

General Abstract

NAME OF WORK : OUTSOURING OF OPERATION AND MAINTENANCE OF CWSS TO SATHANKULAM UTP, UDANKUDI UTP AND 308 RURAL HABITATIONS IN THOOTHUKUDI DISTRICT FOR THE YEAR PERIOD FROM 16.06.2022 TO 31.03.2023

S.No	Description	Amount
1)	CWSS to Sathankulam UTP Udankudi UTP and 308 rural habitations in Thoothukudi district	5158278.26
2)	CWSS to Ittamozhi & 6 other habiationsin Thoothukudi district	280261.12
	Total	5438539.38

I / We agree to execute the above item of works at % Excess over / Less ,
than the departmental value of Rs. 5438539.38(Rupees Fifty four lakhs thirty eight thousand
five hundred and thirty nine and paise thirty eight only)

Contractor

Sd/-*****
Superintending Engineer, TWAD

SCHEDULE -A

NAME OF WORK : OUTSOURSING OF OPERATION AND MAINTENANCE OF CWSS TO SATHANKULAM UTP. UDANKUDI UTP AND 308 RURAL HABITATIONS IN THOOTHUKUDI DISTRICT FOR THE YEAR 2022-2023

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
1	Operation and Maintenance of the Electro Mechanical installations, equipments, components, pipelines valves and appurtenances, water retaining structures including protection of all scheme components from damages/ theft undertaking legal actions for such untoward incidents, preventive maintenance, disinfection and deliverance of water as per quality standards and supply of earmarked quantity of water to the beneficiaries as per Annexure, carrying out the O&M as per standard operating procedures, Acts and rules in force etc., complete and as directed by TWAD Board Officers and excluding cost towards attending leak, burst repair and replacement works to electro mechanical installations consumables for disinfection of water, cleaning of all water retaining structure, electricity .	2666.664	ML	Special Specifications	1452.74	One thousand four hundred and fifty two and paise seventy four only	3873969.46
2	Attending collar Leaks occurred in all the size, class and material of pipes in all the pipelines of this CWSS for the following items round the clock as per the standard specifications including earthwork excavation ,removal of slushy soil , labour charges, civil works, cost of materials, dewatering , genset, welding unit,and providing night lamps, barrigading arrangements, caution sign boards ,traffic diversion arrangements and all other incidental charges, etc complete within the stipulated time limit as specified in Clause 2.8 of General conditions of Contract Part II.and as directed by TWAD Board officers						

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
i)	Earth work excavation and depositing on bank in hard stiff clay, stiff black cotton soil, hard red earth, shales, murrums, ordinary gravel stoney earth mixed with small sized boulders etc., for leak rectification works for the following sizes of PSC pipes with standard trench width and depth etc., complete and as directed by the TWAD Board officers.			SS 20 B, 95 and Special specifications			
a)	For AC Pipes of various classes	20.442	m3		483.00	Four hundred and eighty three only	9873.49
b)	For PSC Pipes of various classes	27.344	m3		483.00	Four hundred and eighty three only	13207.15
ii)	Supply and delivery of lead wool as per sample including loading, umloading and transportation charges etc. complete and as directed by TWAD Bd. Officers			Special Specifications			
a)	150 mm AC of Various Classes	2.00	Kg		380.00	Three hundred and eighty only	760.00
b)	200 mm AC of Various Classes	4.00	Kg		380.00	Three hundred and eighty only	1520.00
c)	250 mm AC of Various Classes	6.00	Kg		380.00	Three hundred and eighty only	2280.00
d)	350 mm dia PSC Pipe Various Classes	2.00	Kg		380.00	Three hundred and eighty only	760.00
e)	400 mm dia PSC Pipe Various Classes	8.00	Kg		380.00	Three hundred and eighty only	3040.00
f)	450 mm dia PSC Pipe Various Classes	10.00	Kg		380.00	Three hundred and eighty only	3800.00
iii)	Supply and delivery of Hard crete oil as per sample including loading, umloading and transportation charges etc. complete and as directed by TWAD Bd. Officers			Special Specifications			
a)	150 mm AC of Various Classes	2.00	lit		105.00	One hundred and five only	210.00
b)	200 mm AC of Various Classes	4.00	lit		105.00	One hundred and five only	420.00

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
c)	250 mm AC of Various Classes	6.00	lit		105.00	One hundred and five only	630.00
d	350 mm PSC of Various Classes	2.00	lit		105.00	One hundred and five only	210.00
e	400 mm PSC of Various Classes	8.00	lit		105.00	One hundred and five only	840.00
f	450 mm PSC of Various Classes	12.00	lit		105.00	One hundred and five only	1260.00
iv)	Supply and delivery of cement			SS 10 and Special Specification			
a)	150 mm AC of Various Classes	10.00	Kg		5.96	Five and paise ninety six	59.60
b)	200 mm AC of Various Classes	14.00	Kg		5.96	Five and paise ninety six	83.44
c)	250 mm AC of Various Classes	18.00	Kg		5.96	Five and paise ninety six	107.28
d	350 mm PSC of Various Classes	7.00	Kg		5.96	Five and paise ninety six	41.72
e	400 mm PSC of Various Classes	20.00	Kg		5.96	Five and paise ninety six	119.20
f	450 mm PSC of Various Classes	24.00	Kg		5.96	Five and paise ninety six	143.04
v)	Dewatering using 5HP diesel engine pumpset including Hire charges, cost of Diesel, Engine oil, pump operator, labour charges, conveyance of pumpset and fuel to site and back, loading, unloading and any other incidental charges etc., complete. And as directed by TWAD Board officers			Special Specifications			
a)	150 mm AC of Various Classes	4.00	Hour		296.50	Two hundred and ninety six and paise fifty only	1186.00
b)	200 mm AC of Various Classes	6.00	Hour		296.50	Two hundred and ninety six and paise fifty only	1779.00
c)	250 mm AC of Various Classes	8.00	Hour		296.50	Two hundred and ninety six and paise fifty only	2372.00

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
d	350 mm PSC of Various Classes	2.00	Hour		296.50	Two hundred and ninety six and paise fifty only	593.00
e	400 mm PSC of Various Classes	8.00	Hour		296.50	Two hundred and ninety six and paise fifty only	2372.00
f	450 mm PSC of Various Classes	12.00	Hour		296.50	Two hundred and ninety six and paise fifty only	3558.00
vi)	Refilling with excavated soil (other than sand) complying with standard specification in layers of 15cm watered well rammed and consolidated after the pipes and specials are laid, jointed and tested etc. and removing and depositing the surplus earth at the places shown by the TWAD Board Officers.			SS 24, 95 and Special specifications			
a)	For AC Pipes of various classes	20.442	m3		33.60	Thirty three and paise sixty only	686.85
b)	For PSC Pipes of various classes	27.344	m3		33.60	Thirty three and paise sixty only	918.76
3	Attending Leaks occurred in all the size, class and material of pipes in all the pipelines of this CWSS for the following items with SS Clampsets round the clock as per the standard specifications including earthwork excavation, removal of slushy soil, labour charges, civil works, cost of materials, dewatering, and providing night lamps, barricading arrangements, caution sign boards, traffic diversion arrangements and all other incidental charges, etc complete within the stipulated time limit as specified in Clause 2.8 of General conditions of Contract Part II. and as directed by TWAD Board officers.						
i)	Earth work excavation and depositing on bank in hard stiff clay, stiff black cotton soil, hard red earth, shales, murrums, ordinary gravel stoney earth mixed with small sized boulders etc., for leak rectification works for the following sizes of AC pipes with standard trench width and depth etc., complete and as directed by the TWAD Board officers.			SS 20 B, 23, 95 and Special specifications			

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
a)	For AC Pipes of various classes	19.662	m3		483.00	Four hundred and eighty three only	9496.75
b)	For PSC Pipes of various classes	29.815	m4		483.00	Four hundred and eighty three only	14400.65
ii)	Supply and delivery of Leak Arresting Flexible MS Clamps Suitable width of the clamps to be decided by the engineer incharge at site depending on the nature of pipe crack.			Special Specifications			
a)	For 150 mm AC Class 15 Pipe	2.00	No		1681.78	One thousand six hundred and eighty one and paise seventy eight only	3363.56
b)	For 200 mm AC Class 15 Pipe	2.00	No		2013.52	Two thousand and thirteen and paise fifty two only	4027.04
c)	For 250 mm AC Class 15 Pipe	2.00	No		2395.26	Two thousand three hundred and ninety five and paise twenty six only	4790.52
d)	For 350mm PSC of various classes Pipe	1.00	No		3832.80	Three thousand eight hundred and thirty two and paise eighty only	3832.80
e)	For 400 mm PSC of various classes Pipe	2.00	No		4276.26	Four thousand two hundred and seventy six and paise twenty six only	8552.52
f)	For 450 mm PSC of various classes Pipe	2.00	No		4497.42	Four thousand four hundred and ninety seven and paise forty two only	8994.84
iii)	Dewatering using 5HP diesel engine pumpset including Hire charges, cost of Diesel, Engine oil, pump operator, labour charges, conveyance of pumpset and fuel to site and back, loading, unloading and any other incidental charges etc., complete. And as directed by TWAD Board officers			Special Specifications			

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	
a)	150 mm AC Class 15	4.00	Hour		296.50	Two hundred and ninety six and paise fifty only	1186.00
b)	200 mm AC Class 15	6.00	Hour		296.50	Two hundred and ninety six and paise fifty only	1779.00
c)	250 mm AC Class 15	8.00	Hour		296.50	Two hundred and ninety six and paise fifty only	2372.00
d	350 mm dia PSC Pipe Various Classes	6.00	Hour		296.50	Two hundred and ninety six and paise fifty only	1779.00
e	400 mm dia PSC Pipe Various Classes	10.00	Hour		296.50	Two hundred and ninety six and paise fifty only	2965.00
f	450 mm dia PSC Pipe Various Classes	14.00	Hour		296.50	Two hundred and ninety six and paise fifty only	4151.00
iii)	Refilling with excavated soil (other than sand)complying with standard specification in layers of 15cm watered well rammed and consolidated after the pipes and specials are laid,jointed and tested etc. and removing and depositing the surplus earth at the places shown by the TWAD Board Officers.			SS 24, 95 and Special specifications			
a)	For AC Pipes of various classes	19.66	m3		33.60	Thirty three and paise sixty only	660.58
b)	For PSC Pipes of various classes	29.82	m3		33.60	Thirty three and paise sixty only	1001.95
4	Attending burst occurred in all the size, class and material of pipes in all the pipelines of this CWSS for the following items <i>with replacing the pipes</i> round the clock as per the standard specifications including earthwork excavation ,removal of slushy soil , labour charges, civil works, cost of materials, dewatering , genset, welding unit,and providing night lamps, barrigading arrangements, caution sign boards ,trafic diversion arrangements and all other incidental charges, etc complete within the stipulated time limit as specified in Clause 2.8 of General conditions of Contract Part II.and as directed by TWAD Board officers						
i)	Earth work excavation and depositing on bank in hard stiff clay, stiff black cotton soil, hard red earth, shales, murrums, ordinary gravel stoney earth mixed with small sized boulders etc., for leak rectification works for the following sizes of AC pipes with standard trench width and depth etc., complete and as directed by the TWAD Board officers.			SS 20 B, 95 and Special specifications			

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
a)	For PVC Pipes of various classes	22.436	m3		96.60	Ninety six and paise sixty only	2167.32
b)	For AC Pipes of various classes	13.627	m3		96.60	Ninety six and paise sixty only	1316.37
c)	For PSC Pipes of various classes	11.717	m3		96.60	Ninety six and paise sixty only	1131.86
ii)	Supply and delivery of the following sizes of pipes and specials confirming to IS other specifications as amended from time to time with ISI marking as specified in ISI and having the required working pressure and delivery at site of work including loading, unloading, freight, stacking and transit, insurance charges, etc., complete and as directed by TWAD Board officers.			IS 4985/2000, IS 8329/2000 and IS 3589/2001 and as amended from time to time and special specification			
a)	50mm PVC 6KSC	2.00	m		339.90	Three hundred and thirty nine and paise ninety only	679.80
b)	63mm PVC 4KSC	2.00	m		339.90	Three hundred and thirty nine and paise ninety only	679.80
c)	75mm PVC 4KSC	2.00	m		426.80	Four hundred and twenty six and paise eighty only	853.60
d	90mm PVC 4 KSC	2.00	m		568.30	Five hundred and sixty eight and paise thirty only	1136.60
e	110mm PVC 4KSC	2.00	m		690.10	Six hundred and ninety and paise ten only	1380.20
f	140mm PVC 4KSC	2.00	m		1010.40	One thousand and ten and paise forty only	2020.80
g	150 mm DI K7 Class	2.00	m		1268.40	One thousand two hundred and sixty eight and paise forty only	2536.80

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
h	200 mm DI K7 Class	2.00	m		1779.90	One thousand seven hundred and seventy nine paise ninety only	3559.80
i	250 mm DI K7 Class	2.00	m		2276.40	Two thousand two hundred and seventy six and paise forty only	4552.80
j	355.6 mm x 4 mm thick MS PIPE	2.00	m		4940.00	Four thousand nine hundred and forty only	9880.00
k	406.4 mm x 4 mm thick MS PIPE	2.00	m		5774.00	Five thousand seven hundred and seventy four only	11548.00
l	457 mm x 4 mm thick PIPE	1.00	m		6465.00	Six thousand four hundred and sixty five only	6465.00
iii)	Supply and delivery of following sizes of Specials conforming to IS specifications at site of work including loading, unloading, transportation, insurance, etc., Complete and as directed by TWAD Bd. officers.			IS 10124/1982 Part - II, IS 9523/2000 and amended from time to time and special specification			
a)	50 mm PVC Coupler Fabricated 6 KSC	4.00	No		10.00	Ten only	40.00
b)	63 mm PVC Coupler Fabricated 4 KSC	4.00	No		22.00	Twenty two only	88.00
c)	75 mm PVC Coupler Fabricated 4 KSC	4.00	No		34.00	Thirty four only	136.00
d	90 mm PVC Coupler Fabricated 4 KSC	4.00	No		50.00	Fifty only	200.00
e	110 mm PVC Coupler Fabricated 4 KSC	4.00	No		77.00	Seventy seven only	308.00
f	140 mm PVC Coupler Fabricated 4 KSC	4.00	No		166.00	One hundred and sixty six only	664.00

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
g	150mm MJ Collars for DI pipe	1.00	No		4264.00	Four thousand two hundred and sixty four only	4264.00
h	200mm MJ Collars for DI pipe	1.00	No		5565.00	Five thousand five hundred and sixty five only	5565.00
i	250mm MJ Collars for DI pipe	1.00	No		7747.00	Seven thousand seven hundred and forty seven only	7747.00
j	350mm MJ Collars for MS pipe	1.00	No		14358.00	Fourteen thousand three hundred and fifty eight only	14358.00
k	400mm MJ Collars for MS pipe	1.00	No		17102.00	Seventeen thousand one hundred and two only	17102.00
l	450mm MJ Collars for MS pipe	1.00	No		19782.00	Nineteen thousand seven hundred and eighty two only	19782.00
iv)	Removing following the burst Pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc complete (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers			special specification			
a)	50mm PVC 6KSC	2.00	No		339.90	Three hundred and thirty nine and paise ninety only	679.80
b)	63mm PVC 4KSC	2.00	No		339.90	Three hundred and thirty nine and paise ninety only	679.80
c)	75mm PVC 4KSC	2.00	No		426.80	Four hundred and twenty six and paise eighty only	853.60
d	90mm PVC 4 KSC	2.00	No		568.30	Five hundred and sixty eight and paise thirty only	1136.60

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
e	110mm PVC 4KSC	2.00	No		690.10	Six hundred and ninety and paise ten only	1380.20
f	140mm PVC 4KSC	2.00	No		1010.40	One thousand and ten and paise forty only	2020.80
g	150 mm dia AC Class 15 Pipe	1.00	No		1268.40	One thousand two hundred and sixty eight and paise forty only	1268.40
h	200 mm dia AC Class 15 Pipe	1.00	No		1779.90	One thousand seven hundred and seventy nine paise ninety only	1779.90
i	250 mm dia AC Class 15 Pipe	1.00	No		2276.40	Two thousand two hundred and seventy six and paise forty only	2276.40
j	For 350 mm PSC Pipes of various classes	1.00	No		4538.20	Four thousand five hundred and thirty eight and paise twenty only	4538.20
k	For 400 mm PSC Pipes of various classes	1.00	No		5806.80	Five thousand eight hundred and six paise eighty only	5806.80
l	For 450 mm PSC Pipes of various classes	1.00	No		6492.10	Six thousand four hundred and ninety two and paise ten only	6492.10
5.a	Carrying out the following repair works occurring during the maintenance period in the Electrical, Mechanical and Electro-mechanical items to bring back the scheme / components into normal running condition as per standard specification including all labour charges, cost of materials and all incidental charges within the stipulated time limit etc., complete as specified in Clause 2.8 of General conditions of Contract Part II etc as directed by TWAD Board officers			special specification			
i)	Rewinding of motor and reconditioning pump and repair works to 5 HP Open Well Submersible Pump Set (915 LPM X 30 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Submersible pumpset at Ponnankurichi Head Works in Infiltration well - 2 Nos	1	No		25700.00	Twenty five thousand and seven hundred only	25700.00
ii)	Rewinding of motor and reconditioning pump and repair works to 7.5 HP Open Well Submersible Pump Set (975 LPM X 17 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Submersible pumpset at Ponnankurichi Head Works in Infiltration Well - 16 Nos	1	No		28800.00	Twenty eight thousand and eight hundred only	28800.00
iii)	Rewinding of motor and repair works to 167 HP centrifugal HSC Motor (7686 lpm x 59 m Head) including cost of all material ,conveyance ,labour charges for removing and re-erection of centrifugal HSC Motor at Ponnankurichi Head Works Pump Room - 2 Nos	1	No		135000.00	One lakhs thirty five thousand only	135000.00

Contractor

Sd/-*****
Superintending Engineer, TWAD

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
iv)	Rewinding of motor and reconditioning pump and repair works to 3 HP Monobloc Pump set (114 lpm x 30 m Head) including cost of all material ,conveyance ,labour charges for removing and re-erection of Monobloc Pump set at Ponnankurichi Head Works Pump Room to Vellore - 2 Nos	1	No		17500.00	Seventeen thousand and five hundred only	17500.00
v)	Rewinding of motor and reconditioning pump and repair works to 10 HP Monobloc Pump set (910 LPM X 32 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Monobloc Pump set at Peikulam Pump Room to kattarimangalam - 2 Nos	1	No		32500.00	Thirty two thousand and five hundred only	32500.00
vi)	Rewinding of motor and reconditioning pump and repair works to 40 HP Open Well Submersible Pump Set (2625 LPM X 45 M Head) including cost of all material ,conveyance ,labour charges for removing and re-erection of Submersible pumpset at Pannamparai Sump for Theriyoor - 2 Nos	1	No		66600.00	Sixty six thousand and six hundred only	66600.00
vii)	Rewinding of motor and reconditioning pump and repair works to 10 HP Open Well Submersible Pump set (485 lpm x 45 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Monobloc Pump set at Pannamparai Pump Room to meignanapuram - 2 Nos	1	No		32400.00	Thirty two thousand and four hundred only	32400.00
viii)	Rewinding of motor and reconditioning pump and repair works to 7.5 HP Monobloc Pump set (450 lpm x 40 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Monobloc Pump set at Pannamparai Pump Room to Arivanmozhi - 2 Nos	1	No		27500.00	Twenty seven thousand and five hundred only	27500.00
ix)	Attending rewinding of motor and reconditioning pump and repair works to 20 HP Open Well Submersible Pump Set (1750 lpm x 26 m Head) including cost of all material ,conveyance ,labour charges for removing and re-erection of Submersible pumpset at Theriyoor Sump to udangudi TP - 2 Nos	1	No		48600.00	Forty eight thousand and six hundred only	48600.00
x)	Rewinding of motor,reconditioning Pump and repair works to 15 HP Monobloc Pump Set (1150 lpm x 38 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Centrifugal Monabloc Pump Set at Sathankulam Pump Room for sathankulam TP - 2 Nos.	1	No		40000.00	Forty thousand only	40000.00
xi)	Rewinding of motor,reconditioning Pump and repair works to 30 HP Centrifugal Pump Set (1389 lpm x 46 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Centrifugal Pump Set at Pothakalanvilai TP - 2 Nos.	1	No		35000.00	Thirty five thousand only	35000.00

Contractor

Sd/-*****
Superintending Engineer, TWAD

SI.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
xii)	Rewinding of motor, reconditioning Pump and repair works to 12.5 HP Monobloc Pump Set (675 lpm x 53) including cost of all material ,conveyance ,labour charges for removing and re-erection of Centrifugal Monobloc Pump Set at Pothakalanvilai Pump Room to Azhagiyavali - 2 Nos	1	No		35000.00	Thirty five thousand only	35000.00
xiii)	Rewinding of motor and reconditioning pump and repair works to 5 HP Monobloc Pump set (168 lpm x 40 M) including cost of all material ,conveyance ,labour charges for removing and re-erection of Monobloc Pump set at Periyathalai Pump Room to Periyathazhai - 2 Nos	1	No		22000.00	Twenty two thousand only	22000.00
5.b)	Repair/ reconditioning			special specification			
i)	Repair and reconditioning works in 167 HP HSC centrifugal Pump (7686 lpm x 59 m Head) including cost of all material exluding Bronze impeller ,conveyance ,labour charges for removing and re-erection of centrifugal HSC Pump at Ponnankurichi Head Works Pump Room - 2 Nos	1	No		72000.00	Seventy two thousand only	72000.00
ii)	Repair and reconditioning works to 30 HP HSC centrifugal Pump (1389 LPM X 46 M Head) including cost of all material exluding Bronze impeller, conveyance ,labour charges for removing and re-erection of centrifugal HSC Pump at Sathankulam Pump Room for pothakalankalai - 2 Nos	1	No		25000.00	Twenty five thousand only	25000.00
5.c)	Repair and reconditioning of starter		No	special specification			
i)	Supply and delivery of 9 Amps\440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		827.00	Eight hundred and twenty seven only	827.00
ii)	Supply and delivery of 12 Amps\440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		961.00	Nine hundred and sixty one only	961.00
iii)	Supply and delivery of 18 Amps\440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		1656.00	One thousand six hundred and fifty six only	1656.00
iv)	Supply and delivery of 25 Amps\440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		3558.00	Three thousand five hundred and fifty eight only	3558.00
v)	Supply and delivery of 32 Amps\440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		4343.00	Four thousand three hundred and forty three only	4343.00

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
vi)	Supply and delivery of 70 Amps/440V Electro magnetic Contactors Suitable for Starter in AC Three Phase rating Conforming to IS/IEC 60947-4-1	1	No		8848.00	Eight thousand eight hundred and forty eight only	8848.00
vii)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 5A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		1311.00	One thousand three hundred and eleven only	1311.00
viii)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 5A-10A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		1321.00	One thousand three hundred and twenty one only	1321.00
ix)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 10A-20A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		1486.00	One thousand four hundred and eighty six only	1486.00
x)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 20A-30A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		2152.00	Two thousand one hundred and fifty two only	2152.00
xi)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 30A-50A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		2963.00	Two thousand nine hundred and sixty three only	2963.00
xii)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 50A-75A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		4294.00	Four thousand two hundred and ninety four only	4294.00
xiii)	Supply and delivery of Directly operated Bimetallic Thermal overload relay Upto 200A-300A which operates in case of overload and also in case of under voltage with manual and auto reset mode	1	No		10357.00	Ten thousand three hundred and fifty seven only	10357.00
xiv)	Electric Motor protection device against single phasing. The device should protect the motor against single phasing, reverse phasing and unbalance supply. The device should be suitable for any device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply.	1	No		1152.00	One thousand one hundred and fifty two only	1152.00
xv)	Electric Motor protection device against dry running. The device should protect the motor against Dry running. The device should be suitable for any device and have provisions for mounting in panel boards. Operate without need of any auxiliary supply	1	No		1613.00	One thousand six hundred and thirteen only	1613.00

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
5.d)	Supply and delivery of direct online starter confirming to IS13947 and IEC60947-1 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(the cost of capacitor is to be taken separately).						
i	For 5 HP Starter - 2 Nos	1	No		14492.00	Fourteen thousand four hundred and ninety two only	14492.00
5 e)	Attending cable fault by replacing the cable 9 Nos of IW						
i)	Supply, delivery of 1.1 KV Grade 3 core 35 Sq. mm PVC insulated and steel Armoured aluminium cable as per I.S.7098 for following Wells submersible motor to main panel board.35 sqmm Aluminum armoured cable for 7 Nos of IW Including standby pumpset	100.00	m		184.00	One hundred and eighty four only	18400.00
ii)	Laying of 1.1 KV Grade 3 core 35 Sq. mm PVC insulated steel Armoured aluminium cable as per I.E. rules to be laid in between Well Submersible motor and main panel board.35 sqmm Aluminum armoured cable for 7 Nos of IW Including standby pumpset	100.00	m		160.00	One hundred and sixty only	16000.00
iii)	Jonting the 1.1KV grade 3 Core 35 SQ mm PVC Insulated Steel armoured aluminum cable as per I E Rules including Jointing materials etc complete directed by the TWAD Board officers. 35 sq.mm cable for 7 Nos.of infiltration wells	20.00	No		183.00	One hundred and eighty three only	3660.00
5 f)	Attending cable fault by replacing the cable 2 Nos of IW						
i)	Supply, delivery of 1.1 KV Grade 3 core 50 Sq. mm PVC insulated and steel Armoured aluminium cable as per I.S.1554 for following Wells submersible motor to main panel board.50 sqmm Aluminum armoured cable for 2 Nos of IW Including standby pumpset	50.00	m		243.00	Two hundred and forty three only	12150.00
ii)	Laying of 1.1 KV Grade 3 core 50 Sq. mm PVC insulated steel Armoured aluminium cable as per I.E. rules to be laid in between Well Submersible motor and main panel board. 50 sqmm Aluminum armoured cable for 2 Nos of IW Including standby pumpset	50.00	m		160.00	One hundred and sixty only	8000.00
iii)	Jonting the 1.1KV grade 3 Core 50 SQ mm PVC Insulated Steel armoured aluminum cable as per I E Rules including Jointing materials etc complete directed by the TWAD Board officers Jointing of 50 sq.mm cable for 2 Nos.of infiltration wells	10.00	Set		242.00	Two hundred and forty two only	2420.00
iv)	Replacement of 32-400 Amps 4 Pole MCCB Switch in the Head works and other pumprooms						

Contractor

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Superintending Engineer, TWAD

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
No.					Rs.	In words	Rs.
a	32 Amps 4 Pole MCCB	1	No		12788.00	Twelve thousand seven hundred and eighty eight only	12788.00
b	160 Amps 4 Pole MCCB	1	No		20658.00	Twenty thousand six hundred and fifty eight only	20658.00
v)	Replacement of 32-400 Amps 3 Pole MCCB Switch in the Head works and other pumphouses		No				
a	200 Amps 3 Pole MCCB Switch	1	No		29511.00	Twenty nine thousand five hundred and eleven only	29511.00
vi	Repairing/ reconditioning of Sluice valve (for line valve/ for Scour valve) including all material, labour (Specify type of sluice valve and type of repair to be carried out)		No				
a	50 mm CI Sluice valve	1	No		1550.00	One thousand five hundred and fifty only	1550.00
b	50 mm Air valve	1	No		1500.00	One thousand and five hundred only	1500.00
c	80 mm CI Sluice valve	1	No		2200.00	Two thousand and two hundred only	2200.00
d	80 mm Air valve	1	No		2250.00	Two thousand two hundred and fifty only	2250.00
e	100 mm CI Sluice valve	1	No		2750.00	Two thousand seven hundred and fifty only	2750.00
f	150 mm CI Sluice valve	1	No		3500.00	Three thousand and five hundred only	3500.00
g	150 mm CI NRV valve	1	No		4000.00	Four thousand only	4000.00
h	200 mm CI Sluice valve	1	No		4250.00	Four thousand two hundred and fifty only	4250.00
i	250 mm CI Sluice valve	1	No		5500.00	Five thousand and five hundred only	5500.00

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate in		Amount
					Rs.	In words	Rs.
j	300 mm CI Sluice valve	1	No		8000.00	Eight thousand only	8000.00
k	350 mm CI Sluice valve	1	No		9500.00	Nine thousand and five hundred only	9500.00
l	350 mm CI NRV valve	1	No		15000.00	Fifteen thousand only	15000.00
vii)	Supply, delivery and fixing of following size of Gate valves in OHT's		No				
a	50 mm Gate valve	1	No		2062.00	Two thousand and sixty two only	2062.00
5.g)	Supply and delivery Power capacitor for power factor improvement with oil filled with discharge resistance 3 phase 415/440V 50 HZ conforming to ISS:2834 with ISI marking	93.00	KVAR		315.00	Three hundred and fifteen only	29295.00
6	Removal of sediments and deposition of sludge, silt, Particles inside the sump at various capacities by engaging required labours and diesel pumpsets and cleaning the side wall using wire brushes, brooms, collecting, lifting of the deposited slit particles on above the sump and washing side wall and the slab using bleaching powder etc., complete and as directed by TWAD Board officers			special specification			
i	2.50 LL capacity of sump @ Ponnankurichi	1	No		11000.00	Eleven thousand only	11000.00
ii	1.50 LL capacity of sump @ Peikulam	1	No		7000.00	Seven thousand only	7000.00
iii)	2.50 LL capacity of sump @ Pannamparai	1	No		11000.00	Eleven thousand only	11000.00
iv)	2.00 LL capacity of sump @ Sathankulam	1	No		10000.00	Ten thousand only	10000.00
v	1.00 LL capacity of sump @ Pothakalanvilai	1	No		7000.00	seven thousand only	7000.00
vi	1.50 LL capacity of sump @ Theriyoore	1	No		9000.00	Nine thousand only	9000.00
vii	0.50 LL capacity of sump @ Periathalai	1	No		5000.00	Five thousand only	5000.00
viii)	Desilting light or sandy soil or silt from infiltration wells below water level including the charges for special tools and plants and air compressor etc. complete and as directed by the TWAD Board Officers.	15.9	m3	special specification	1834.70	One thousand eight hundred and thirty four and paise seventy only	29171.73
	Grand Total						5158278.26

Schedule A1

NAME OF WORK : OUTSOURING OF OPERATION AND MAINTENANCE OF CWSS TO ITTAMOZHI AND 6 OTHER HABITATIONS IN THOOTHUKUDI DISTRICT FOR THE PERIOD FROM 16.07.2022 TO 31.03.2023

Sl. No.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate		Amount
					Rs. P	in Word	Rs.
1	Operation and Maintenance of the Electro Mechanical installations, equipments, components, pipelines valves and appurtenances, water retaining structures including protection of all scheme components from damages/ theft undertaking legal actions for such untoward incidents, preventive maintenance, disinfection and deliverance of water as per quality standards and supply of earmarked quantity of water to the beneficiaries as per Annexure, carrying out the O&M as per standard operating procedures, Acts and rules in force etc., complete and as directed by TWAD Board Officers and excluding cost towards attending leak, burst repair and replacement works to electro mechanical installations consumables for disinfection of water, cleaning of all water retaining structure, electricity .	39.886	ML	Special Specifications	6100.5	Six thousand one hundred and paise five only	243324.54
b)	Attending burst occurred in all the size, class and material of pipes in all the pipelines of this CWSS for the following items <i>with replacing the pipes</i> round the clock as per the standard specifications including earthwork excavation ,removal of slushy soil , labour charges, civil works, cost of materials, dewatering , genset, welding unit,and providing night lamps, barrigading arrangements, caution sign boards ,traffic diversion arrangements and all other incidental charges, etc complete within the stipulated time limit as specified in Clause 2.8 of General conditions of Contract Part II.and as directed by TWAD Board officers						

Contractor

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Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate		Amount
No.					Rs. P	in Word	Rs.
	For PVC Pipes of various classes	3.743	m3		96.60	Ninety six and paise sixty	361.57
2	Supply and delivery of the following sizes of pipes and specials confirming to IS other specifications as amended from time to time with ISI marking as specified in ISI and having the required working pressure and delivery at site of work including loading, unloading, freight, stacking and transit, insurance charges, etc., complete and as directed by TWAD Board officers.			IS 4985/2000, IS 8329/2000 and IS 3589/2001 and as amended from time to time and special specification			
i	63mm PVC 4KSC	2.00	m		78.50	Seventy eight and paise fifty only	157.00
ii	110mm PVC 4KSC	2.00	m		216.50	Two hundred and sixteen and fifty paise	433.00
3	Supply and delivery of following sizes of Specials conforming to IS specifications at site of work including loading, unloading, transportation, insurance, etc., Complete and as directed by TWAD Bd. officers.			IS 10124/1982 Part - II, IS 9523/2000 and amended from time to time and special specification			
i	63 mm PVC Coupler Fabricated 4 KSC	2.00	No		22.00	Twenty two only	44.00
ii	110 mm PVC Coupler Fabricated 4 KSC	2.00	No		77.00	Seventy seven only	154.00

Contractor

Sd/-****
Superintending Engineer, TWAD

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate		Amount
No.					Rs. P	in Word	Rs.
4	Removing following the burst Pipes from the pipe line and removal of slushy soil and baling out water and replacing the pipe line with sound pipe including jointing and cost of refilling the pipe line with water for retesting the pipe line etc complete (excluding cost of sound pipe and jointing materials and earth work) and as directed by the TWAD Board Officers			Special Specifications			
i	63mm PVC 4KSC	1.00	No		339.90	Three hundred and thirty nine and paise ninety only	339.90
ii	110mm PVC 4KSC	1.00	No		690.10	Six hundred and ninety and paise ten	690.10
5	Carrying out the following repair works occurring during the maintenance period in the Electrical, Mechanical and Elctro-mechanical items to bring back the scheme / components into normal running conditition as per standard specification including all labour charges, cost of materials and all incidental charges within the stipulated time limit etc., complete as specified in Clause 2.8 of General conditions of Contract Part II etc as directed by TWAD Board officers		No	Special Specifications			

Contractor

Sd/-****
Superintending Engineer, TWAD

Sl.	Description of work	Quantity	Unit	TNBP No. Other specification	Rate		Amount
No.					Rs. P	in Word	Rs.
i	Rewinding of motor and reconditioning pump and repair works to 7.5 HP Open Well Submersible Pump Set including cost of all material ,conveyance ,labour charges for removing and re-erection of Submersible pumpset at Sathankulam Pump Room.- 2 Nos	1	No		30000.00	Thirty thousand only	30000.00
ii	Repair and reconditioning of starter			Special Specifications			
6	Repairing/ reconditioning of Sluice valve (for line valve/ for Scour valve) including all material, labour (Specify type of sluice valve and type of repair to be carried out)						
i)	50 mm CI Sluice valve	1	Nos		1750.00	One thousand seven hundred and fifty only	1750.00
7	Supply, delivery and fixing of following size of Gate valves in OHT's						
i)	50 mm Gate valve	1	Nos		2062.00	Two thousand and sixty two only	2062.00
8	Supply and delivery Power capacitor for power factor improvement with oil filled with discharge resistance 3 phase 415/440V 50 HZ conforming to ISS:2834 with ISI marking	3.00	KVAR		315.00	Three hundred and fifteen only	945.000
	Grand Total						280261.12

Contractor

Sd/-****
Superintending Engineer, TWAD