1	Supply and laying	of Clear v	vater pumpin	ig mains.						
1.001	OD286685/2023-2	024								
	Supply of 100 mm	GI pipe a	nd specials							
	Supply of 100	mm GI pi	ipe			,				
	KSEB Filter house-Near St.Antony's Church	1.000	6600.000	520			6600.000			
	KSEB Filter house-Pathipally	1.000	1500.000		_		1500.000			
	KSEB Filter house-Elappally	1.000	6800.00 <mark>0</mark>	えし	_E		6800.000			
	Total Quantity in metre									
1.002	100.98.117									
	Supply of DI K9 P	ipe Confo	orming to IS	8329/2000, 2	200mm Dia.					
	200 mm DI K9	Pipe				, r				
	Asoka jn KSEB Filter House	1.000	4670.000				4670.000			
	Deduct MS(WTP - KSEB Filter House)	-1.000	2500.000				2500.000			
	2% for future mace.	1.000	2800.000			0.0200	56.000			
	Total						2226.000			
				Tota	al Quantity	in metre	2226.000			
1.003	100.98.440									
		Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.								
	25mm CI air valve									
		38.000					38.000			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Total						38.000			
					Total Quant	tity in no	38.000			
1.004	100.98.441									
	Supply of CI Air V Type S1, Size 40n		nforming to I	IS 14848 - 20	000, Single C	Drifice, Sn	nall Orifice			
	40 mm CI Air v	alve								
		18.000					18.000			
	Total						18.000			
				1	Total Quant	tity in no	18.000			
1.005	100.98.446									
	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Double Orifice Type DS2, Size 50mm.									
	50 mm CI Air v	alve								
		6.000	-				6.000			
	Total 6.000									
			See.		Total Quant	tity in no	6.000			
1.006	100.98.460			3-16						
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 150mm.									
	150 mm D/F SI	luice Valv	e of public	WORKS						
		2.000					2.000			
	Total						2.000			
					Total Quant	tity in no	2.000			
1.007	100.98.457									
	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.									
	80mm D/F Slui	ce valve								
		10.000					10.000			
	Total						10.000			
					Total Quant	tity in no	10.000			
1.008	100.98.429	100.98.429								
	Supply of CI Non Return Valve, Conforming to IS 5312 Part I - 1984, PN 1.6, Size 100mm.									
	100mm CI nor	n Return V	/alve	1	[,				
		8.000					8.000			
	Total						8.000			
					Total Quant	tity in no	8.000			
1.009	100.98.432									

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	Supply of CI Non 200mm.	Return Va	alve, Confor	ming to IS 53	312 Part I - 1	984, PN 1	1.0, Size		
	200mm CI NRV								
		2.000					2.000		
	Total						2.000		
				,	Total Quant	tity in no	2.000		
1.010	100.1.1								
	Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in all kinds of soil.								
	All kinds	of soil							
	Asoka jnKSEB Filter House 200mm DI-K9	1.000	2170.000	0.800	1.150	0.6000 00	1197.840		
	Asoka jnKSEB Filter House 200mm MS	1.000	2500.000	0.800	1.150	0.6000 00	1380.000		
	Cutting the bituminous / concrete	-1.000	3400.000	0.800	0.150		-408.000		
	Total						2169.840		
				Тс	otal Quantit	y in cum	2169.840		
1.011	100.1.5								
	Excavating trenche sockets, and dressi getting out the exc exceeding 20cm ir watering, etc., and m, in Ordinary Ro	ing of side avated so depth, in disposing	es, ramming o il, and then r cluding cons	of bottoms, c eturning the solidating eac	lepth up to 1 soil as requin th deposited	.5m, inclu ed, in lay layer by r	ding ers not amming,		
	Earthwork e	xcavation	in OR						
	Asoka jnKSEB Filter House 200mm DI-K9	1.000	2170.000	0.800	1.150	0.2500 00	499.100		
	Asoka jn KSEB Filter House 200mmMS	1.000	2500.000	0.800	1.150	0.2500 00	575.000		
	Total 1								
				Te	otal Quantit	y in cum	1074.100		
1.012	100.2.7								

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	 Excavating trenches of required width for pipes, cables, etc., including exclosed sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including out the excavated soil, and then returning the soil as required, in la exceeding 20cm in depth, including consolidating each deposited layer by watering, etc., and disposing of surplus excavated soil as directed, within 50m, in Medium Rock where Blasting is Prohibited. Earthwork excavation in MR ((blasting prohibited) 									
	Earthwork exca	vation in	MR ((blastir	ng prohibited)					
	Asoka jnKSEB Filter House 200mm DI-K9	1.000	2170.000	0.800	1.150	$\begin{array}{c} 0.0800\\00\end{array}$	159.712			
	Asoka jnKSEB Filter House 200mm MS	1.000	2500.000	0.800	1.150	$\begin{array}{c} 0.0800\\00\end{array}$	184.000			
	Total						343.712			
				Тс	otal Quantity	y in cum	343.712			
1.013	100.4.1		1	101						
	Excavating in hard rock for trenches by blasting for laying pipes and stacking useful materials for measurements and disposing unserviceable materials within the initial lead of 50m and lift up to 1.50m (depth from 0.0m to 1.50m) and providing protection by earth filled cement bags during blasting to avoid damages to nearby structures (200 Nos. of earth filled cement bags for 10m3 of blasting)									
	Earthwork exc	avation in	HR							
	Asoka jnKSEB Filter House 200 mm DI	1.000	1120.000	0.800	1.150	$\begin{array}{c} 0.0700\\00\end{array}$	72.128			
	Asoka jnKSEB Filter House 200mm MS	1.000	1000.000	0.800	1.150	$\begin{array}{c} 0.0700\\00\end{array}$	64.400			
	Total						136.528			
				To	otal Quantit	y in cum	136.528			
1.014	100.1.13					U				
	 Excavating trenches of required width for pipes, cables, etc., including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering, etc., and disposing of surplus excavated soil as directed, within a lead of 50m, in Hard Rock where Blasting is Prohibited. 									
	Earthwork ex	kcavation	in HR (Blast	ing Prohibite	ed)					
	Asoka jnKSEB Filter House 200mm DI-K9	1.000	1050.000	0.800	1.150	0.0700 00	67.620			
	Asoka jnKSEB Filter House 200mm MS pipe	1.000	1500.000	0.800	1.150	$\begin{array}{c} 0.0700\\00\end{array}$	96.600			
	Total						164.220			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
				Тс	otal Quantit	y in cum	164.220			
1.015	100.8.1									
	Fencing one side of in vertical casuarir						caution tape			
	Fencing									
		1.000	2650.000				2650.000			
	Total						2650.000			
	Total Quantity in metre 2650.00									
1.016	100.59.1									
	Cutting the bituminous / concrete roads with cutting machine for a minimum depth of 200mm along the sides of proposed alignment of the pipe to be laid without causing any damage to other utilities, including the charges for hire and conveyance of tools and plant, cost of consumables and charges for lighting, watching, ribbon fencing, caution boards, traffic diversion, and as per the direction of departmental officers etc. complete, before carrying out the demolition of bituminous / concrete road by mechanical means and carrying out the excavation.									
	Cutting the bitum	ninous/cor	ncrete road							
	Crossing	4.000					4.000			
	Cutting the bituminous / concrete	2.000	3400.000				6800.000			
	Total		OF PUBLIC	WORKS			6804.000			
				Tot	al Quantity	in metre	6804.000			
1.017	OD286688/2023-2	2024								
	Dismantling manu metres lead as per									
	dismantiling of t	oituminus	road							
	Cutting the bituminous / concrete	1.000	3400.000	0.800			2720.000			
	Total						2720.000			
				Te	otal Quantit	y in sqm	2720.000			
1.018	50.2.25.1									
	Filling with contractor's own earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m as per direction of site Engineer-in-charge									
	Filling with contractors own earth									
		1.000	200.000				200.000			
	Total						200.000			
				Тс	otal Quantit	y in cum	200.000			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
1.019	100.12.9				<u> </u>				
	Conveying and fix refilling etc., but e diameter nominal	excluding	ipes complet cost of pipes	e with G.I. f and fittings	ittings incluc for External	ling trencl work: 100	ning and 0mm		
	Conveying and	fixing G.	I. pipes-100	mm dia					
	KSEB Filter House -Lourde Mount Church	1.000	6600.000				6600.000		
	KSEB Filter House - Pathippally	1.000	1500.000				1500.000		
	KSEB Filter House - Elappally	1.000	6800.000				6800.000		
	Total						14900.00 0		
	Total Quantity in metre 14900.0								
1.020	100.14.3		A. C.						
	Conveying and lay to IS: 8329 exclud K-9 Pipes.								
	Laying 200mm	DI pipe	e-PLATFOR	M FOR THE N	ANAGEMENT				
	Asoka jnKSEB filter house	1.000	2170.000	WORKS			2170.000		
	Total						2170.000		
				Tot	al Quantity	in metre	2170.000		
1.021	OD286689/2023-2	2024							
	Conveying and lay	ying 200 n	nm MS pipe						
	Laying 200 mm N	AS pipe							
		1.000	2500.000				2500.000		
	Total						2500.000		
				Tot	al Quantity	in metre	2500.000		
1.022	18.70.3								
	Providing push - on-joints to Centrifugally (Spun) Cast Iron Pipes or Ductile Iron Pipes including testing of joints and including the cost of rubber gasket:200 mm dia pipes								
	Providing push on joints-200 mm								
		410.00 0					410.000		
	Total						410.000		
	Total Quantity in joint								

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
1.023	18.30.5				_					
	Providing flanged joints to double flanged C.I./ D.I pipes and specials, includ testing of joints:200 mm diameter pipe									
	Providing flange)0mm			Г Г				
		18.000					18.00			
	Total						18.00			
					Total Quant	tity in no	18.00			
1.024	18.68.1									
	Providing and laying D.I specials of class K - 12 suitable for push - on jointing as per IS : 9523 :Upt 600 mm dia									
	Providing and laying DI specials									
	200x90 DI bend	2.000				$\begin{array}{c} 0.3200\\00\end{array}$	0.64			
	200x45 DI bend	6.000	de la			0.2600 00	1.56			
	200x22.5 DI bend	24.000	16 B			0.2300 00	5.52			
	200x11.25 DI bend	40.000		3 ſ		0.2100 00	8.40			
	200 mm DI collar	6.000	e-PLATFOR	M FOR THE M	ANAGEMENT	$\begin{array}{c} 0.2700\\00\end{array}$	1.62			
	200mm DI TP	10.000	OF POBUL	WORKS		0.2300 00	2.30			
	200 x150 mm Tee	2.000				$\begin{array}{c} 0.3600\\00\end{array}$	0.72			
	200 x 100 mm Tee	2.000				$\begin{array}{c} 0.3100\\00\end{array}$	0.62			
	Total									
				Tota	l Quantity in	n quintal	21.38			
1.025	100.31.1.1									
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 80mm diameter, Class I.									
	Conveying an									
		10.000					10.00			
	Total									
	Total Quantity in no									
1.026	Total Quantity in no 10.0 100.31.1.2									
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 100mm diameter, Class I.									

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	Conveying and	fixing 10	0mm valve						
	NR valve	8.000					8.000		
	Total						8.000		
				I	Total Quant	tity in no	8.000		
1.027	100.31.1.4								
	Conveying and fix insertions etc., cor will be paid separa	nplete, bu	t excluding t	he cost of the					
	Conveying and	1 fixing15	0 mm D/F v	alve	[
	Sluice	2.000					2.000		
	Total						2.000		
	Total Quantity in no 2								
1.028	100.31.1.5								
	Conveying and fixing C.I. sluice valves (with cap) by providing bolts, nuts, rubber insertions etc., complete, but excluding the cost of the valve (tail pieces, if required, will be paid separately): 200mm diameter, Class I.								
	Conveying and fix	Conveying and fixing 200mm NRV							
	200mm NRV	2.000					2.000		
	Total						2.000		
			e-PLATFOR OF PUBLIC	M FOR THE N WORKS	Total Quant	tity in no	2.000		
1.029	100.32.1								
	Conveying and fix nuts, rubber insert required, will be p	ions etc.,	complete, bu	t excluding t	he cost of air	valve (ta			
	Conveying and	fixing 251	nm air valve	;	1				
		38.000					38.000		
	Total						38.000		
				I	Total Quant	tity in no	38.000		
1.030	100.32.2								
	Conveying and fix nuts, rubber insert required, will be p	ions etc., o aid separa	complete, bu ttely): 40mm	t excluding t	he cost of air	valve (ta			
	Conveying and f		mi air vaive				10.000		
	Total	18.000					18.000		
	Total 18.000								
1 021	100 22 2				Total Quant	nty m no	18.000		
1.031	100.32.3 Conveying and fix nuts, rubber insert required, will be p	ions etc.,	complete, bu	t excluding t	he cost of air	valve (ta			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	Conveying and	fixing 50	mm double a	air valve					
		6.000					6.000		
	Total						6.000		
					Total Quant	tity in no	6.000		
1.032	OD286690/2023-2	2024							
	Labour for cutting	D.I. pipe	with steel sa	w.200 mm c	liameter D.I.	pipe			
	Labour for Cutting 200mm DI pipe								
		60.000					60.000		
	Total								
	Total Quantity in Each Cu								
1.033	100.35.3								
	Testing 200mm D 200 mm dia	I/CI pipeli	ine with pota	able water to	the required	test pressu	ıre		
	Observed Data der		6136	20 of PHED	DATA				
	Testing 200mm	DI pipeli	10100-000-0		1				
		1.000	2170+25 00		_		4670.000		
	Total			7			4670.000		
				Tot	al Quantity	in metre	4670.000		
1.034	100.37.7.1		OF PUBLIC	WORKS	11-12 80-1002-011 8 1021 W 1				
	In situ fabrication including cost and of painting the ste- even shade over an	conveyar el work w	ice charges of the two or mo	of M.S. plate ore coat delu	, all fabrications in the surface of the second sec	on charges	s, charges		
	200 mm M.S pipe	es			_				
		1.000	2500.000				2500.000		
	Total						2500.000		
				Tot	al Quantity	in metre	2500.000		
1.035	100.37.7.2								
	Fabricating M.S. flanges of diameter 200mm using 12mm thick M.S. plate including cost and conveyance charges of M.S. plate, all fabrication charges, charges of painting the steel work with two or more coat deluxe multi surface paint to give an even shade over an under-coat of primer etc., complete: For pipes fabricated with 8mm thick M.S. plates.								
	Fabricating M.S	pipe of 20	00mm Dia						
		20.000					20.000		
	Total						20.000		
					Total Quant	ity in no	20.000		
1.036	100.37.7.3								

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Cutting 200mm (I. including cost of g fabricated with 8m	as, all lab	our and hire							
	cutting M.S pipe			1						
		150.00 0					150.000			
	Total						150.000			
				I	Total Quant	tity in no	150.000			
1.037	100.37.7.4									
	Welding 200mm (welding machine i tools etc., complet	ncluding	cost of gas a	nd welding r	ods, all labou	ar and hire				
	Welding									
		150.00 0		107			150.000			
	Total									
					Total Quant	tity in no	150.000			
1.038	100.37.7.5				_					
	Grinding cut and weld edges of 200mm (I.D.) M.S. pipes during fabrication work including all labour and hire charges of tools etc., complete: For pipes fabricated with 8mm thick M.S. plates.									
	Grinding	300.00								
		0					300.000			
	Total						300.000			
				I	Total Quant	tity in no	300.000			
1.039	2.8.1									
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil Earth work excavation									
		46.000	1.800	1.800	1.500		223.560			
	Total		1.000	1.000	1.000	I	223.560			
				Т	otal Quantit	v in cum	223.560			
1.040	4.1.3				•	•				
	Providing and layi of centering and sl (zone-III) : 4 grade	nuttering -	All work up	o to plinth lev	vel:1:2:4 (cer					
1	CC 1:2:4									

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	CC	46.000	1.500	1.500	0.100		10.350
	Total						10.350
				To	tal Quantity	y in cum	10.350
1.041	5.1.3						
	Providing and layi excluding the cost to plinth level:1:2: nominal size)	of centeri	ng, shuttering	g, finishing a	nd reinforce	ment - Al	l work up
	RCC 1:2:4	Г Т				[
	Base slab	46.000	1.500	1.500	0.150		15.525
	side wall	46.000	5.400	0.150	1.150		42.849
	Cover slab	46.000	1.500	1.500	0.200		20.700
	Anchor block	200.00 0	1.000	1.000	1.000		200.000
	Total		63	200			279.074
			16103	To	tal Quantity	y in cum	279.074
1.042	5.9.1			and a second			
	Centering and shu footings, bases of Centering and sh	columns, e uttering	etc for mass c			orm for:F	oundations
	Anchor block	$\begin{array}{c} 200.00\\ 0\end{array}$	4*1		1.000		800.000
	Total						800.000
				То	tal Quantity	y in sqm	800.000
1.043	5.9.2						
	Centering and shuttering including strutting, etc. and removal of form for:W thickness) including attached pilasters, butteresses, plinth and string courses Form work						Valls (any s etc.
	Foundation Concrete	46.000	6.000		0.100		27.600
	Base Slab	46.000	6.000		0.150		41.400
	Side wall inside	46.000	4.800		1.150		253.920
	Side wall outside	46.000	6.000		1.150		317.400
	Cover slab sides	46.000	1.5*4		0.200		55.200
	Total			ł			695.520
				Το	tal Quantity	y in sam	695.520
1.044	5.22.6					,	
	Steel reinforcemer in position and bin bars of grade Fe-5	ding all co	omplete upto				

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Steel Reinforc	ement					
	for valve chamber	1.000	79.074			80.000 000	6325.920
	for anchor block	1.000	200.000			50.000 000	10000.00 0
	Total						16325.92 0
		kilogram	16325.92 0				
1.045	OD286695/2023-2	2024					
	Supply, erection of 4046 class B of ARAD// certified by FCRI product shall have Supply, erection of	ZENNIER Palakkad a warranty 1	/REYCHEM and for at least 2	I RPG/ITRO years		• 1	C
		3.000	128	2414			3.000
	Total	5.000	23/13	92658			3.000
	Total	5.000		- (Total Quant	ity in no	
1.046	OD286696/2023-2 Finishing with Epo	2024 oxy paint (coats) at all	locations pro	epared and	3.000 I applied as
1.046	OD286696/2023-2	2024 oxy paint (z#39;s spec nplete.On	cifications in 200mm (ID)	coats) at all cluding appr) MS pipe.	locations pro	epared and	3.000 I applied as preparation
1.046	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor	2024 Dxy paint (z#39;s spec nplete.On Doxy paint	cifications in 200mm (ID) -200 mm MS	coats) at all cluding appr) MS pipe.	locations pro	epared and	3.000 I applied as preparation 2500.000
1.046	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep	2024 Dxy paint (z#39;s spec nplete.On Doxy paint	cifications in 200mm (ID) -200 mm MS	coats) at all cluding appr) MS pipe. 5 pipe	locations pre opriate prim	epared and ning coat, j	3.000 I applied as preparation 2500.000 2500.000
	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total	2024 oxy paint (z#39;s spec nplete.On oxy paint 1.000	cifications in 200mm (ID) -200 mm MS 2500.000	coats) at all cluding appr) MS pipe. 5 pipe	locations pro	epared and ning coat, j	3.000 I applied as preparation 2500.000 2500.000
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep	2024 oxy paint (z#39;s spec nplete.On oxy paint 1.000	cifications in 200mm (ID) -200 mm MS 2500.000	coats) at all cluding appr) MS pipe. 5 pipe	locations pre opriate prim	epared and ning coat, j	3.000 I applied as preparation 2500.000 2500.000
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total Road Restoration (2024 2024	AORD ROA draulic Excav gin tippers, tr s of lines, gr	coats) at all cluding appr) MS pipe. 5 pipe Tota D) vator and Tip raulic excava rimming bot ades and cro	locations pre- opriate prime al Quantity opers with di- ator of 0.9 cu- tom and side ss-sections,	epared and ing coat, j in metre sposal upt um bucket e slopes, ir and transp	3.000 1 applied as preparation 2500.000 2500.000 2500.000 co 1000 m capacity borting to
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total Road Restoration (3.5.3 Excavation in Soil Excavation for roa including cutting a accordance with re the embankment lo	2024 2024 2024 2024 2029 2024	cifications in 200mm (ID) -200 mm MS 2500.000 MORD ROA draulic Excav soil with hydr g in tippers, tr s of lines, gr th a lift upto	coats) at all cluding appr) MS pipe. 5 pipe Tota D) vator and Tip raulic excava rimming bot ades and cro 1.5 m and le	locations pre- opriate prime al Quantity opers with di- ator of 0.9 cu- tom and side ss-sections,	epared and ing coat, j in metre sposal upt um bucket e slopes, ir and transp	3.000 1 applied as preparation 2500.000 2500.000 2500.000 co 1000 m capacity borting to
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total Road Restoration (3.5.3 Excavation in Soil Excavation for roa including cutting a accordance with re the embankment lo Specification Clau	2024 2024 2024 2024 2029 2024	cifications in 200mm (ID) -200 mm MS 2500.000 MORD ROA draulic Excav soil with hydr g in tippers, tr s of lines, gr th a lift upto	coats) at all cluding appr) MS pipe. 5 pipe Tota D) vator and Tip raulic excava rimming bot ades and cro 1.5 m and le	locations pre- opriate prime al Quantity opers with di- ator of 0.9 cu- tom and side ss-sections,	epared and ing coat, j in metre sposal upt um bucket e slopes, ir and transp	3.000 I applied as preparation 2500.000 2500.000 2500.000 2500.000 conting to Technical
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total Road Restoration (3.5.3 Excavation in Soil Excavation for roa including cutting a accordance with re the embankment lo Specification Clau Excavation in S	2024 2024	cifications in 200mm (ID) -200 mm MS 2500.000 MORD ROA draulic Excav soil with hydr soil with hydr in tippers, tr is of lines, gr th a lift upto Hydraulic Excav	coats) at all cluding appr) MS pipe. 5 pipe Tota D) vator and Tip raulic excava rimming bot ades and cro 1.5 m and le	locations pre- opriate prime al Quantity opers with di- ator of 0.9 cu- tom and side ss-sections, ad upto 1000	epared and ing coat, j in metre sposal upt um bucket e slopes, ir and transp	3.000 1 applied as preparation 2500.000 2500.000 2500.000 2500.000 capacity borting to Technical 624.000
2	OD286696/2023-2 Finishing with Epo per manufacturer& of surface, etc. cor Finishing with Ep Total Road Restoration (3.5.3 Excavation in Soil Excavation for roa including cutting a accordance with re the embankment lo Specification Clau Excavation in S Tar surface	2024 2024	cifications in 200mm (ID) -200 mm MS 2500.000 AORD ROA draulic Excaves oil with hydr g in tippers, tr s of lines, grathant th a lift upto Hydraulic Excaves 2600.000	coats) at all cluding appr) MS pipe. 5 pipe Tota D) vator and Tip raulic excava rimming bot ades and cro 1.5 m and le cavator 0.800	locations pre- opriate prime al Quantity opers with di- ator of 0.9 cu- tom and side ss-sections, ad upto 1000 0.300	epared and ing coat, j in metre sposal upt um bucket e slopes, ir and transp	2500.000 2500.000 2500.000 2500.000 2500.000 co 1000 m capacity borting to

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Granular Sub-base Method Construct spreading in unifo place method with achieve the desired For Grading I Mat	ction of gra rm layers rotavator d density,	anular sub-ba with motor g at OMC, and	ase by provid grader on pre- d compacting	ling well gra pared surface g with smoot	ded mater e, mixing h wheel r	rial, by mix in oller to
	Granular Sub-ba	se with W	ell Graded N	Material			
		1.000	2600.000	0.800	0.150		312.000
	CC Road	1.000	800.000	0.800	0.150		96.000
	Total						408.000
				Та	otal Quantit	y in cum	408.000
2.003	4.9						
	Wet Mix Macadar aggregate to wet n water at OMC in r site, laying in unif compacting with s density including 1 400.11 & 400.12 a with 1 km lead	nix macad nechanica orm layers mooth wh lighting, b	am specifica l mixer (Pug s in sub-base eel roller of arricading ar	tion includin Mill), carria /base course 80 to 100kN nd maintenan	g premixing ge of mixed on a well pro- weight to ac ce of diversi	the mater material l epared su hieve the on, etc as	tial with by tipper to b-base and desired per Tables
	Wet Mix Macad	am					
		1.000	2600.000	0.800	0.150		312.000
-	Total		OF PUBLIC	WORKS			312.000
				Τα	otal Quantit	y in cum	312.000
2.004	5.1.1a						
	Prime Coat :- Low emulsion (SS-1) o surface and sprayi per Technical Spe	n prepared ng primer cification	at the rate of g	granular base	including cl	eaning of	road
	Providing Prime		2 < 0.0 0.00	1.000			2120.000
	Tatal	1.000	2600.000	1.200			3120.000
	Total				(1.0 (!))	•	3120.000
				T	otal Quantit	y in sqm	3120.000
2.005	5.2.3a Tack Coat Provid emulsion distribut surfaces treated w Specification Clau	or at the ratified or at the rational tension of the second second second second second second second second se	ate of 0.25 to	0.30 kg per	sqm on the p	prepared g	granular
	Providing Tack C	Coat					
		1.000	2600.000	1.200			3120.000
	Total						3120.000
				To	otal Quantit	y in sqm	3120.000

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
2.006	5.9.1.2a									
	20mm thick Open-Graded Premix Carpet using Bituminous (penetration grade/modified bitumen) Binder - Bitumen S-65 Providing, laying and rolling of open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grad and level to serve as wearing course on a previously prepared base, including mixin in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat of either Type A or Type B or Type C as per Technical Specification Clause 508. Case - I E Manual Means (II) Bitumen (S-65)									
	Providing 20mm	thick Ope	en-Graded Pi	emix Carpet						
		1.000	2600.000	1.200			3120.000			
	Total						3120.000			
				Т	otal Quantit	y in sqm	3120.000			
2.007	5.12.A.3.2a									
	Seal Coat - Manual Means - Type C - Bitumen S-65 Providing and laying seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A, Type B and Type C as per Technical Specification Clause 510 A By Manual Means :- Case - III : Type C (II) Bitumen (S-65)									
	Providing Seal C	oat		3-16						
		1.000	2600.000	1.200			3120.000			
	Total		e-PLATFOR	M FOR THE M	ANAGEMENT		3120.000			
				Т	otal Quantit	y in sqm	3120.000			
2.008	75.8.1									
	Providing Plain cement concrete for road work CC 1:2:4 (1 cement: 2 fine aggregate: 4course aggregate) laid to required slope and camber in panels (@ 3 m c/c) as requiredincluding compaction, finishing and tamping etc .complete. Max. size of courseaggregate not exceeding 25mm, mixed in concrete mixer etc complete as perspecification (i) Nominal mix (1:2:4)									
	Providing Plain	cement co	oncrete for ro	ad work						
		1.000	800.000	0.800	0.150		96.000			
	Total						96.000			
				To	otal Quantit	y in cum	96.000			
	Construction of 3.	8 LL capa	city Sump c	um pump hou	use near KSE	EB Filter l	House			
3.001	2.6.1									
	Earth work in exca over areas (exceed including disposal earth to be levelled	ling 30 cm of excava	n in depth, 1. ated earth, le	5 m in width ad up to 50 n	as well as 10) sqm on	plan)			
	Earth work Exca									
	Levelling-Sump	1.000	17.000	10.000	1.500		255.000			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity					
	Levelling-Pump house	1.000	13.000	7.000	1.500		136.500					
	Total						391.500					
				То	tal Quantity	y in cum	391.500					
3.002	2.8.1											
	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.All kinds of soil											
	Earthwork excati	ion										
	Column Foundation of Pump house	10.000	1.500	1.500	1.500		33.750					
	For compound wall	1.000	82.000	0.450	0.450		16.605					
	For toilet	1.000	4.400	0.600	0.600		1.584					
	Total						51.939					
	10141											
3.003	7.1.1 Random rubble m up with cement co	oncrete 1:6	:12 (1 cemen	in foundatio t : 6 coarse s	and : 12 gra	including ded stone	aggregate					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand)	oncrete 1:6	:12 (1 cemen	in foundatio t : 6 coarse s	n and plinth and : 12 grad	including ded stone	levelling aggregate					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry	oncrete 1:6	:12 (1 cemen	in foundatio t : 6 coarse s	n and plinth and : 12 grad	including ded stone	levelling aggregate					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand)	oncrete 1:6	:12 (1 cemen	in foundatio t : 6 coarse s	n and plinth and : 12 grad	including ded stone	levelling aggregate 6 coarse					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump	oncrete 1:6 ze) up to p	:12 (1 cemen blinth level w	in foundatio t : 6 coarse s ith:Cement r	n and plinth and : 12 grad nortar 1:6 (1	including ded stone	levelling aggregate					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound	1.000	:12 (1 cemen blinth level w 10.500	in foundatio t : 6 coarse s ith:Cement r 16.500	n and plinth and : 12 gray nortar 1:6 (1 0.500	including ded stone	levelling aggregate 6 coarse 86.625					
3.003	7.1.1 Random rubble m up with cement cc 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet	1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000	in foundation t : 6 coarse s ith:Cement r 16.500 0.450	n and plinth and : 12 grad nortar 1:6 (1 0.500 0.450	including ded stone	levelling aggregate 6 coarse 86.625 16.605					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet foundation for toilet	1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000 4.400	in foundatio t : 6 coarse s ith:Cement r 16.500 0.450 0.600	n and plinth and : 12 gra- nortar 1:6 (1 0.500 0.450 0.600	including ded stone	levelling aggregate 6 coarse 86.625 16.605 1.584					
3.003	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet foundation for toilet basement	1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000 4.400	in foundation t : 6 coarse s ith:Cement r 16.500 0.450 0.600 0.450	n and plinth and : 12 gra- nortar 1:6 (1 0.500 0.450 0.600	including ded stone cement :	levelling aggregate 6 coarse 86.625 16.605 1.584 0.830 105.644					
	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet foundation for toilet basement Total	1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000 4.400	in foundation t : 6 coarse s ith:Cement r 16.500 0.450 0.600 0.450	n and plinth and : 12 gra- nortar 1:6 (1 0.500 0.450 0.600 0.450	including ded stone cement :	levelling aggregate 6 coarse 86.625 16.605 1.584 0.830					
	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet foundation for toilet basement Total	1.000 1.000 1.000 1.000 1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000 4.400 4.100 tion cement c All work up	in foundation t : 6 coarse s ith:Cement r 16.500 0.450 0.600 0.450 To concrete of s to plinth lev	n and plinth and : 12 grad nortar 1:6 (1 0.500 0.450 0.450 0.450 tal Quantity pecified grad el:1:2:4 (cen	including ded stone cement : y in cum	levelling aggregate 6 coarse 86.625 16.605 1.584 0.830 105.644 105.644					
	7.1.1 Random rubble m up with cement co 20 mm nominal si sand) RR masonry For sump levelling For compound wall for toilet foundation for toilet basement Total 4.1.3 Providing and lay of centering and s	1.000 1.000 1.000 1.000 1.000 1.000	:12 (1 cemen blinth level w 10.500 82.000 4.400 4.100 tion cement c All work up	in foundation t : 6 coarse s ith:Cement r 16.500 0.450 0.600 0.450 To concrete of s to plinth lev	n and plinth and : 12 grad nortar 1:6 (1 0.500 0.450 0.450 0.450 tal Quantity pecified grad el:1:2:4 (cen	including ded stone cement : y in cum	levelling aggregate 6 coarse 86.625 16.605 1.584 0.830 105.644 105.644					

F F F F V F F	For pump house column For pump house- nside floor For compound wall For toilet floor evelling Fotal	10.000 1.000 1.000 1.000	1.500 11.000 82.000	1.500 6.000 0.450	0.150		3.375 6.600
i F v F	nside floor For compound wall For toilet floor evelling	1.000			0.100		6 600
F	wall For toilet floor evelling		82.000	0.450	I		0.000
1	evelling	1.000			0.100		3.690
<u>ן</u> ר	Fotal		2.000	1.800	0.150		0.540
	lotai						40.193
				То	tal Quantity	y in cum	40.193
3.005 5	5.33.1 Providing and layii		tion machine	hotohod or d	mashina	and doate	m miy M
	as per approved de excluding the cost admixtures in recor- concrete, improve direction of Engine 330 kg/ cum. Exce- separately.All worl	of centeri mmended workabili eer - in-ch ss or less	ng, shutterin proportions ty without in arge. Note:- cement used	g, finishing a as per IS: 91 pairing strer Cement cont	nd reinforce 03 to acceler ogth and dura ent consider	ment, inc rate, retar ability as ed in this	luding d setting of per item is @
	Design mix M-	25		711			
	Sump Bottom	1.000	16.100	10.100	0.300		48.783
	Pump house Foundation	10.000	1.200	1.200	0.200		2.880
f T P A	Pump house Foundation- Trapezoidal portion(h/3*(A1+ A2+root of (A1*A2))	10.000	.20+1.44 +.54	0.450	1/3		3.270
	Pump house Plinth beam	2.000	11.500	0.300	0.450		3.105
	Column up to plinth beam	5.000	5.900	0.300	0.450		3.983
	Column up to plinth beam	10.000	0.300	0.300	0.900		0.810
Ţ	Fotal						62.831
				То	tal Quantity	y in cum	62.831

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Providing and layin 25 grade cement co as per approved de excluding the cost admixtures in reco concrete, improve direction of Engine 330 kg/ cum. Exce separately.All wor	oncrete fo sign mix, of centeri mmended workabili eer - in-ch ss or less	r reinforced including pung, shutterin proportions ty without in arge. Note:- cement used	cement conc umping of co g, finishing a as per IS: 91 npairing strea Cement con as per desig	rete work, us ncrete to site and reinforce 03 to acceler ngth and dura tent consider n mix is paya	sing ceme of laying ment, inc rate, retar ability as ed in this	nt content g but luding d setting of per item is @			
	Design mix-25									
	Haunch of sump	0.500	48.000	0.300	0.700		5.040			
	vertical haunch	4.000	0.400	0.400	3.450	$\begin{array}{c} 0.5000\\00\end{array}$	1.104			
	side wall of sump	2.000	15.25+9. 25	0.250	3.450		42.263			
	Column	8.000	0.300	0.300	3.450		2.484			
	Corbel	8.000	1.000	0.300	0.450		1.080			
	Roof beam long side	2.000	15.000	0.300	0.300		2.700			
	Roof beam short side	4.000	8.400	0.300	0.300		3.024			
	Roof slab	1.000	16.100	10.100	0.150		24.392			
	Pump house column	10.000	0.300	0.300	4.000		3.600			
	Pump house beam- long side	2.000	11.400	0.300	0.300		2.052			
	Pump house beam - short side	5.000	5.000 5.600	0.300	0.300		2.520			
	Pump house lintel	1.000	23.800	0.200	0.150		0.714			
	Pump house Sunshade	1.000	25.000	0.600	0.100		1.500			
	Pump house Roof slab	1.000	12.000	6.500	0.150		11.700			
	toilet roof slab	1.000	2.800	2.600	0.100		0.728			
	Total						104.901			
				Тс	otal Quantity	y in cum	104.901			
3.007	5.34.1									
	Extra for providing richer mixes at all floor levels. Note:- Excess/less cement over the specified cement content used is payable/ recoverable separately.Providing M-30 grade concrete instead of M-25 grade BMC/RMC. (Note:- Cement content considered in M-30 is @ 340 kg/cum).									
	Design Mix M-30)								
	Bottom slab	1.000	16.100	10.100	0.300		48.783			
	Haunch of sump	0.500	48.000	0.300	0.700		5.040			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Haunch of sump verrtical	4.000	0.400	0.400	3.450	$\begin{array}{c} 0.5000\\00\end{array}$	1.104
	side wall of sump	2.000	15.25+9. 25	0.250	3.450		42.263
	Column	8.000	0.300	0.300	3.450		2.484
	Total						99.674
				То	tal Quantity	y in cum	99.674
3.008	5.9.1						
	Centering and shut footings, bases of a	tering inc columns, e	luding strutti etc for mass o	ng, etc. and i	removal of f	orm for:F	oundations,
	Centering and shu	uttering					
	For sump	2.000	16.500+1 0.5	0.150			8.100
	For sump Bottom slab	2.000	16.1+10. 1	0.300			15.720
	For pump house	10*4.0 00	1.500	0.150			9.000
	For pump house	10*4.0 00	1.200	0.120			5.760
	For pump house- Trapezoidal portion	10*4.0 00	1.2+.45	0.45/2			14.850
	For pump house- column up to Plinth	10.000	4*1.2	0.900			43.200
	For pump house- Plinth beam long wall	2.000	11.400	1.200			27.360
	For pump house- Plinth beam short wall	5.000	6.200	1.200			37.200
	Total						161.190
				To	tal Quantit	y in sqm	161.190
3.009	5.9.2						
	Centering and shut thickness) including						
	Centering and shu						
	Sump side wall- inside	1.000	48.000		2.750		132.000
	Sump side wall- outside	1.000	50.000		3.450		172.500
	Sump -Haunch	1.000	48.000		0.700		33.600

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Sump Haunch vertical	4.000	3.450		0.550		7.590
	Total						345.69
				Tot	tal Quantity	' in sqm	345.69
3.010	5.9.3						
	Centering and shutt floors, roofs, landir	tering incl	uding struttin	g, etc. and ress platform	emoval of fo	orm for:Su	ispended
	Centering and shut	ttering					
	Sump - Roof	1.000	16.100	10.100			162.61
	Sump - Roof sides	2.000	16.1+10. 1	0.150			7.86
	Pump house- roof	1.000	12.000	6.500			78.00
	Pump house- roof sides	1.000	12+6.5+6 .5	0.150			3.75
	Pump house- Sunshade	1.000	25.000	0.600			15.00
	Pump house- Sunshade sides	1.000	26.200	0.100	_		2.62
	toilet roof	1.000	2.800	2.600			7.28
	toilet roof- side	1.000	2.8+2.6	0.100			0.54
	Total		e-PLATFORM OF PUBLIC W	I FOR THE MA IORKS	NAGEMENT		277.66
				Tot	tal Quantity	' in sqm	277.66
3.011	5.9.5						
	Centering and shutt beams, plinth beam	tering incl is, girders	uding struttin bressumers a	ng, etc. and re nd cantileve	emoval of fo rs	orm for:Li	ntels,
	Centering and shu	ittering		T			
	Lintel of pump house	2.000	23.600		0.150		7.08
	Roof beam of pump house	1.000	11.400		0.900		10.26
	Roof beam of pump house	5.000	5.600		0.900		25.20
	Roof beam of sump	2.000	15.000		0.900		27.00
	Roof beam of sump	4.000	8.400		0.900		30.24
	corbel	8.000	1.000		1.200		9.60
	Total						109.38
				-			

	Specification	No	Length	Width	Depth	Cf	Quantity
	Centering and shur Pillars, Piers, Abur	ttering inc tments, Po	luding strutt	ing, etc. and t	removal of fo	orm for:C	olumns,
	Centering and shu	ittering					
	Column of sump	8.000	1.200		3.450		33.120
	Column of pump house	10.000	1.200		3.700		44.400
	Total						77.520
				To	tal Quantity	y in sqm	77.520
3.013	5.22.6						
	Steel reinforcement in position and bin bars of grade Fe-5	ding all c	omplete upto	ding straight plinth level	tening, cuttir Fhermo - Me	ng, bendin echanically	g, placing y Treated
	Steel reinforce	ment for l	RCC work	,			
	Quantity of item no.5	1.000	62.831	2		120.00 0000	7539.720
	Quantity of item no.6	1.000	104.910	2417)		120.00 0000	12589.20 0
	Total			3-16			20128.92 0
				Total Q	uantity in k	cilogram	20128.92
3.014	50.6.1.1		OF PUBLIC	WORKS			
	Solid block mason or nearest availabl with thickness 20	e size con	ore cast solid	blocks (fact	ory made) of	f size 40x2	20x20cm
		cm and ab				foundation	n and plinth
	Solid block mas	onry (40x	ove in: CM	1:6 (1 cemer	nt : 6 coarse s	foundation	n and plinth
	For PH wall		ove in: CM			foundation	n and plinth
	For PH wall For PH parapet wall	onry (40x 1.000 1.000	ove in: CM 20x20 cm) 23.600 12+13	0.200 0.200	3.700 0.750	foundation	n and plinth complete
	For PH wall For PH parapet	onry (40x 1.000	ove in: CM 20x20 cm) 23.600	1:6 (1 cemer 0.200	at : 6 coarse s 3.700	foundation	n and plinth complete 17.464
	For PH wall For PH parapet wall	onry (40x 1.000 1.000	ove in: CM 20x20 cm) 23.600 12+13	0.200 0.200	3.700 0.750	foundation	n and plinth complete 17.464 3.750 1.680
	For PH wall For PH parapet wall For toilet wall For sump parapet	onry (40x 1.000 1.000 1.000	zove in: CM 20x20 cm) 23.600 12+13 2.2+1.8	0.200 0.200 0.200 0.200	3.700 0.750 2.100	foundation	n and plinth complete 17.464 3.750 1.680 6.060
	For PH wall For PH parapet wall For toilet wall For sump parapet wall Deduction -	onry (40x 1.000 1.000 1.000 1.000	ove in: CM 20x20 cm) 23.600 12+13 2.2+1.8 40.400	0.200 0.200 0.200 0.200 0.200	3.700 0.750 2.100 0.750	foundation	n and plinth complete 17.464 3.750
	For PH wall For PH parapet wall For toilet wall For sump parapet wall Deduction - rolling shutter	onry (40x 1.000 1.000 1.000 1.000 -1.000	ove in: CM 20x20 cm) 23.600 12+13 2.2+1.8 40.400 3.000	0.200 0.200 0.200 0.200 0.200 0.200	3.700 0.750 2.100 0.750 2.100 2.100	foundation	n and plinth complete 17.464 3.750 1.680 6.060 -1.260 -0.336
	For PH wall For PH parapet wall For toilet wall For sump parapet wall Deduction - rolling shutter Deduction - door Deduction -	onry (40x 1.000 1.000 1.000 -1.000 -1.000	ove in: CM 20x20 cm) 23.600 12+13 2.2+1.8 40.400 3.000 0.800	0.200 0.200 0.200 0.200 0.200 0.200 0.200	3.700 0.750 2.100 0.750 2.100 2.100 2.100	foundation	n and plinth complete 17.464 3.750 1.680 6.060 -1.260 -0.336 -2.520
	For PH wall For PH parapet wall For toilet wall For sump parapet wall Deduction - rolling shutter Deduction - door Deduction - windows	onry (40x 1.000 1.000 1.000 -1.000 -1.000 -6.000	ove in: CM 20x20 cm) 23.600 12+13 2.2+1.8 40.400 3.000 0.800 1.500	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	3.700 0.750 2.100 0.750 2.100 2.100 2.100 1.400	foundation	n and plinth complete 17.464 3.750 1.680 6.060 -1.260 -0.336 -2.520 -0.708
	For PH wall For PH parapet wall For toilet wall For sump parapet wall Deduction - rolling shutter Deduction - door Deduction - windows Deduction - lintel Deduction-	onry (40x 1.000 1.000 1.000 -1.000 -1.000 -1.000 -1.000	ove in: CM 20x20 cm) 23.600 12+13 2.2+1.8 40.400 3.000 0.800 1.500 23.600	0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200 0.200	3.700 0.750 2.100 0.750 2.100 0.750 2.100 0.750 2.100 0.750 0.150	foundation	n and plinth complete 17.464 3.750 1.680 6.060 -1.260

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity	
3.015	13.1.1							
	12 mm cement pla	ster of mi	x:1:4 (1 cen	nent : 4 fine s	and)			
	12mm Cemen	t plasterin	g	T				
	Sump bottom slab	1.000	15.000	9.000			135.000	
	Sump side wall- inside	1.000	48.000	3.450			165.600	
	Sump side wall- out side	1.000	50.000	3.450			172.500	
	Sump column	8.000	1.200	3.450			33.120	
	Sump roof slab	2.000	16.100	10.100			325.220	
	Sump roof slab - sides	1.000	52.400	0.150			7.860	
	Sump long beam	2.000	15.000	0.900			27.000	
	Sump short beam	4.000	8.400	0.900			30.240	
	PH column	3.000	1.200	4.000			14.400	
	PH side wall- inside	1.000	23.000	4.000	_		92.000	
	PH side wall- out side	1.000	23.800	4.000	_E		95.200	
	PH sunshade	2.000	25.000	0.600	ANAGEMENT		30.000	
	PH sunshade- side	1.000	25.600	0.100			2.560	
	PH long -beam	1.000	11.000	0.900			9.900	
	PH short-beam	3.000	5.600	0.900			15.120	
	PH -roof slab	2.000	12.000	6.500			156.000	
	PH -roof slab sides	1.000	25.000	0.150			3.750	
	P H parapet	2.000	12+13	0.750			37.500	
	Sump parapet	2.000	40.400	0.750			60.600	
	toilet wall inside	1.000	3.800	2.100			7.980	
	toilet wall out side	1.000	4.200	2.100			8.820	
	deduction- rolling shutter	-1.000	3.000	2.500			-7.500	
	deduction- door	-1.000	0.800	2.100			-1.680	
	deduction- windows	-6.000	1.500	1.400			-12.600	
	Total							
				Τα	tal Quantity	in sqm	1408.590	

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	Providing and app waterproofing trea water tanks, roof s / subway and bridg integral crystalline integral crystalline same from negativ shall meet the requ permeability of cor DIN 1048 and resi slurry shall be cap shall be carried ou engineerin- charge. The produce	tment to t labs, podi ge deck et slurry : 2 slurry : 1 e (interna irements ncrete by stant to 10 able of se t all comp ct perforn	he RCC structures, reserved c., prepared b parts water) part water) 1) side with t as specified more than 90 6 bar hydrost lf-healing of blete as per speak	ctures like re or, sewage & by mixing in for vertical s for horizonta he help of sy in ACI-212-3 0% compared cracks up to pecification a arry guarante	taining walls water treatm the ratio of 5 surfaces and l surfaces an inthetic fiber 3R-2010 i.e b l with contro on negative a width of 0 and the direct e for 10 year	s of the ba nent plant 5 : 2 (5 pa 3 : 1 (3 pa d applying brush. The by reducin ol concrete side. The .50mm. The tion of the	sement, , tunnels rts arts g the te material g as per crystalline he work		
	Providing and app	olying inte	egral crystalli	ine slurry					
	haunch	1.000	48.000	0.700			33.600		
	sidewall	1.000	48.000		3.450		165.600		
	Column	8.000	1.200	2413	3.450		33.120		
	Total			The second			232.320		
			· D .	To To	otal Quantit	y in sqm	232.320		
3.017	Providing and app waterproofing trea water tanks, roof s / subway and bridg integral crystalline integral crystalline same from negativ shall meet the requ permeability of co DIN 1048 and resi slurry shall be caps shall be carried our engineerin-	22.23.2 Providing and applying integral crystalline slurry of hydrophilic in nature for waterproofing treatment to the RCC structures like retaining walls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge deck etc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI-212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineerin- charge. The product performance shall carry guarantee for 10 years against any							
	Providing and app				<u>bqiii.</u>				
	sump bottom slab	1.000					135.000		
	Total						135.000		
				Te	otal Quantit	y in sqm	135.000		

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Providing and layi (thickness to be sp 15622, of approve mm thick cement with white cement	becified by d make in mortar 1:4	the manufa colours Wh (1 cement :	cturer), of 1s ite, Ivory, Gi 4 Coarse sai	t quality con rey, fume Re nd), including	forming to d Brown,	o IS: laid on 20			
	floor tiles of size 3	300x300 n	nm							
	floor tiles	1.000	2.000	1.800			3.600			
	Total						3.600			
				T	otal Quantit	y in sqm	3.600			
3.019	11.36									
	shades except burg Charge, in skirting 1:3 (1 cement : 3 c including pointing	(thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete. Providing and fixing ceramic wall tiles								
	ceramic wall tiles		19976							
	for toilet	1.000	6.800	2.100			14.280			
	Total				_		14.280			
			C-PLATEOR	T	otal Quantit	y in sqm	14.280			
3.020	17.3.1		OF PUBLIC	WORKS						
	Providing and fixi with seat and lid, 1 bend with fittings specials of standar complete, includin walls and floors w and lid	10 litre lov & C.I. bra d make an g painting	w level white ackets, 40 mi nd mosquito g of fittings a	e vitreous chi n flush bend proof coupli and brackets,	na flushing of , overflow ar ng of approv cutting and	cistern & rangemen ed munici making go	C.P. flush it with pal design ood the			
	Providing and fixi	ng water o	closet							
	Providing and fixing water closet	1.000					1.000			
	Total						1.000			
				Тс	otal Quantity	y in each	1.000			
3.021	17.7.11									
	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:Stainless Steel AISI - 304 (18/8) Wash basin 530 x 345 mm with single 15mm C.P. brass pillar tap									
	Providing and fixi	ng wash b	asin arrange	ments	Ι	1				
	Providing and fixing wash basin arrangements	1.000					1.000			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Total						1.000
				То	tal Quantity	y in each	1.000
3.022	13.43.1						
	Applying one coat manufacture on wa	of water all surface	thinnable cer :Water thinn	nent primer of able cement	of approved l primer	brand and	
	Applying one co	oat of cem	ent primer			r	
	Sump out side wall	1.000	48.000	3.450			165.600
	Sump roof slab	1.000	16.100	10.100			162.610
	Parapet wall	1.000	52.400	1.700			89.080
	PH side wall - inside	1.000	23.000	4.000			92.000
	PH side wall - outside	1.000	23.800	4.000			95.200
	PH column	4.000	1.200	4.000			19.200
	P H roof slab T & B	2.000	11.400	6.200			141.360
	Parapet wall	1.000	23.800	1.700			40.460
	PH sunshade	2.000	25.000	0.600			30.000
	PH sunshade- side	1.000	25.600	0.100	ANAGEMENT		2.560
	Toilet out side wall	1.000	4.200	2.100			8.820
	Toilet roof slab T & B	2.000	2.200	2.000			8.800
	Toilet parapet wall	1.000	4.200	1.700			7.140
	Deduction - Rolling shutter	-1.000	3.000	2.500			-7.500
	Deduction - windows	-6.000	1.500	1.400			-12.600
	Deduction - door	1.000	0.800	2.100			1.680
	Total						844.410
				To	otal Quantity	y in sqm	844.410
3.023	13.60.1						
	Wall painting with an even shade:Two				d brand and r	manufactu	re to give
	Wall painting w	ith acrylic	emulsion pa	aint			
	Quantity same as item no. 13.43.1	1.000	844.410				844.410
	Total					T	844.410

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity				
				Te	otal Quantit	y in sqm	844.410				
3.024	10.6.1										
	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.80x1.25 mm M.S. laths with 1.25 mm thick top cover										
	Supplying and fixing rolling shutterrolling shutter1.0003.0002.5007.500										
	rolling shutter 1.000 3.000 2.500										
	Total										
		y in sqm	7.500								
3.025	50.9.1.1										
	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood										
	window and ventil	ator		Z []							
	horizontal	2*6	1.700	0.100	0.075		0.153				
	vertical	4*6	1.400	0.100	0.075		0.252				
	vertical- ventilator	2*1	0.600	0.100	0.075		0.009				
	horizontal- ventilator	2*1	0.800	0.100	0.075		0.012				
	Total						0.426				
				Тс	otal Quantit	y in cum	0.426				
3.026	50.9.5.1										
	Providing and fixi 4 mm thick float g finished of require thick shutters.	lass panes	s including IS	SI marked M	.S pressed by	utt hinges	bright				
	shutter										
	Window	3*6	1.400	0.450			11.340				
	Ventilator	1.000	0.600	0.400			0.240				
	Total						11.580				
				To	otal Quantit	y in sqm	11.580				
3.027	9.117.2										

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity				
	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0mm (± 0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 x 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-chargeExtruded section profile size 42x50 mm										
	Door frame										
		1.000	6.000				6.000				
	Total			Τ.4	-1.0	•	6.000				
2 0 2 9	9.118.1			10t	al Quantity	in metre	6.000				
	Providing and fixing to existing door frames24 mm thick factory made PVC door shutters made of styles and rails of a uPVC hollow section of size 59x24 mm and wall thickness 2 mm (\pm 0.2 mm) with inbuilt edging on both sides. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 20x20 mm and 1 mm (\pm 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x24 mm and 2 mm (\pm 0.2 mm) wall thickness,fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (\pm 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge(For W.C. and bathroom door shutter).										
	Tatal	1.000	0.800		2.100		1.680 1.680				
	Total			Т	otal Quantit	v in sam	1.680				
3.029	13.48.2				Jun Zuandt	, moqui	1.000				
	Finishing with Del primer as per man Surface Paint of re under coat of prim	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.75 ltr/10 sqm of approved brand and manufacture									
	Painting on wood	work				0.0000					
		6.000	1.500		1.400	0.8000 00	10.080				
	Total						10.080				
				Т	otal Quantit	y in sqm	10.080				
3.030	13.48.3										

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Finishing with Del primer as per man Surface Paint to gi an under coat of p	ith Deluxe 0.90 ltr/1	e Multi 0 sqm over							
	Painting on steel w	vork				,				
		1.000	3.000		2.500		7.500			
	Total						7.500			
				Т	otal Quantit	y in sqm	7.500			
3.031	13.71									
	Lettering with blac	ek Japan p	oint of approv	ed brand and	d manufactu	re				
	Lettering with blac	ck japan p	aint							
	Lettering with black japan paint	1.000	100.000			15.000 000	1500.000			
	Total		1500.000							
		1500.000								
3.032	Total Quantity in per Letter per cm height 10.25.2									
	Steel work welded in built up sections/framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works									
	Steel work									
	ladder & gate	1.000	350.000				350.000			
	Total						350.000			
				,	Total Quant	tity in kg	350.000			
3.033	100.36.1									
	Filling water with of 5 km (average) height not less that and other applienc	to the rese n 3 m usir	ervoir site and g 5 HP diese	d pumping th l engine pur	ne water into	the reserv	voir of			
	Filling with water									
	Filling with water	1.000	380.000				380.000			
	Total						380.000			
				Total (Quantity in l	Kilo litre	380.000			
3.034	100.41.33 Supplying and fixi charges including					medium c	luty)			
	Supplying and fixi	ng Manho	ole cover			,				
	Manhole cover	4.000					4.000			
	Total						4.000			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity				
				I	Total Quant	tity in no	4.000				
3.035	18.26.1										
	Providing and layi caps etc., suitable						lars, tapers,				
	Providing and lay	ing specia	als		1						
	200 mm wall casting pipe	3.000				0.4700 00	1.410				
	100 mm wall casting pipe	3.000				0.2000 00	0.600				
	Total						2.010				
				Tota	l Quantity ii	n quintal	2.010				
3.036	OD286676/2023-2	2024									
	2mm thi 160mm PVC pipe thread for connect	Supplying and providing water level indicator to the tank using scale fabricated out of mm thick MS plate with in the frame work of suitable size MS square tube, 60mm PVC pipe for guiding the float, necessary pullies, suitable nylon nread for connecting float and level indicator, painting the entire structure, ettering etc complete including all charges for material and labour									
	Supplying and fixi	ing water	level indicate	or	_						
	water level indicator	1.000	P	₹IL	LE		1.000				
	Total	_	e-PLATFOR	M FOR THE M	IANAGEMENT		1.000				
					Total Quant	tity in no	1.000				
3.037	OD286677/2023-2										
	Supply and Fitting			<u>'</u>							
	Supply and fitting Supply and fitting	went cow	/1								
	went cowl	10.000					10.000				
	Total						10.000				
				1	Total Quant	tity in no	10.000				
3.038	OD286678/2023-2	2024									
	working on single conditions for lifti supplied with one	Supply, delivery and fixing of 5 T or suitable capacity Electrically and manually working on single girder with overhead travelling trolley and clear lift as per site conditions for lifting the chemicals, Chlorine, pumps etc and fitting as required, supplied with one set of crane slings with GI D shackle and clamps etc. complete as per the instruction of the Engineer in charge.									
	Supply, delivery a	and fixing	of 5 T or su	itable capaci	ty crane						
		1.000					1.000				
	Total						1.000				
				F	Fotal Quant	ity in set	1.000				
3.039	10.2										

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity	
	Structural steel wo work, including cu approved steel prin	tting, hois	sting, fixing	elded in buil in position a	t up sections nd applying a	s, trusses a a priming	nd framed coat of	
	Steel section							
		650.00 0					650.000	
	Total						650.000	
				r	Fotal Quant	ity in kg	650.000	
4	Construction of 0.1	3LL capac	city steel tanl	ks at Pathipal	lly			
4.001			-		-			
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil							
	Earth work excav		6 500	6 500	1 000		10.050	
	For site levelling	1.000	6.500	6.500	1.000		42.250	
	For PCC	1.000	6.000	6.000	0.500		18.000	
	Total			— т.			60.250	
4.002	4.1.3				otal Quantit	y in cuin	60.250	
	Providing and layi of centering and sh (zone-III) : 4 grade Cement concrete 1	nuttering - ed stone a : 2: 4	All work up ggregate 20	to plinth lev mm nominal	vel:1:2:4 (cer size)		barse sand	
		1.000	6.000	6.000	0.150		5.400	
	Total						5.400	
				То	otal Quantit	y in cum	5.400	
4.003	Providing and layi excluding the cost to plinth level:1:1: nominal size	of centeri 5:3 (1 cen	ng, shutterin	g, finishing a	and reinforce	ement - Al	l work up	
	Providing RCC 1:	1.5:3						
	Ring Beam (3.14*.45*(2.167 +1.717)*.45	1.000	2.470				2.470	
	Total						2.470	
				То	otal Quantit	y in cum	2.470	
4.004	5.9.1							
	Centering and shur footings, bases of				removal of f	orm for:F	oundations,	

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Centering & amp;	shuttering								
	for ring beam inside	1.000	3.140	3.434	0.450		4.852			
	for ring beam outside	1.000	3.140	4.334	0.450		6.124			
	Total						10.976			
	Total Quantity in sqm									
4.005	5.22.6									
	Steel reinforcement for R.C.C work including straightening, cutting, bending, pla in position and binding all complete upto plinth levelThermo - Mechanically Trea bars of grade Fe-500D or more									
	Steel Reinforcement									
		1.000	2.470			100.00 0000	247.000			
	Total									
	Total Quantity in kilogram									
4.006	OD286679/2023-2	2024	and the	all and a second						
	Supplying,coveyir	ng & f	filling sand in	side the plat	form for ste	el tank				
	Sand for filling									
		3.140	3.434	3,434	0.450	0.2500	4.166			
		5.140	OF P3.737	VORKS	01120	00				
	Total	5.140	0 0 0 0	/ORKS	01120	00	4.166			
	Total	5.140	0 0 0 0 0 0	VORKS	tal Quantity					

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
	Supply, installation	and com	missioning c	of a pre-engin	eered, pre-fa	bricated,	
	factorymanufactur				- -	6.0.6	
	steel storage Wate multiple layersas r						
	PE	equireu io	n the capacit	ly and neight		ina manaj	sie-layered
	sheet/membrane fo		ercontainmer	nt liner.The T	ank Shell / E	Body &an	np; the
	Liner material shall			1' 4 T	CO 0001 0	000 - (
	manufactured in a Tank shall be	facility ce	ertified and c	ompliant to I	.50 9001 - 2	000 stand	ards. The
	supplied with acce	ss points,	penetrations	for inlets, ou	utlets, drains	and fittin	gs,
	overflow and drain, high and	d low wat	er level indic	eators All cor	nections to t	he tankss	hall be with
	flanged or		er iever maie			ne tankss	
	threaded nozzles, j	placed to	the KWA wa	ter mainsTA	NK ROOF 7	The roof o	of the tank
	shall	. 1 1	-1		1 41- 1		
	be of corrugated G Galvanized truss fr						
	maintenance and c			eupuole of su	pporting 15	persons	
	tank shall have an			er, on the roo	of, for operation	ion and M	laintenance.
	TANK COVER Tank cov	are chall b	a of approve	d galvanized	l vermin prov	of constru	ection Poof
	ends shall	ers shan i		a garvanizet	i vernin prod		iction. Roof
	be fitted with suita	ble vermi	n-proofing t	ape or other r	naterial, to p	revent ing	gress of
	dust and		1 1 - 6 1 6		<u>.</u>	4 1	
	foreign objects. Co galvanized bolts an		I be firmly fi	xed to the to	-	tank with	n
	nuts. LADDERS 7		ll be provide			d ladders	internally
	or externally. Externa	al roof sur	norts shall h	e of an appro	onriately desi	igned Hot	-din
	galvanized		ports shall c	c of all appro			-uip
	steel construction.	Tanks sh	all comply w	ith relevant s	spill level, air	r gap and	overflow
	requirements relative to Effectiv	e Canacit	$x \Delta 11$ nuts a	nd holts used	for the nane	le chall h	A 9
	minimum of 12mm		.y. All lluts a	ilu oons useu	for the part	15 SHall U	c a
	size and hot-dip ga		Case harden	ed. The tank	shall have a	circular a	ngle fixed
	around the	o of the te	nka at tha ta	n of minim	m 2 mm thi	alznaga Ta	nka ahall
	total circumference be properly	e or the ta	inks, at the to	p, or minim	1111 Z 111111 (fill)	CKHESS, 1 a	uiks shall
	flushed out with cl	ean water	r prior to bein	ng brought in	to service.TA	ANK DIN	IENSIONS
	The dimensions of the	Tople ab -1	1 ha of 2 00.	a in diamater	and 2 00	n hoistei	DESIGN
	dimensions of the LIFE. The	Tank sna	n de of 3.88h	ii in diameter	anu 2.90m 1	n neight l	DESIGN
	tanks shall have a						
	inlet,outlet,overflo						
	including an Interr capacity.iii) One (
	valve.TANK LINE						
	shall comply to AS	S/NZS 40	20 (Appendi	x Å) of 2005	and ANSI/N	ISF 61 - 2	2008,
	Section 5 Certifica						
	manufacturer of th construction, fabric						
	to (ANSI/ NSF 61)						
	construction for st						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	elongation and enhance tensile strength. The total liner material thickness shall be not less than 0.6 mm thick. The tensile strength shall not be less than 2266 N (warp) and 2495 N (weft) and heat sealing strength of 2056 N v) All the liner welded lap joints shall be strengthened with Metallocene encapsulating tape welded over the overlap. The Metallocene tape shall cover and protect the exposed material at the edges of the liner joints to further prevent the ingress of water into the scrim. vii) Liners shall be positively and continuously attached to the top outer edge of the circumference of th tank to prevent entry of water from the runoff from the roof structure. viii) All liners on tanks over 2m in height shall have a continuous intermediate liner support design out of nylon (or other material)cord, around the circumference of the tank, at vertica intervals corresponding to the level of each ring. ix) The intermediate liner support cords shall be firmly secured to the steel shell at each level, to prevent stress on the liner welded joints, and thereby eliminate possibility of failure CORROSSION PROTECTION. The tank structure shall have a secondary corrosion protection syste using sacrificial magnesium anodes. The number of anodes, their location around the tank and the mass of each anode shall be designed for anode replacement frequency five years. The anodes shall be installed external to the tank and concrete apron with their location marked with a suitably label-Cost for Tank steel with 10years guarante includes shel l,Steel wall,steel domed roof,Zinc Alum steel',Cost for Poly ethylene infinity liner ,Geo synthetic Fibre withfood grade plastics are used for insid coating and Support Arrangements,Cost for Fabricated items,attachments and accessories like steel ladder,Cost of Fabricated nozzles,over flow nozzles and drain arrangements, Cost for HDG nut and bolts,Freight Charges,Erection Installation and									
	commissioning of Steel storage tank	tank com	ponents.	$< \kappa$	_ =					
		1.000	30000.00 0	M FOR THE M WORKS	ANAGEMENT		30000.00 0			
	Total						30000.00 0			
				То	tal Quantity	in Litre	30000.00 0			
5	Construction of 0.: and Elappally	5 LL capa	city steel tar	ıks Near St.A	ntony'	s Church((Asramam)			
5.001	2.6.1									
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil									
	Earthwork excavation									
	For site levelling 2.000 7.000 7.000 1.000									
	For site levelling	2.000	6.500	6.500	0.500		42.250 140.250			
	Total									
				To	otal Quantit	y in cum	140.250			
5.002	4.1.3									

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	Providing and layi of centering and sl (zone-III) : 4 grad	nuttering -	- All work up	to plinth lev	vel:1:2:4 (cer				
	PCC 1:2:4	-							
		2.000	6.500	6.500	0.150		12.675		
	Total						12.675		
				To	otal Quantit	y in cum	12.675		
5.003	5.1.2								
	Providing and layi excluding the cost to plinth level:1:1: nominal size	of centeri	ing, shutterin	g, finishing a	and reinforce	ement - Al	l work up		
	Providing RCC 1	:1.5:3							
	Ring Beam (3.14*.45*(2.652 5+2.2025)*.45	2.000	3.087				6.174		
	Total 6.1								
	Total Quantity in cum								
5.004	5.9.1			J					
	Centering and shu footings, bases of				removal of f	orm for:F	oundations,		
	Centering & amp;	shuttering	2						
	for ring beam inside	2.000	3.140	4.405	0.450		12.449		
	for ring beam outside	2.000	3.140	5.305	0.450		14.992		
	Total						27.441		
				То	otal Quantit	y in sqm	27.441		
5.005	5.22.6								
	Steel reinforcement in position and bir bars of grade Fe-5	ding all c	omplete upto						
	Steel Reinforcer	nent							
		1.000	6.174			$\begin{array}{c} 100.00\\0000\end{array}$	617.400		
	Total						617.400		
				Total Q	Quantity in k	kilogram	617.400		
5.006	OD286714/2023-2	2024							
	Supplying,coveyir	ng &	filling sand i	inside the pla	tform for ste	el tank			
	Sand filling								

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
		2.000	3.14*4.40 5	4.405	0.450	$\begin{array}{c} 0.2500\\00\end{array}$	13.709
	Total						13.709
				To	otal Quantit	y in cum	13.709
5.007	OD286715/2023-2	2024					



Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	Supply, installation and commissioning of a pre-engineered, pre-fabricated,									
	factorymanufactur			6 70000	- -	6.0.6				
	steel storage Water Tank having a capacity of 50000 L thickness of 0.6 mm, in multiple layersas required for the capacity and height of the tank and multiple-layered									
	PE									
	sheet/membrane for the innercontainment liner. The Tank Shell / Body & amp; the									
	Liner material shall be									
	manufactured in a facility certified and compliant to ISO 9001 - 2000 standards. The Tank shall be									
	supplied with access points, penetrations for inlets, outlets, drains and fittings, overflow									
	and drain, high and flanged or	d low wat	er level indic	ators.All cor	nnections to t	he tankss	hall be with			
	threaded nozzles, j	placed to	the KWA wa	ter mainsTA	NK ROOF 7	The roof o	of the tank			
	shall be of corrugated G	alvaluma	chaot staal a	nd chall be d	omed with h	aavv du	ty Hot din			
	Galvanized truss fi	rame for s	support, and							
	maintenance and c tank shall have an			er, on the roo	of, for operati	ion and M	laintenance.			
	TANK COVER Tank cov	ers shall l	be of approve	ed galvanized	l vermin proo	of constru	ction. Roof			
	ends shall									
	be fitted with suita dust and	ble vermi	n-proofing ta	ape or other 1	naterial, to p	revent ing	gress of			
	foreign objects. Co		l be firmly fi			tank with	h			
	galvanized bolts an nuts. LADDERS 7		ll be provide	d with Hot-di		d ladders	internally			
	or externally. Externa	al roof sup	oports shall b	e of an appro	priately desi	igned Hot	-dip			
	galvanized steel construction.	Tanks sh	all comply w	ith relevant s	pill level, ai	r gap and	overflow			
	requirements				-	• •				
	relative to Effectiv		y. All nuts a	nd bolts used	for the pane	ls shall b	e a			
	size and hot-dip galvanized/Case hardened. The tank shall have a circular angle fixed									
	around the total circumference	e of the ta	nks, at the to	p, of minimu	um 2 mm thio	ckness.Ta	nks shall			
	be properly flushed out with cl	ean water	r prior to bein	ng brought in	to service.TA	ANK DIN	1ENSIONS			
	The dimensions of the		-							
	LIFE. The					•				
	tanks shall have a design inlet, outlet,									
	connection includi									
	overflow capacity.									
	isolation valve.TA	NK LINE	ERS:Tank lin	ers shall be p	ourpose-desig	gned and				
	manufactured and									
	ANSI/NSF 61 - 20						rds shall be			
	furnished by the m						oot			
	manufactured to or certified for potabl									
	of PE (polyethyler	ie) in mul	ti-layer cons	truction for s	trength, reinf	forced wi	th woven			
•		,			0,		-			

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity	
	scrim industrial fai liner material thick not be less than 22 v) All the liner we tape welded over t exposed material a into the scrim. vii) edge of the circum the roof structure. intermediate liner circumference of t ix) The intermedia each level, to prev possibility of failu secondary corrosion number of anodes, designed for anode external to the tanl label-Cost for Tan roof,Zinc Alum sta withfood grade pla Fabricated items,a nozzles,over flow Charges,Erection 1	kness shal 66 N (wa lded lap ju he overlap at the edge Liners shaference o viii) All l support du he tank, a te liner su ent stress re CORR on protect their loca e replacent k and cond k steel wi eel', astics are ttachment nozzles at	l be no less t rp) and 2495 oints shall be p. vi) The Me es of the liner all be positiv f the tank to iners on tank esigned out of t vertical into apport cords on the liner OSSION PR ion system u ation around nent frequence crete apron v th 10years gr Cost for Pol- used for insides and access nd drain arra	han 0.6 mm to N (weft) and e strengthene etallocene tap r joints to fur vely and cont prevent entry s over 2m in of nylon (or cont ervals correspisable be firm welded joints OTECTION sing sacrifici- the tank and cy of five year with their loca- uarantee inclu- y ethylene int le coating an ories like ste- ngements, Co	thick. The te d heat sealing d with Metal pe shall cove ther prevent tinuously atta y of water from height shall other materia bonding to the ly secured to s, and thereby and thereby ars. The tank strict al magnesion the mass of the ars. The anoto ation marked udes shel 1,S finity liner , Cost for HDG	nsile strer g strength locene en er and prot the ingres ached to th om the rur have a co l)cord, arc ne level of the steel y eliminat ructure sh m anodes. each anod des shall b l with a su teel wall,s Geo synthe rrangements st of Fabri nut and b	agth shall of 2056 N capsulating tect the ss of water ne top outer noff from ntinuous bund the each ring. shell at e all have a The le shall be te installed titably steel domed etic Fibre nts,Cost for cated	
	Supplying and In	stallation	A-DLATEOD	M FOD THE M	ANAGEMENT			
		2.000	50000.00 0	WORKS			100000.0 00	
	Total 100000.0 00							
	Total Quantity in Litre 100000.0							
6	Supply, Erection, Testing and commissioning of CF type CW Pumpsets from KSEB filter house to Lourde Mount St.Antony's Church Discharge 6 lps, Head 133m							
6.001	OD286706/2023-2	2024						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity
SI No	Supply erection, test for a head of 133m CF pump set with erection, testing ar pump sets with Bre base plate with cou- suitable for coupling providing suitable complete <br&g lps Total 100 mm GI, Lengt Motor S reputed make horiz suitable for the abov V/3300V (select th 2018 including pro- and metal etc. com included in starter coupling of pumps and commissioning for the above moto preventer, over loa contactor as per CI complete.<br&g but one pump set a cubical type floor panel board consis suitable capacity N other) providing su fitted with 3 Nos of</br&g </br&g 	sting and from KS the follow onze/SS i upling, co ng the pur concrete t;The dut l head - 1 h-6600 m upply, ere zontal sol ove pump he suitable oviding su uplete For as per CE and mote g of suital IP and for or with ov d relay w EA regula gt; <br& at a time)a mounted ting of 1 ACCB as uitable siz of indicate</br& 	commissioni SEB Filter ho ving specific ssioning of K mpeller, SS s upling guard mp and moto foundation in y condition is 33 mtrs <b a S ection, testing id shaft foot working 3 p e). The motor itable concre 3300v moto EA regulation ors.<br&g ble rating (Fu above 100 H er voltage an vith motor pro- ation 2010 an zgt;4. Panel b %lt;br>Su MS fabricate No. suitable out going (th ze Aluminiun or lamps, 1 N</br&g </b 	ing of CF pur- puse to lourd ation <br& CWA pre-qua- shaft and CI j foundation b or above the b ncluding costs is as follows& r><br& peed- Less th g and commi- mounted TE hase 50 Hz A r shall confir- ete foundatio rs digital mo n 2010. Flexil t;3. Starter& ally Automat HP FCMA sta- board (suitab pply, erection d dust and vec capacity MC in bus bar inter o. volt meter</br& </br& 	npset having mound. Supp gt;1. Pump& dified repute pump casing polts & amp; pase plate etc of cement size clt;br>Dis cgt;Size of pu an 1500 rpm ssioning of k FC squirrel c AC supply, w m to IE2/IE3 n including c tor protection ble coupling lt;br>Sup ic starter wit arters to be u age protection with main c actice etc. le for operati n, testing ance ermin proof c CB as incom 3s are interlo er connect the with selecto	g a dischar oly and er oly and er elt;br> d make C with suita nuts etc. of complet and and n scharge - of umping m h. 2. WA pre cage inductor orking vol as per IS cost of cen n relay sh shall be u ply, erection h air brea used.) star on, single contactor and two put common of the above N or switch,	rge of 6 lps ection of Supply, bentrifugal able type complete e including netal etc. 6 nain pipe - qualified ction motor oltage 415 5 12615- ment sand all be used for ion, testing k contact ter suitable phase and bypass ump sets sioning of control Nos of th each ICCBs and 1 No.
	other) providing suitable size Aluminium bus bar inter connect the above MCCBs and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. Complete and provided with a common earth bus for the entire panel and inter connect with the MCCBs as per CEA regulation 2010 and code of practice. The panel shall be fitted on a common base frame on suitable foundation. (Specification may be modified if there is only one) pump set by changing 2 Nos of out going as one out going and the provision of interlocking may be avoided) 5. Cabling work Supply, laying, testing and commissioning of suitable size XLPE cables for the above pump set from panel board to starter and from starter to motor. considering energy conservation. 6. Earthing Supply of all materials and providing suitable earthing by using suitable size pipe/plate earthing GI/copper strip buried in ground and giving double earthing to motor, starter, panel board etc. as per IE standards. 7. Capacitor for the motor to get a power factor above 0.95. The capacitor shall confirm to IS 2834 8. Valves Supply of suitable size best quality heavy duty ISI marked CI double flanged sluice valve and Non return valve with suitable pressure rating. Fitting of valves shall include proper RCC support especially for Non return valves. In case of positive suction pump set sluice valve should be in suction as well as delivery sides for easy repair works. 9. Suction and delivery pipe connections Supply and fitting of suitable size best quality GI/MS pipe of thickness not less than 8mm for a total length of 10 m. suitable for the above pump set and suitable size foot valve and connecting the suction pipe and valve with suitable flanges, nut and bolts IR sheet etc. complete and connecting the delivery side of the						

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	pump with the valves and suitable specials to connect with the pumping main. If the dia of suction pipe is above 80 mm CI pipes & amp; specials shall be provided. .Also two year Warrantee and Supply of ELCB/RCCB to be added at panel for safety.									
	Supply erection, testing and commissioning of CF pumpset having a discharge of 6 lps for a head of 133m from KSEB Filter house to lourd mound.									
	16 HP PUMPSET	2.000					2.000			
	Total						2.000			
					Total Quant	tity in no	2.000			
6.002	OD286707/2023-2	2024								
	Submitting applica	ation to K	SEBLfor pov	wer connection	on and powe	r extensio	n .			
	Submitting applica	ation to K	SEBLfor pov	wer connection	on and powe	r extensio	n			
		2.000					2.000			
	Total									
	Total Quantity in set 2.000									
6.003	OD286708/2023-2	2024	230	2006-02						
	Providing and fixi electrode including					pipe fron	n earth			
	earthing conductor	of size 1	0 SWG							
		2.000	OF PUBLIC	WORKS			2.000			
	Total						2.000			
				r	Fotal Quant	ity in set	2.000			
6.004	OD286709/2023-2	2024								
	OD37419/2023-2024 Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories,									
	and providing masonry enclosure .									
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick									
		2.000					2.000			
	Total 2.000									
					Fotal Quant		2.000			
7	Supply, Erection, Testing and commissioning of CF type CW Pumpsets from KSEB filter house to Pathipally Discharge 4 lps, Head 212m									
7.001	OD286698/2023-2024									

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity	
SI No	Supply erection, test for a head of 212 m pump set with the erection, testing an pump sets with Bro base plate with cou- suitable for couplin providing suitable complete <br&g 4lps Tota 100 mm GI, Lengt Motor Sp reputed make horiz suitable for the abov V/3300V (select th 2018 including pro and metal etc. com included in starter coupling of pumps and commissioning for less than 100 H for the above moto preventer, over loa contactor as per CI complete.<br&g but one pump set a cubical type floor m panel board consis suitable capacity M other) providing su fitted with 3 Nos o Ammeter with sele for the entire panel</br&g </br&g 	sting and n from K. following ad commi onze/SS i apling, co- ng the pur concrete t;The dut al head - 2 h-1500 m upply, ere zontal sol ove pump he suitable oviding su aplete For as per CF and mote g of suital IP and for or with ove d relay w EA regula gt; <br8 at a time) and inter f indicate ector swit l and inter</br8 	commissioni SEB filter ho specificatio ssioning of F mpeller, SS upling guard mp and moto foundation in 212 mtrs< aklt;br>S ection, testing id shaft foot working 3 p e). The moto itable concre 3300v moto EA regulation ors. <br&g ble rating (Fu above 100 F er voltage ar vith motor pra- tion 2010 ar zgt;4. Panel f %lt;br>Su MS fabricate No. suitable out going (the concret with concret with</br&g 	ing of CF purpuse to Pathip n 1 KWA pre-qua shaft and CI p foundation lo r above the b ncluding costs s as follows& br> <br peed- Less th g and commi- mounted TE shase 50 Hz A r shall confir- ete foundatio rs digital mo n 2010. Flexil t;3. Starter& ally Automat HP FCMA stand the FCMA stand otection relay ploy, erection d dust and vec capacity MC n bus bar inter o. volt meter plete and prov-</br 	npset having pally. Supply . Pump <b lified repute pump casing polts & amp; pase plate etc of cement si clt;br>Dis >Size of p an 1500 rpm ssioning of k FC squirrel c AC supply, w m to IE2/IE3 n including c tor protection ble coupling lt;br>Sup ic starter wit arters to be u age protection with main c actice etc. le for operation n, testing and ermin proof c CB as incom Bs are interloor with selector vided with a s as per CEA</b 	g a dischar and erect or>Sup d make C with suita nuts etc. of c. complet and and n scharge - pumping 1 h. 2. WA pre cage induct orking vo as per IS cost of cer n relay sh shall be u ply, erect h air brea used.) star on, single contactor and 2 becking wite e above N or switch, common A regulatio	rge of 4 lps ion of CF ply, entrifugal able type complete e including netal etc. main pipe - qualified ction motor blage 415 12615- ment sand all be used for ion, testing k contact ter suitable phase and bypass ump sets sioning of control Nos of h each 1CCBs and 1 No. earth bus on 2010 and	
	cubical type floor mounted MS fabricated dust and vermin proof common control panel board consisting of 1 No. suitable capacity MCCB as incomer and 2 Nos of suitable capacity MCCB as out going (the two MCCBs are interlocking with each other) providing suitable size Aluminium bus bar inter connect the above MCCBs and fitted with 3 Nos of indicator lamps, 1 No. volt meter with selector switch, 1 No. Ammeter with selector switch etc. Complete and provided with a common earth bus for the entire panel and inter connect with the MCCBs as per CEA regulation 2010 and code of practice. The panel shall be fitted on a common base frame on suitable foundation. (Specification may be modified if there is only one) pump set by changing 2 Nos of out going as one out going and the provision of interlocking may be avoided) 5. Cabling work Supply, laying, testing and commissioning of suitable size XLPE cables for the above pump set from panel board to starter and from starter to motor. considering energy conservation. 6. Earthing Supply of all materials and providing suitable earthing by using suitable size pipe/plate earthing Gl/copper strip buried in ground and giving double earthing to motor, starter, panel board etc. as per IE standards. 7. Capacitor for the motor to get a power factor above 0.95. The capacitor shall confirm to IS 2834 8. Valves Supply of suitable size best quality heavy duty ISI marked CI double flanged sluice valve and Non return valve with suitable pressure rating. Fitting of valves shall include proper RCC support especially for Non							
	pressure rating. Fit return valves. In ca well as delivery sic connections <bra thickness not less t and suitable size for flanges, nut and bo</bra 	ase of pos des for ea >Supp han 8mm oot valve	itive suction sy repair wor ly and fitting for a total le and connecti	pump set slu rks. <br&g of suitable s ength of 10 m ng the suctio</br&g 	tice valve sho t;9. Suction a ize best qual n. suitable for n pipe and v	ould be in and delive ity GI/MS r the abov alve with	a suction as ery pipe S pipe of ve pump set suitable	

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity		
	pump with the valves and suitable specials to connect with the pumping main. If the dia of suction pipe is above 80 mm CI pipes & amp; specials shall be provided. .Also two year Warrantee and Supply of ELCB/RCCB to be added at panel for safety.								
	Supply erection, testing and commissioning of CF pumpset having a discharge of 4 lps for a head of 212 m from KSEB filter house to Pathipally								
	17 HP pump set	2.000					2.000		
	Total								
				,	Total Quant	tity in no	2.000		
7.002	OD286699/2023-2	2024							
	Submitting applica	ation to K	SEBLfor pov	wer connection	on and power	r extensio	n.		
	Submitting applica	ation to K	SEBLfor pov	wer connecti	on and powe	r extensio	n		
		2.000					2.000		
	Total			5+0			2.000		
	Total Quantity in set								
7.003	OD286700/2023-2	2024	1412	S OLAN					
	Providing and fixing 3.15 mm(10 SWG)copper strip/conductor in 40mm GI pipe from earth electrode including connection with brass nut, bolt, sprn3g.								
	earthing conductor of size 10 SWG								
	2.000 CPLATFOR M FOR THE MANAGEMENT								
	Total						2.000		
	Total Quantity in set						2.000		
7.004	OD286701/2023-2	2024							
	OD37419/2023-2024 Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories,								
	and providing masonry enclosure .								
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick						2.000		
	2.000								
	Total			r	Fatal Quant	ity in got	2.000		
	Sugalar Enertie	De aties -	d sourcester t		Fotal Quant		2.000		
8	Supply, Erection, Filter House to Ela					npsets fro	т кзев		
8.001	OD286720/2023-2	2024							

Sl No	Specification	No	Length	Width	Depth	Cf	Quantity			
	pump with the valves and suitable specials to connect with the pumping main. If the dia of suction pipe is above 80 mm CI pipes & amp; specials shall be provided. .Also two year Warrantee and Supply of ELCB/RCCB to be added at panel for safety.									
	Supply erection, testing and commissioning of CF pumpset having a discharge of 6 lps for a head of 280 m from KSEB Filter house to elapally									
	32HP PUMP SET	2.000					2.000			
	Total						2.000			
				1	Total Quant	tity in no	2.000			
8.002	OD286721/2023-2	2024								
	Submitting applica	ation to K	SEBLfor pov	wer connecti	on and powe	r extensio	n .			
	Submitting applica	ation to K	SEBLfor pov	wer connecti	on and powe	r extensio	n			
		2.000					2.000			
	Total									
			147B	QATA -	Fotal Quant	ity in set	2.000			
8.003	OD286722/2023-2	2024	200	State Stat						
	Providing and fixi earth electrode inc	ng 4.75 m luding co	m(6 SWG) on the second se	cop <mark>p</mark> er strip/c h brass nut, b	conductor in oolt, sprn3g.	40mm GI	pipe from			
	earthing conductor	r of size 6	SWG							
		2.000	OF PUBLIC	WORKS	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		2.000			
	Total						2.000			
				r	Fotal Quant	ity in set	2.000			
8.004	OD286723/2023-2	2024								
	OD37419/2023-2024									
	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure .									
	Earthing with G.I.	earth plat	te 600 mm X	600 mm X 6	5 mm thick	· · · · · · · · · · · · · · · · · · ·				
		2.000					2.000			
	Total						2.000			
	Total Quantity in set									