



KERALA WATER AUTHORITY

Office of the Superintending Engineer
P H Circle, Kerala Water Authority.

No. KWA/PHC/ALP/DB2-JJM-3007/2022

Dated: 19.01.2023

From

The Superintending Engineer

To

M/s. Hi Tech Construction Group,
A-216, 217 & 218 Citi Tower,
Section-15, CBD Belapur,
Navi Mumbai-400614

Sir,

Sub:- Jal Jeevan Mission-Providing Household retrofittable/extentable water service connections in Mannanchery Panchayaths in Alappuzha District. - Pipeline Work:- reg

Ref:- 1. e -Tender No.11a/2022-23/SE/PHC/ALP due dated: 08.11.2022
2. Proceedings No. KWA/CE/CR/D7/ ALP/JJM/4594//2022 Dtd 19.01.2023 of the Chief Engineer (CR),Kochi

REGISTERED WITH A/D

With reference to the above you are hereby informed that your tender for the above work accepted at **Rs. 12,97,45,348/-** (Rupees Twelve Crore Ninety seven Lakhs Forty five Thousand Three Hundred and Forty Eight only) which is 9.394% below the tendered PAC of Rs. **14,31,96,798/-**

You are directed to attend this office of the Superintending Engineer on or before **02/02/2023** with required stamp paper (**0.1 % of contract value subject to a maximum of Rs.1,00,000/-**) to execute an agreement and start the work within a week after getting necessary instruction from the Executive Engineer, KIIFB Project Division, Kerala Water Authority, Alappuzha. Penal provisions as per G.O. (P) No. 84/97 PW & T dated : 19.08.97 will be imposed of, if the agreement is not executed within the date specified above.

1. Before executing the agreement on stamp paper you should remit **Rs.38,93,000/-** (Rupees Thirty eight Lakhs Ninety three Thousand only) towards security in the office of the **Superintending Engineer, P H Circle, Alappuzha** at least 50% (Fifty percentage) of the deposit in the form of Treasury fixed deposit and the rest in the form of Bank Guarantee duly pledged in favour of **Superintending Engineer, P H Circle, KWA, Alappuzha** for the fulfillment of the contract. The EMD furnished along



with the tender will be released after remitting the security deposit.

2. Any failure in this direction will be liable to result in the forfeiture of your Earnest Money and the cancellation of the proposed contract. The contractor shall be liable to pay to the Kerala Water Authority, the entire cost that may be caused in the Authority by the re-tender or the re-arrangement of the work or otherwise consequent on the contractors failure to execute the agreement or execute the work as provided for in clause 13 of the notice inviting tenders and all such loss shall be recovered from the contractor under the provision of the Revenue Recovery Act or Otherwise vide G.O. (P) 245/76/PW dated 19-11-1986.
3. It must be understood that on no account the rates once fixed will be increased.
4. The work should be completed in all respects within **12 (Twelve)** months from the date of executing agreement.
5. All the terms and conditions of the notice inviting the tenders shall be binding on the contract.
6. Specials required for the above work shall be used from reputed approved manufactures and no fabrication elsewhere or at site should be permitted.

Yours faithfully,

ABRAHAM VARGHESE
Superintending Engineer

Copy To

The Executive Engineer, KIIFB Project Division, KWA., Alappuzha for necessary action.
Agreement
file.

Encl:

Accepted Schedule



Validate

Print

Help

Item Rate BoQ**Tender Inviting Authority: Superintending Engineer,PH Circle,Alappuzha****Work Name: -Jal Jeevan Mission-Providing Household retrofittable/extentable water service connections in Mannanchery Panchayaths in Alappuzha District. -Pipeline Work****Contract No: e-Tender No.11a/2022-23/SE/PHC/ALP**

Name of the Bidder/ Bidding Firm / Company :						
<u>ACCEPTED SCHEDULE</u>						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	TOTAL AMOUNT With all Taxes but excluding GST in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	Appendix A-Providing Connections from Existing schemes by retrofitting of existing schemes for last mile connectivity to provide FHTC					



1.01	Providing 15mm (1/2 inch) house connection with 15mm water meter from existing PVC / HDPE mains up to 110 mm dia., up to a length of 5m using 20mm (1/2 inch) PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PP PN 16 Compression / GM / Brass specials viz. brass ferrule, brass hexagonal nipple, GM fullway wheel valve, bend, MTA, FTA, couplers, PVC Service Saddle of suitable size etc. and connecting with the mains, testing the joints etc. complete including trenching and refilling in all kinds of soil up to a depth of 1.50m for main line tracing and trench of average cross section 0.3m x 0.75m for laying connection pipe and service pipe, fixing water meter, lighting, watching, providing caution boards, traffic control etc. complete including cost of materials, hire for tools, cost of consumables and labour charges, including the cost of tested Class B Multijet water meter with ISI mark and weather resistant PP / PE meter box of minimum size 300mm x 200mm x 150mm, but excluding charges for cutting the concrete / tarred / bituminous roads etc, and as per the direction of the departmental officers.	7849.000	Nos.	5391.48	42317726.52	INR Four Crore Twenty Three Lakh Seventeen Thousand Seven Hundred & Twenty Six and Paise Fifty Two Only
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1.02	Providing 15mm (1/2 inch) house connection with 15mm water meter from existing PVC / HDPE mains from 140mm to 200mm dia., up to a length of 5 m using 20mm (1/2 inch)PE Pipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PPPN 16 Compression / GM / Brass specials viz. brass ferrule, brass hexagonal nipple, GM full way wheel valve, bend, MTA, FTA, couplers, PVC Service Saddle of suitable size etc. and connecting with the mains, testing the joints etc. complete including trenching and refilling in all kinds of soil up to a depth of 1.50m for mainline tracing and trench of average cross section 0.3m x 0.75m for laying connection pipe and service pipe, fixing water meter, lighting, watching, providing caution boards, traffic control etc. complete including cost of materials, hire for tools, cost of consumables and labour charges, including the cost of tested Class B Multijet water meter with ISI mark and weather resistant PP / PE meter box of minimum size 300mm x 200mm x 150mm, but excluding charges for cutting the concrete / tarred / bituminous roads etc, and as per the direction of the departmental officers.	3364.000	Nos.	5563.48	18715546.72	INR One Crore Eighty Seven Lakh Fifteen Thousand Five Hundred & Forty Six and Paise Seventy Two Only
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1.03	Providing additional length of house connection pipe using 20 mm (1/2 inch) PEPipe, PE80, PN16, Conforming to IS 4984: 2016 or later edition and PN16 specials and testing the joints etc., by trenching and refilling in all kinds of soil with trench of average cross section 0.3m x 0.75m for laying of connection pipe and service pipe, lighting, watching, providing caution boards, traffic control etc., including cost of materials, hire for tools, cost of consumables and labour charges etc. complete, but excluding the cost of cutting of concrete / tarred / bituminous roads etc., and as per the directions of the department officers.	108840.000	metre	161.14	17538477.60	INR One Crore Seventy Five Lakh Thirty Eight Thousand Four Hundred & Seventy Seven and Paise Sixty Only
1.04	Providing 15mm PVC Tap in the water meter assembly for 15mm connection, using 20mm Indian Standard Class 6u PVC pipes and specials including cost of materials, consumables, hire charges for tools and labour charges etc. complete and as per the direction of departmental officers.	11213.000	Nos.	553.24	6203480.12	INR Sixty Two Lakh Three Thousand Four Hundred & Eighty and Paise Twelve Only
2	Appendix B-Providing Connections from Existing schemes by extending distribution lines of existing schemes for last mile connectivity to provide FHTC Working Charges for Extension of lines					
2.01	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	348.750	cum	2045.12	713235.60	INR Seven Lakh Thirteen Thousand Two Hundred & Thirty Five and Paise Sixty Only
2.02	Dismantling manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer -in-Charge: Bituminous road	672.500	sqm	375.26	252362.35	INR Two Lakh Fifty Two Thousand Three Hundred & Sixty Two and Paise Thirty Five Only



2.03	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.	1120.000	metre	55.00	61600.00	INR Sixty One Thousand Six Hundred Only
2.04	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.	13653.000	cum	510.54	6970402.62	INR Sixty Nine Lakh Seventy Thousand Four Hundred & Two and Paise Sixty Two Only
2.05	Fencing one side of trenches, 1.50m height with two rows of 10cm plastic caution tape in vertical casuarina pole (girth 15cm to 24cm) fixed at 2m intervals.	3780.000	metre	20.23	76469.40	INR Seventy Six Thousand Four Hundred & Sixty Nine and Paise Forty Only



2.06	Laying HDPE pipes (IS : 4984) on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi-automatic electrofusion machines, testing the pipeline thus fabricated to suit the hydraulic working pressure and after testing, aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and levelling the trenches including all labour charge, hire for appliances etc., complete but excluding cost of pipe and fittings: 90mm Nominal Outer Diameter pipes.	18000.000	metre	140.00	2520000.00	INR Twenty Five Lakh Twenty Thousand Only
2.07	Laying HDPE pipes (IS : 4984) on land portion including conveying within initial lead and aligning the pipes, electro-fusion welding using automatic or semi-automatic electrofusion machines, testing the pipeline thus fabricated to suit the hydraulic working pressure and after testing, aligning the pipeline, lowering the pipe in position into the trenches already made, testing the line to suitable pressure with potable water before back filling and levelling the trenches including all labour charge, hire for appliances etc., complete but excluding cost of pipe and fittings: 110mm Nominal Outer Diameter Pipes.	7050.000	metre	145.00	1022250.00	INR Ten Lakh Twenty Two Thousand Two Hundred & Fifty Only



2.08	Interconnecting the newly laid 90mm HDPE Pipe line to the existing line, by cutting the existing 160mm PVC pipe Line diametrically, the cut being diametrically perpendicular to the axis of pipe and smoothening of cut ends, inserting the suitable PVC Coupling supplied by the contractor and placing in position, jointing with ,and testing to the required test pressure, including cost of specials supplied by the contractor, labour charges , and hire for tools etc; complete.	50.000	Nos	1645.25	82262.50	INR Eighty Two Thousand Two Hundred & Sixty Two and Paise Fifty Only
2.09	Interconnecting the newly laid 110mm HDPE Pipe line to the existing line, by cutting the existing 160/110/140mm PVC pipe Line diametrically, the cut being diametrically perpendicular to the axis of pipe and smoothening of cut ends, inserting the suitable PVC Coupling supplied by the contractor and placing in position, jointing with ,and testing to the required test pressure, including cost of specials supplied by the contractor, labour charges , and hire for tools etc; complete.	20.000	Nos	2056.25	41125.00	INR Forty One Thousand One Hundred & Twenty Five Only
2.1	Providing and fixing G.I. pipes complete with G.I fittings including trenching and refilling etc. External work 80 mm dia nominal bore	300.000	metre	985.63	295689.00	INR Two Lakh Ninety Five Thousand Six Hundred & Eighty Nine Only
2.11	Conveying and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc., but excluding cost of pipes and fittings for External work: 100mm diameter nominal bore.	250.000	metre	264.60	66150.00	INR Sixty Six Thousand One Hundred & Fifty Only
2.12	Cutting M.S. sheet, pipe and specials by gas cutting including cost of gas, all labour and hire charges of tools etc., complete.	2398.800	cm	28.00	67166.40	INR Sixty Seven Thousand One Hundred & Sixty Six and Paise Forty Only



2.13	Grinding the cut edges / welded portions in M.S. sheet, pipe and specials by grinding machine including all labour and hire charges of tools etc., complete.	4797.600	cm	22.96	110152.90	INR One Lakh Ten Thousand One Hundred & Fifty Two and Paise Ninety Only
2.14	Welding M.S. sheet, pipe and special by gas or electric plant for three run welding including cost of welding rod / gas, all labour and hire charges of tools etc., complete.	4797.600	cm	42.35	203178.36	INR Two Lakh Three Thousand One Hundred & Seventy Eight and Paise Thirty Six Only
2.15	Conveying and fixing C. I. Single Acting Air Valve of approved quality with bolts, nuts, rubber insertions etc., complete, but excluding the cost of air valve (tail pieces, if required, will be paid separately): 25mm Single Acting Air Valve.	8.000	Nos.	142.24	1137.92	INR One Thousand One Hundred & Thirty Seven and Paise Ninety Two Only
2.16	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.	5.000	Nos	238.14	1190.70	INR One Thousand One Hundred & Ninety and Paise Seventy Only
2.17	Providing protection tube to the 80mm CI valve using 150mm AC/160mm PVC pipe after conveying the pipe, cutting into suitable size placing in position etc complete	5.000	Nos	291.06	1455.30	INR One Thousand Four Hundred & Fifty Five and Paise Thirty Only
2.18	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:2:4) 1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	348.750	cum	9853.25	3436320.94	INR Thirty Four Lakh Thirty Six Thousand Three Hundred & Twenty and Paise Ninety Four Only
2.19	Testing 100mm GI pipeline with potable water to the required test pressure 100 mm dia	250.000	metre	65.37	16342.50	INR Sixteen Thousand Three Hundred & Forty Two and Paise Fifty Only



2.2	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M - 30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	720.000	sqm	363.05	261396.00	INR Two Lakh Sixty One Thousand Three Hundred & Ninety Six Only
2.21	Taking out existing CC interlocking paver blocks from footpath/ central verge, including removal of rubbish etc., disposal of unserviceable material to the dumping ground, for which payment shall be made separately and stacking of serviceable material within 50 metre lead as per direction of Engineer-in-Charge.	720.000	sqm	263.05	189396.00	INR One Lakh Eighty Nine Thousand Three Hundred & Ninety Six Only
3	Appendix C-Providing Connections from Existing schemes by extentiong distribution lines of existing schemes for last mile connectivity to provide FHTCCost of materials					
3.01	Supply of HDPE Pipe PE 100 (IS 4984/1995), 8kg, 90mm Outer Dia.	18000.000	metre	352.25	6340500.00	INR Sixty Three Lakh Forty Thousand Five Hundred Only
3.02	Supply of HDPE Pipe PE 100 (IS 4984/1995), 8kg, 110mm Outer Dia.	7050.000	metre	422.12	2975946.00	INR Twenty Nine Lakh Seventy Five Thousand Nine Hundred & Forty Six Only
3.03	HDPE Specials at 3 % of cost	6056880.000	L.S	0.05	302844.00	INR Three Lakh Two Thousand Eight Hundred & Forty Four Only
3.04	Supply of CI Air Valve, Conforming to IS 14848 - 2000, Single Orifice, Small Orifice Type S1, Size 25mm.	8.000	No	1351.43	10811.44	INR Ten Thousand Eight Hundred & Eleven and Paise Forty Four Only
3.05	Supply of CI Double Flanged Sluice Valve Conforming to IS 14846 - 2000, Sluice Valve with Cap PN 1.6, Size 80mm.	5.000	No	7276.50	36382.50	INR Thirty Six Thousand Three Hundred & Eighty Two and Paise Fifty Only
3.06	Supply 100 mm GI Pipe (B class)	250.000	metre	1586.05	396512.50	INR Three Lakh Ninety Six Thousand Five Hundred & Twelve and Paise Fifty Only



4	Appendix D-Road Restoration Charges LSGD roads					
4.01	Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m	1900.000	cum	463.05	879795.00	INR Eight Lakh Seventy Nine Thousand Seven Hundred & Ninety Five Only
4.02	Construction of granular sub-base by providing graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with a motor grader on the prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 Grading-I - Plant Mix Method	760.000	cum	3652.36	2775793.60	INR Twenty Seven Lakh Seventy Five Thousand Seven Hundred & Ninety Three and Paise Sixty Only
4.03	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	1140.000	cum	4099.75	4673715.00	INR Forty Six Lakh Seventy Three Thousand Seven Hundred & Fifteen Only



4.04	Providing, laying and rolling of open-graded premix surfacing of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates using Viscosity Grade paving Bitumen(VG -30) to the required line, grade, and level to serve as wearing course on a previously prepared base, including mixing in a suitable HMP of appropriate capacity not less than 75 tonnes/hour, laying and rolling with a smooth wheeled roller 8-10 tonne capacity, finished to the required level and grades.	7600.000	sqm	350.00	2660000.00	INR Twenty Six Lakh Sixty Thousand Only
4.05	Providing and applying primer coat with bitumen emulsion (SS) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means.	7600.000	sqm	75.38	572888.00	INR Five Lakh Seventy Two Thousand Eight Hundred & Eighty Eight Only
4.06	Providing and applying tack coat with bitumen emulsion(RS) using emulsion pressure distributor at the rate of 0.20 - 0.30 kg per sqm on the prepared bituminous surface cleaned with mechanical broom.	7600.000	sqm	12.36	93936.00	INR Ninety Three Thousand Nine Hundred & Thirty Six Only
5	Appendix E-Road Restoration Charges PWD roads					
5.01	Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location within all lifts and lead upto 1000m	1010.800	cum	352.36	356165.49	INR Three Lakh Fifty Six Thousand One Hundred & Sixty Five and Paise Forty Nine Only



5.02	Construction of granular sub-base by providing graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with a motor grader on the prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 Grading-I - Plant Mix Method	399.000	cum	4233.60	1689206.40	INR Sixteen Lakh Eighty Nine Thousand Two Hundred & Six and Paise Forty Only
5.03	Providing, laying, spreading and compacting graded stone aggregate to Wet Mix Macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	399.000	cum	4220.32	1683907.68	INR Sixteen Lakh Eighty Three Thousand Nine Hundred & Seven and Paise Sixty Eight Only
5.04	Providing and applying primer coat with bitumen emulsion (SS) on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.70 - 1.0 kg/sqm using mechanical means.	2660.000	sqm	75.38	200510.80	INR Two Lakh Five Hundred & Ten and Paise Eighty Only
5.05	Providing and applying tack coat with bitumen emulsion(RS) using emulsion pressure distributor at the rate of 0.20 - 0.30 kg per sqm on the prepared bituminous surface cleaned with mechanical broom.	2660.000	sqm	12.36	32877.60	INR Thirty Two Thousand Eight Hundred & Seventy Seven and Paise Sixty Only



5.06	Providing and laying bituminous macadam with 80-100 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading premixed with a bituminous binder (VG 30), transported to the site, laid over a previously prepared surface with paver finisher to the required grade, level, and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction For Grading II - (19 mm nominal size)	133.000	cum	11642.40	1548439.20	INR Fifteen Lakh Forty Eight Thousand Four Hundred & Thirty Nine and Paise Twenty Only
5.07	Providing and laying bituminous concrete with 80-100 TPH hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with a bituminous binder(NRMB) @ 5.2 percent of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level, and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects For Grading - I (19 mm nominal size)	79.800	cum	12520.08	999102.38	INR Nine Lakh Ninety Nine Thousand One Hundred & Two and Paise Thirty Eight Only
5.08	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads on Bituminous Surface @ 250 gms per sqm area, the thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform, and free from streaks and holes.	350.000	sqm	550.00	192500.00	INR One Lakh Ninety Two Thousand Five Hundred Only



5.09	Providing and fixing reflective road studs (Raised Pavement Marker) of category A; made out of ASA/HIPS/ABS moulded body with shanks and conforming to ASTM D 4280, strong enough to support a load of more than 13.635 T when tested in accordance with ASTM D 4280, reflective panel conforming to ASTM D 788, and reflectivity conforming to clause 804.4. including installation, drilling, fixing with adhesive etc. with 2 years warranty for the road stud as well as for in field performance as per clause 804.7.3; Road Markers/Road Stud with Lense Reflector :-	636.000	Nos.	250.00	159000.00	INR One Lakh Fifty Nine Thousand Only
Total in Figures					129745348.04	Twelve Crore Ninety Seven Lakh Forty Five Thousand Three Hundred & Forty Eight and Paise Four Only
Accepted Amount in words -Twelve Crore Ninety seven Lakhs Forty five Thousand Three Hundred and Forty Eight only						

