

NAME OF THE WORK : OPERRATION AND MAINTENANCE OF THE FOLLOWING CWSS
FOR THE YEAR 2022-23 IN CHENGALPATTU DISTRICT

S.No	Description of work	Amount in Rs
1	Outsourcing the Operation and Maitenance of Combained Water supply Scheme to Sembur -Thandarai in Chengalpattu District.	185469.00
2	Outsourcing the Operation and Maitenance of Combained Water supply Scheme to Kadaloor -Koovathur in Chengalpattu District.	372389.00
	GRAND TOTAL	557858.00

“ I/We hereby agree to execute the above items of work at
.....percentage Excess / Less over the
Departmental value mentioned above"

TWAD BOARD, RWS DIVISION, CHENGALPATTU

Name of work: Outsourcing the Operation and Maintenance of Combined Water supply Scheme for the Year 2022 - 23 to Sembur -Thandarai in Chengalpattu District.

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
1	CWSS to Sembur -Thandarai in Chengalpattu District.						
	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 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 .	36.00	1 MLD	1 MLD (One Million Litre Day)	3649.98	Rupees Three Thousand Six Hundred & Fourty Nine - Paise Ninety Eight Only	131399.28
A	ATTENDING LEAKS/BURSTS IN THE PVC & DI PIPELINES						
1	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in sand ,silt or other loose soil,wet sand or silt not under water,light black cotton soil,sandy loam and ordinary soil including excavated as per SS20B.						
a	100mm GI Pipes	4.37	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	1409.01
b	100mm AC Pipes	4.37	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	1409.01
2	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in hard stiff clay, stiff block cotton soil, hard red earth, shales, murrum, gravelly soil and earth mixed with small size boulders as per SS20B.						
a	90mm PVC 4KSC Pipes	8.75	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	4224.83
3	Refilling the trench with excavated sand complying with the standard specification after attending the jointing work and testing etc., complete						
a	100mm GI Pipes	4.37	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	128.92

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Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
b	100mm AC Pipes	4.37	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	128.92
4	Refilling the trench with excavated soil (other than sand) complying with the standard specification after attending the jointing work and testing etc., complete						
a	90mm PVC 4KSC Pipes	8.75	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	294.00
5	Labour Charges for Jointing the following GI pipes and specials . (including cost of jointing materials)						
a	100mm GI Pipes	2.00	Joint	1 No (Each)	23.40	Rupees Twenty Three - Paise Fourty Only	46.80
6	Labour Charges for Jointing the following AC pipes and specials . (including cost of jointing materials)						
	100mm AC Pipes	2.00	Joint	1 No (Each)	240.50	Rupees Two Hundred & Fourty - Paise Fifty Only	481.00
6	Supply and delivery of following GI pipes medium as per IS 1239/PART I/2004						
a	100mm GI Pipes	2.00	m	1M (One Metre)	930.00	Rupees Nine Hundred & Thirty Only	1860.00
7	Supply and delivery of the following PVC Pipes as per IS 4985/2000						
A	90mm PVC 4KSC Pipes	4.00	m	1M (One Metre)	151.00	Rupees One Hundred & Fifty One Only	604.00
8	Supply and delivery of the following PVC Specials as per IS 10124/1982 Part II						
a	90mm PVC 4KSC Coupler	4.00	No	1 No (Each)	21.00	Rupees Twenty One Only	84.00
b	90mm PVC 4KSC Bend	2.00	No	1 No (Each)	65.00	Rupees Sixty Five Only	130.00
c	90mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	99.00	Rupees Ninety Nine Only	198.00
d	90mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	54.00	Rupees Fifty Four Only	108.00
9	Dewatering using 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.						
a	5HP Diesel Engine	3.00	Hrs	1 Hour (One Hour)	296.50	Rupees Two Hundred & Ninety Six - Paise Fifty Only	889.50
10	Providing PCC 1:2:4 using 20mm HBG including mixing concrete, laying, curing, and compacting of concrete,etc., complete for arresting the leaks and including cost of all materials and as directed by the TWAD Board Officers	0.30	m3	1Cum (One Cubic Metre)	5720.22	Rupees Five Thousand Seven Hundred & Twenty - Paise Twenty Two Only	1716.07
11	Hire charges for deploying earth moving machinery (JCB/Poclain) for earthwork including diesel, oil and labour charges etc., complete.	2.00	Hrs	1 Hour (One Hour)	784.00	Rupees Seven Hundred & Eighty Four Only	1568.00

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
B	ATTENDING PUMPSET REPAIR IN THE SOURCES & COLLECTION SUMP						
1	Labour charges for Removal of openwell Submersible Pumpset and its accessories from the Sources/Collection Sump including disjoining the submersible cable, etc., complete for the rewinding work.						
a	7.5 HP	1.00	Job	1 No (Each)	5758.80	Rupees Five Thousand Seven Hundred & Fifty Eight - Paise Eighty Only	5758.80
2	Labour charges for Re –erection of Openwell Submersible Pumpset and its accessories after rewinding work into Sources/Collection Sump						
a	7.5 HP	1.00	Job	1 No (Each)	5758.80	Rupees Five Thousand Seven Hundred & Fifty Eight - Paise Eighty Only	5758.80
3	Labour charges for Rewinding of the Openwell Submersible Pumpset with first class insulation wire including removal of burnt coil, servicing the motor testing, commissioning, etc., Complete						
a	5.0 HP	1.00	Job	1 No (Each)	4850.00	Rupees Four Thousand Eight Hundred & Fifty Only	4850.00
4	Supply and Delivery of the following PVC Insulated and Sheathed 3 Core Flat type Copper Cable confirming to IS 694/1990 and as amended thereafter for erecting into the sources						
a	4 Sq.mm	2.00	m	1M (One Metre)	186.00	Rupees One Hundred & Eighty Six Only	372.00
5	Attending the Cable fault in the following sizes of Aluminium Armoured Cable of Sources						
a	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in Sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth SS 20 B.						
	50 Sq.mm LT Cables	11.95	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	3853.88
6	Labour charges for Jointing of the following LT Cables - 3 Core 1.1 KV Grade Armoured Aluminium Conductor Cable Confirming to IS 1554 and as amended thereafter Part I with ISI Marking including cost of jointing materials, testing and commissioning etc., Complete						
	50 Sq.mm LT Cables	2.00	Joint	1 No (Each)	242.00	Rupees Two Hundred & Fourty Two Only	484.00
7	Refilling the trench with excavated sand after attending the cable fault in LT Cables and jointing, etc, complete.						
	50 Sq.mm LT Cables	11.95	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	352.53
8	Supply and delivery of the following 3 Core Armoured Aluminium Conductor Cross Linked Polyethylene Insulated PVC Sheathed Cables Conforming to IS 7098 (PART I)/1988 with ISI Marking						
	50 Sq.mm LT Cables	2.00	m	1M (One Metre)	243.00	Rupees Two Hundred & Fourty Three Only	486.00

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Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
9	Supply, Delivery and Fixing of the following Electrical Items required for the Openwell Submersible Pumpset in the pumproom.						
a	Single phase preventer should protect the motor against single phasing reverse phasing and unbalance supply	1.00	No	1 No (Each)	1152.00	Rupees One Thousand One Hundred & Fifty Two Only	1152.00
b	supply and delivery of 63 Amps porcelain fuse (440v)	1.00	No	1 No (Each)	188.40	Rupees One Hundred & Eighty Eight - Paise Fourty Only	188.40
c	Charges for removing the burnt power capacitor and labour charges for fixing the new 3 KVAR capacitor suitable length copper cable wiring this panel board testing etc. complete after adjusted the old scrap materials.	2.00	No	1 No (Each)	461.00	Rupees Four Hundred & Sixty One Only	922.00
10	Supply and Delivery of the following consumable items for pumpset repairs at the site of work to carry out the general maintenance works						
a	R I Sheet	2.00	kg	1kg(kilogram)	96.00	Rupees Ninety Six Only	192.00
b	UPVC COLUMN pipe	3.00	m	1M (One Metre)	479.00	Rupees Four Hundred & Seventy Nine Only	1437.00
c	65mm GI pipe	3.00	m	1M (One Metre)	527.00	Rupees Five Hundred & Twenty Seven Only	1581.00
						Sub Total -I Rs	1,74,067.75
						Service charges @ 10% for labour cost Rs	11,401.25
						GRAND TOTAL	1,85,469.00

Rupees One Lakh Eighty Five Thousand Four Hundred & Sixty Nine Only

I/We agree to the execute all the above components of works atpercentage Execss/Less over the department value mentioned above
(The percentage should be mentioned both in words and figure)

CONTRACTOR

EXECUTIVE ENGINEER

TWAD BOARD, RWS DIVISION, CHENGALPATTU

Name of work: Outsourcing the Operation and Maintenance of Combined Water supply Scheme for the Year 2022 - 23 to Kadalur -Koovathur in Chengalpattu District.

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
1	CWSS to Kadalur -Koovathur in Chengalpattu District.						
	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 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 .	36.00	1 MLD	1 MLD (One Million Litre Day)	7299.97	Rupees Seven Thousand Two Hundred & Ninety Nine - Paise Ninety Seven Only	262798.92
A	ATTENDING LEAKS/BURSTS IN THE PVC & DI PIPELINES						
1	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in sand ,silt or other loose soil,wet sand or silt not under water,light black cotton soil,sandy loam and ordinary soil including excavated as per SS20B.						
a	150mm CI pipes	3.26	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	1052.18
2	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in hard stiff clay, stiff block cotton soil, hard red earth, shales, murram, gravelly soil and earth mixed with small size boulders as per SS20B.						
a	90mm PVC 4KSC Pipes	8.76	m3	1Cum (One Cubic Metre)	483.00	Rupees Four Hundred & Eighty Three Only	4224.83
3	Refilling the trench with excavated sand complying with the standard specification after attending the jointing work and testing etc., complete						
a	150mm CI pipes	3.26	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	96.17
4	Refilling the trench with excavated soil (other than sand) complying with the standard specification after attending the jointing work and testing etc., complete						

CONTRACTOR

EXECUTIVE ENGINEER

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
a	90mm PVC 4KSC Pipes	8.76	m3	1Cum (One Cubic Metre)	33.60	Rupees Thirty Three - Paise Sixty Only	294.34
5	Labour Charges for Jointing the following DI/SS pipes and specials . (including cost of jointing materials)						
a	150mm CI pipes	4.00	Joint	1 No (Each)	215.60	Rupees Two Hundred & Fifteen - Paise Sixty Only	862.40
6	Supply and delivery of the following PVC Pipes as per IS 4985/2000						
A	90mm PVC 4KSC Pipes	4.00	m	1M (One Metre)	151.00	Rupees One Hundred & Fifty One Only	604.00
8	Supply and delivery of the following PVC Specials as per IS 10124/1982 Part II						
a	90mm PVC 4KSC Coupler	4.00	No	1 No (Each)	21.00	Rupees Twenty One Only	84.00
b	90mm PVC 4KSC Bend	2.00	No	1 No (Each)	65.00	Rupees Sixty Five Only	130.00
c	90mm PVC 4KSC Elbow (Mould) BIS 7834/1975 part VI	2.00	No	1 No (Each)	99.00	Rupees Ninety Nine Only	198.00
d	90mm PVC 4KSC Male Threaded Adapter	2.00	No	1 No (Each)	54.00	Rupees Fifty Four Only	108.00
9	Removing the following burst PVC pipe in the maintenance works when burst occurs and replacing it with sound pipes including the cost of refilling the trench and the removal of slushy soil etc., complete (pipes and special jointing materials will be supplied with in 200mm lead and at the respective TWAD Board divisional stores free of cost), 2 times ordinary rate allowed for the works are done during day time since the works are done in confined reaches.						
	90mm PVC 4KSC Pipes	1.00	Job	1 job	1136.60	Rupees One Thousand One Hundred & Thirty Six - Paise Sixty Only	1136.60
10	Dewatering using 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.						
a	3P Diesel Engine	2.00	Hrs	1 Hour (One Hour)	233.20	Rupees Two Hundred & Thirty Three - Paise Twenty Only	466.40
11	Providing PCC 1:2:4 using 20mm HBG including mixing concrete, laying, curing, and compacting of concrete,etc., complete for arresting the leaks and including cost of all materials and as directed by the TWAD Board Officers	0.20	m3	1Cum (One Cubic Metre)	5720.22	Rupees Five Thousand Seven Hundred & Twenty - Paise Twenty Two Only	1144.04
12	Hire charges for deploying earth moving machinery (JCB/Poclain) for earthwork including diesel, oil and labour charges etc., complete.	2.00	Hrs	1 Hour (One Hour)	784.00	Rupees Seven Hundred & Eighty Four Only	1568.00

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
B	ATTENDING PUMPSET REPAIR IN THE SOURCES & COLLECTION SUMP						
1	Labour charges for Removal of openwell Submersible Pumpset and its accessories from the Sources/Collection Sump including disjoining the submersible cable, etc., complete for the rewinding work.						
a	3.0HP	1.00	Job	1 No (Each)	5025.55	Rupees Five Thousand & Twenty Five - Paise Fifty Five Only	5025.55
b	5.0 HP	1.00	Job	1 No (Each)	5758.80	Rupees Five Thousand Seven Hundred & Fifty Eight - Paise Eighty Only	5758.80
2	Labour charges for Re –erection of Openwell Submersible Pumpset and its accessories after rewinding work into Sources/Collection Sump						
a	3.0HP	1.00	Job	1 No (Each)	5025.55	Rupees Five Thousand & Twenty Five - Paise Fifty Five Only	5025.55
b	5.0 HP	1.00	Job	1 No (Each)	5758.80	Rupees Five Thousand Seven Hundred & Fifty Eight - Paise Eighty Only	5758.80
3	Labour charges for Rewinding of the Openwell Submersible Pumpset with first class insulation wire including removal of burnt coil, servicing the motor testing, commissioning, etc., Complete						
a	3.0HP	1.00	Job	1 No (Each)	4400.00	Rupees Four Thousand Four Hundred Only	4400.00
b	5.0 HP	1.00	Job	1 No (Each)	4850.00	Rupees Four Thousand Eight Hundred & Fifty Only	4850.00
4	Supply and Delivery of the following PVC Insulated and Sheathed 3 Core Flat type Copper Cable confirming to IS 694/1990 and as amended thereafter for erecting into the sources						
a	4 Sq.mm	3.00	m	1M (One Metre)	186.00	Rupees One Hundred & Eighty Six Only	558.00
5	Attending the Cable fault in the following sizes of Aluminium Armoured Cable of Sources						
a	Earth work Excavation and Depositing on bank with initial lead of 10 m and lift of 2m in Sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth SS 20 B.						
	50 Sq.mm LT Cables	11.96	m3	1Cum (One Cubic Metre)	322.50	Rupees Three Hundred & Twenty Two - Paise Fifty Only	3857.10
6	Labour charges for Jointing of the following LT Cables - 3 Core 1.1 KV Grade Armoured Aluminium Conductor Cable Confirming to IS 1554 and as amended thereafter Part I with ISI Marking including cost of jointing materials, testing and commissioning etc., Complete						
	50 Sq.mm LT Cables	2.00	Joint	1 No (Each)	242.00	Rupees Two Hundred & Fourty Two Only	484.00
7	Refilling the trench with excavated sand after attending the cable fault in LT Cables and jointing, etc, complete.						
	50 Sq.mm LT Cables	11.96	m3	1Cum (One Cubic Metre)	29.50	Rupees Twenty Nine - Paise Fifty Only	352.82

Item No.	Description of work	Probable quantity Figures		Units in	Rates in		Amount in figures
					Figures	Words	
8	Supply and delivery of the following 3 Core Armoured Aluminium Conductor Cross Linked Polyethylene Insulated PVC Sheathed Cables Conforming to IS 7098 (PART I)/1988 with ISI Marking						
	50 Sq.mm LT Cables	3.00	m	1M (One Metre)	243.00	Rupees Two Hundred & Fourty Three Only	729.00
9	Supply, Delivery and Fixing of the following Electrical Items required for the Openwell Submersible Pumpset in the pumphoom.						
a	0A to 15A directly operated bimetallic thermal over load relay which operates in case of over load and in case of under voltage with manual and auto rest model	1.00	No	1 No (Each)	1486.00	Rupees One Thousand Four Hundred & Eighty Six Only	1486.00
b	32 Amps Electro magnetic contactors of suitable capacity in AC three phase rating conforming to IS/IEC 60947	1.00	No	1 No (Each)	4343.00	Rupees Four Thousand Three Hundred & Fourty Three Only	4343.00
c	Single phase preventer should protect the motor against single phasing reverse phasing and unbalance supply	1.00	No	1 No (Each)	1152.00	Rupees One Thousand One Hundred & Fifty Two Only	1152.00
d	supply and delivery of 100 Amps porcelain fuse (500v)	1.00	No	1 No (Each)	550.00	Rupees Five Hundred & Fifty Only	550.00
e	supply and fixing of 32 Amps Triple switch with metal clad(side handle)	1.00	No	1 No (Each)	1302.00	Rupees One Thousand Three Hundred & Two Only	1302.00
c	Charges for removing the burnt power capacitor and labour charges for fixing the new 3 KVAR capacitor suitable length copper cable wiring this panel board testing etc. complete after adjusted the old scrap materials.	5.00	No	1 No (Each)	461.00	Rupees Four Hundred & Sixty One Only	2305.00
10	Cleaning of all storage points like sumps, elevated reservoirs of various capacities available in this scheme at a frequency of once in three months including scrapping the inner side of compartment completely, scouring / dewatering / desilting using required machineries, materials, labour and all other incidental charges, application of bleaching powder/ solution etc complete.						
	0.40LL SUMP	4.00	Nos	1 No (Each)	5400.00	Rupees Five Thousand Four Hundred Only	21600.00
11	Supply and delivery of the following Electrical Works :consumable items at the site of work to carryout the general maintenace works						
	Bulbs (led/Tube/Incandescent/others)	1.00	Nos	1 No (Each)	338.00	Rupees Three Hundred & Thirty Eight Only	338.00
12	Supply and Delivery of the following consumable items for pumpset repairs at the site of work to carry out the general maintenance works						
a	65mm GM GATE VALVE	1.00	No	1 No (Each)	3157.00	Rupees Three Thousand One Hundred & Fifty Seven Only	3157.00
b	R I Sheet	2.00	kg	1kg(kilogram)	96.00	Rupees Ninety Six Only	192.00
c	UPVC COLUMN pipe	2.00	m	1M (One Metre)	270.00	Rupees Two Hundred & Seventy Only	540.00
d	65mm GI pipe	2.00	m	1M (One Metre)	527.00	Rupees Five Hundred & Twenty Seven Only	1054.00
						Sub Total -I Rs	3,49,586.50
						Service charges @ 10% for labour cost Rs	22,802.50
						GRAND TOTAL	3,72,389.00

CONTRACTOR

EXECUTIVE ENGINEER

Item No.	Description of work	Probable quantity Figures	Units in	Rates in		Amount in figures
				Figures	Words	

Rupees Three Lakh Seventy Two Thousand Three Hundred & Eighty Nine Only

I/We agree to the execute all the above components of works atpercentage Execss/Less over the department value mentioned above
(The percentage should be mentioned both in words and figure)

CONTRACTOR

EXECUTIVE ENGINEER