

**Name of work : WSIS to Usilampatti Municipality in Madurai district.**

**General Abstract**

<b>Sl.No.</b>	<b>Description of work</b>	<b>Amount</b>
A1	providing retaining wall around collection well cum pumphouse at head works	2205062.95
A2	providing leveling and filling of gravel inside the compound wall at head	489048.73
A3	providing recycle sump for reuse of wash water at water treatment plant	942010.92
	<b>TOTAL</b>	<b>3636122.60</b>
	<b>Add GST 12%</b>	<b>436334.71</b>
	<b>TOTAL AMOUNT</b>	<b>4072457.31</b>

Executive Engineer/TWAD Board  
RWS Division/Madurai

**Schedule - A1**

**CONSTRUCTION OF RETAINING WALL AROUND THE COLLECTION WELL CUM PUMP HOUSE AT HEAD WORK SITE**

**SIZE: 38.00 x 18.00 m x 3.80 m**

Sl. No	Qty.		DESCRIPTION OF WORK	Standard specification	Per	Rate		Amount	
						in Figures	in words		
1	0.00	cum	Earth work excavation and depositing on bank with an initial lead of 10 m and lift of 2 m sandy or other loose soils, wet sand not under water silt, light black cotton soil ,sandy loam and ordinary soil (SS 20B)including refilling charges	SS 20 B, 23 and Spl.Specification	cum			0.00	
2	20.16	cum	Levelling coarse in cement concrete 1:4:8 (one cement,four sand and eight aggregate) using 40mm hard broken stone for foundation and flooring including cost of all materials, mixing,placing, ramming, curing , finishing etc., complete and as directed by TWAD BOARD Officers. Beyond 1.50 m to 4.50 m below GL	SS 2 B and Spl.Specification	cum	4707.70	Rupees four thousand seven hundred seven and paise seventy only	94907.23	
3	269.64	cum	Random Rubble masonry in CM 1:5 (one cement and five sand) using rough stones including cost of all materials, labour charges, curing etc., complete and as directed by TWAD Board Officers.		cum	4850.56	Rupees four thousand eight hundred fifty and paise fifty six only	1307905.00	

4	40.20	sqm	Supply and erection of steel centering, shuttering for soffits and sides including necessary supports and strutting for all RCC works using MS sheets of suitable size of BG 10 stiffened with MS angle of size 25 X 25 X 3mm for boarding laid over Silver Oak joists of size 10cm X 6.5cm space at 10cm c/c and supported by Casuarino Props 10cm - 13cm spaced at 75cm c/c etc., complete and as directed by TWAD Board Officers.	SS 30 and Spl.Specification	sqm	877.60	Rupees eight hundred seventy seven and paise sixty only	35279.52	
5	9.51	Qtl	Supplying fabricating and placing in position of RTS grills at all heights for reinforcement including cost of steel for all works and labour charges including cost of binding wire etc., complete for all RCC works and as directed by TWAD Board Officers. up to 16mm dia RTS	SS 35A and Spl.Specification	Qtl	5175.00	Rupees five thousand one hundred seventy five only	49230.40	
6	10.08	cum	Reinforced Cement Concrete using Mix 1:1.5:3 (1 cement : 1.5 sand : 3 20mm HBG) Machine crushed HBG stone including the cost of all materials, labour charges, mixing by using mechanical mixer machine, placing in position, lifting, vibrating by using mechanical vibrator, finishing & curing but excluding the cost of reinforcement and fabricating, centering, shuttering and strutting charges etc., complete and as directed by TWAD Board Officers.	SS 30 and Spl.Specification	cum	7944.80	Rupees seven thousand nine hundred forty four and paise eighty only	80083.58	

7	72.9648	cum	Brick work in CM 1:5 using country bricks of size 8.75" X 4.25" X 2.25" including cost of all materials, labour charges, curing etc., complete and as directed by TWAD Board Officers.	SS 31 and Spl.Specification	cum	5735.98	Rupees five thousand seven hundred thirty five and paise ninety eight only	418524.63	
8	449.2	sqm	Plastering with Cement mortar 1:5, 12mm thick including cost of all materials, labour charges, curing etc., complete and as directed by TWAD BOARD Officers.	SS 56, 57 and Spl.Specification	sqm	221.47	Rupees two hundred twenty one and paise forty seven only	99484.32	
9	262.5225	sqm	Pointing with CM 1:3 (one cement and three sand) (flush Pointing) for RR masonry including finishing, curing etc., complete and as directed by TWAD Board Officers.	Specification No.62 and Special Specification	sqm	248.91	Rupees two hundred forty eight and paise ninety one only	65344.48	
10	449.20	sqm	Painting two coats with approved cement paint	SS 65A and Spl.Specification	sqm	120.89	Rupees one hundred twenty and paise eighty nine only	54303.79	
			Total					2205062.95	

<b>Schedule -A2</b>								
<b>PROVIDING GRAVEL FILLING AT HEAD WORKS INSIDE THE COMPOUND WALL</b>								
<b>Sl. No</b>	<b>Qty</b>	<b>Unit</b>	<b>Description of work</b>	<b>Standard specification</b>	<b>Per</b>	<b>Rate</b>		<b>Amount</b>
						<b>in figures</b>	<b>in words</b>	
1	1616.69	Cu.M	Supply well gravel including conveyance charges, Loading and unloading charges.	Specification NO. 6	M <sup>3</sup>	273.00	Rupees two hundred seventy three only	441356.37
2	1616.69	Cu.M	Refilling with excavated sand complying with the standard specification for filling in foundation and basement. (TWAD SR 2021-22, Page 265, Item 19.a.)	SS 95 and Spl.Specification	M <sup>3</sup>	29.50	Rupees twenty nine and paise fifty only	47692.36
			<b>TOTAL AMOUNT</b>					<b>489048.73</b>

Schedule - A3								
Sump of 105000 Lts cap.								
Sl. No.	Quantity		Description	Standard specification	Per	Rate		Amount
						in Figures	in words	Rs. P.
1			Earthwork excavation in hard stiff clay,black cotton, hard red earth, shales,murrams, ordinary gravel stoney earth,mixed with 50% fair sized boulders etc., with an initial lead of 10m and lift of 2m. and as directed by TWAD BOARD Officers.For Foundation First depth of 0 to 2 m	SS 20 B, 23 and Spl.Specification				
	15.08	cum	FOR HSC, HRE		cum	96.30	Rupees ninety six and paise thirty only	1452.20
	0.00	cum	FOR SDR		cum	100.90	Rupees one hundred and paise ninety only	0.00
	70.37	cum	FOR DMR not requiring blasting		cum	252.70	Rupees two hundred fifty two and paise seventy only	17783.00
			2nd depth of 2m to 3m					
	30.16	cum	FOR DMR not requiring blasting		cum	252.70	Rupees two hundred fifty two and paise seventy only	7621.18
2			Filling with clean river sand complyingwith standard specification including,watering ramming and consolidation etc.,complete and as directed by TWAD BOARD Officers.	SS24 and Spl.Specification				

	7.54	cum	Sand filling		cum	1780.25	Rupees one thousand seven hundred eighty and paise twenty five only	13423.09
3			Levelling coarse in cement concrete,1:4:8 (one cement,four sand and eight,aggregate) using 40mm hard broken stone,for foundation and leveling coarse,including cost of all materials,mixing,placing,ramming,finishing etc., complete and as directed,by TWAD BOARD Officers.	SS 2 B and Spl.Specification				
	7.54	cum	PCC Laying (beyond 1.5 m and upto 4.5 m from GL)		cum	4745.80	Rupees four thousand seven hundred forty five and paise eighty only	35783.33
4			Reinforced Cement Concrete with M30 Design Mix for the following members,excluding the cost of reinforcement and fabricating, centering, shuttering and strutting charges but including the cost of all materials, mixing, placing inposition, lifting, vibrating, finishing & curing, etc. complete.and as directed by TWAD Board Officers.	SS 30 and Spl.Specification				
	17.704	cum	Beyond 1.50 m & upto 4.50 m below GL		cum	6444.44	Rupees six thousand four hundred forty four and paise forty four only	114092.37

5			Reinforced Cement Concrete with M30 Design Mix for the following members excluding the cost of reinforcement and fabricating, centering, shuttering and strutting charges but including the cost of all materials, mixing, placing in position, lifting, vibrating, finishing & curing, etc. complete and as directed by TWAD Board Officers.	SS 30 and Spl.Specification				
a	5.128	cum	Upto 1.50 m Below GL		cum	6342.74	Rupees six thousand three hundred forty two and paise seventy four only	32525.57
b	12.517	cum	Upto 4.50 m above GL from GL		cum	6446.04	Rupees six thousand four hundred forty six and paise four only	80685.08
6			Supply and erection of steel centering,shuttering for soffits and sides including necessary supports and strutting for all RCC works using MS sheets of suitable size of BG 10 stiffened with MS angle of size 25 X 25 X 3mm for boarding laid over Silver Oak joists of size 10cm X 6.5cm space at 10cm c/c and supported by Casurino Props 10cm - 13cm spaced at 75cm c/c etc., complete and as directed by TWAD Board Officers	SS 30 and Spl.Specification				
a	1.00	sqm	<b>For 0.00 to 3.30 M (Plane Surface)</b>		sqm	859.40	Rupees eight hundred fifty nine and paise forty only	859.40



b	150.28	sqm	<b>For 0.00 to 3.30 M (Curved Surface)</b>		sqm	1291.81	Rupees one thousand two hundred ninety one and paise eighty one only	194133.21
c			<b>For 0.00 to 3.30 M (FOR ROUND COLUMN)</b>					
	1.29	sqm	FOR CIRCULAR COLUMN		sqm	2062.57	Rupees two thousand sixty two and paise	2654.53
d	36.18	sqm	<b>For 3.30 to 4.30 M (Plane Surface)</b>		sqm	912.78	Rupees nine hundred twelve and paise seventy eight only	33025.29
e	9.84	sqm	<b>For 3.30 to 4.30 M (Curved Surface)</b>		sqm	1345.19	Rupees one thousand three hundred forty five and paise nineteen only	13242.05

7			Supplying, fabricating and placing in position of RTS rods for reinforcement including cost of steel and binding wire, labour charges etc., complete for RCC works and as directed by TWAD Board Officers For RCC Works.	SS 30 and Spl.Specification				
	29.15	Qtl	Upto 16 mm dia		Qtl	7839.80	Rupees seven thousand eight hundred thirty nine and paise eighty only	228530.17
8			Providing and fixing of cut stone (Rough dressed) set in CM 1:3 of size 0.45 X 0.45 X 0.15M at site including cost of all materials, labour charges, curing etc., complete and as directed by TWAD Board Officers.	SS 35A and Special Specification				
	0.030	cum			cum	4567.94	Rupees four thousand five hundred sixty seven and paise ninety four only	137.04
9			Providing AC cowl for Ventilator of 0.100 m dia using placing of concrete, finishing, curing and fixing in position on the roof slab with mosquito proof net arrangement and etc., complete and as directed by TWAD Board officers.	Special Specification				
	2	No			No	58.00	Rupees fifty eight only	116.00

10			Supply,Delivery and fixing of CI Manhole frame with cover of following size including cost of all materials, fixing of MS clamps,Bolt and nuts etc.,complete and as directed by TWAD Board Officers.	SS 86C 15 1726/74 as amended from time to time and Spl.Specification				
	1	No	Size 0.60m x0.60m		No	1846.00	Rupees one thousand eight hundred forty six only	1846.00
11			Providing pipe connection work for SR Rate including supply & laying of pipes, specials and valves etc., complete and as directed by TWAD Board Officers.	Spl.Specification				
			.					
	1	Job			job	42340.00	Rupees forty two thousand three hundred forty only	42340.00
12			Colour washing two coats using cement paint including cost of cement paint cost of all materials, labour charges, etc., complete and as directed by TWAD BOARD Officers.	Spl.Specification				
	45.21	sqm			sqm	120.89	Rupees one hundred twenty and paise eighty nine only	5465.20

13			Supplying and fixing in position of RCC in side access ladder of following size using 20mm size HBS jelly including cost of all materials, centring, shuttering, strutting, fabrication and placing in position of reinforcement, finishing, curing etc., complete and as directed by TWAD Board Officers.	SS 30 and Spl.Specification				
	1	No			No	7500.00	Rupees seven thousand five hundred only	7500.00
14			Refilling the foundation with excavated Soil (other than sand) in layers of not more than 15cm thick, watering, well ramming, consolidating, complying with standard specification and as directed by TWAD Board Officers.	SS 95 and Spl.Specification				
	20.77	Cum			Cum	33.60	Rupees thirty three and paise sixty only	698.01

15	2	Nos	supply and delivery of Open well submersible pumpset conforming to IS 14220/2002 and as amended thereafter and BEE 3 Star rated capable of discharging the following duties due to all causes.the pump shall be with stainless steel shaft and dynamically balanced bronze mixed type impeller ,CI FG 200 grade casing and brass screws and rotor shall be of copper rod as per IS 613/1984 with ISI mark.the pump suitable for installation in sump with 1.1KV grade 3 core suitable copper flat submersible cable to a length of 15m with necessary cable joints.the non return valve located at the top of the pump in the discharge outlet connection is to be designed with minimum friction. the pump should be directly coupled to 2880RPM,three phase ,50 Hz(+/- 5),415 V +6%& 415V-15% squirrel cage induction motor suitable for DOL upto 5HP, fully automatic air break star delta up to 20HP and auto transformer starter for above 20HP starting and for continuous operation. as per IS 14220/20025 500 LPM X 25 M HEAD (TWAD SR 2021-22, Page No.103, Sl.No.73)	As per IE- Rules	Nos	33586.00	Rupees thirty three thousand five hundred eighty six only	67172.00
16	2	Nos	Supply and delivery of direct online starter confirming to IS13947, IEC60947-1 and as amended thereafter with suitable KW rating for operation in AC/ three Phase/50HZ(+/- 5%) and 415V (+/- 10%) including Ammeter, Overload relay, under Voltage release with no Volt coil, Air Break contactors suitable for next Standard higher KW rating, Single phasing preventor, dry running preventor and On/Off Push button switches, including the capacitor		Nos	5249.00	Rupees five thousand two hundred forty nine only	10498.00

17			Labour charges for the erection of submersible pumpset in borewell/openwell including fixing and jointing submersible cable with proper clamps upto the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, Voltmeter, Ammeter, three pilot (indicating) lamps capacitor single laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumpset and trail run for 10 days.	As per IE- Rules				
	2	Nos	Upto 5HP		Nos	9514.10	Rupees nine thousand five hundred fourteen and paise ten	19028.200
18			1.1 KV GRADE ARMOURED ALUMINIUM CONDUCTOR CROSS LINKED POLY ETHYLENE INSULATED PVC SHEATHED CABLES CONFORMING TO IS 7098 (PART I)/1988 AND AS AMENDED	As per IE- Rules				
	50		THEREAFTER WITH ISI MARKING 3 core 6.00 sq.mm cable		m	101.00	Rupees one hundred one only	5050.000
19	50		cable laying 3 core 6.00 sq.mm ( pannel to pumpset)	As per IE- Rules	m	103.00	Rupees one hundred three only	5150.000
20	12		Jointing cable 3 core 6.00 sq.mm	As per IE- Rules	joint	100.00	Rupees one hundred only	1200.000
			<b>Total</b>					<b>942010.920</b>