



मेकॉन लिमिटेड (भारत सरकार का संस्थान) MECON LIMITED (A GOVT. OF INDIA ENTERPRISES)



13वां एवं 15वां तल, नार्थ टॉवर, स्कोप मीनार, लक्ष्मी नगर व्यवसायिक केन्द्र, दिल्ली-110092, (भारत)
13th & 15th Floor, North Tower, Scope Minar, Laxmi Nagar District Center, Delhi-110092, (INDIA)
फ़ोन / Phone : +91-11-2244 7417, CIN : U74140JH1973GOI001199
GSTIN : 07AACCM2119B1Z4 वेबसाइट / Website : <http://meconlimited.co.in>

स्वीकृति का फैक्स / FAX OF ACCEPTANCE (FOA)

FOA NO. 05/51/Q7NT/GAIL/001-II-06/FOA- ११६

DATE: 13.03.2023

TO : M/S BALAJI CONSTRUCTION
PHONE : +91- 8960212222
EMAIL : balajibpclsre@gmail.com , balajimdpcpkol@gmail.com
ATTN : MR. VIPIN PANDEY, PROPRIETOR
FROM : SR. GM (CONTRACTS), MECON LIMITED, DELHI

PLEASE REFER TO YOUR OFFER NO. NIL DTD. NIL (NIC BID ID: 473580) AND ALL OTHER SUBSEQUENT CORRESPONDENCE AGAINST BIDDING DOCUMENT NO. 05/51/Q7NT/GAIL/001-II-06 DATED 17.09.2022 (TENDER ID: 2022 GAIL 128415), COMMERCIAL CORRIGENDUM#1 DATED 01.10.2022, COMMERCIAL CORRIGENDUM#2 DATED 07.10.2022 & REPLY TO PRE-BID QUERIES DATED 07.10.2022 FOR LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA FOR CGD PROJECT AT SIX GAS FOR GAIL (INDIA) LIMITED (.)

WE HEREBY ISSUE THIS FAX OF ACCEPTANCE (FOA) FOR AWARD FOR APPROX. 60% OF SCOPE OF WORK OF TENDER AT AN ESTIMATED CONTRACT VALUE OF RS. 2,21,63,243/- (INDIAN RUPEES TWO CRORES TWENTY-ONE LAKHS SIXTY-THREE THOUSAND TWO HUNDRED FORTY-THREE ONLY) EXCL. GST. GST SHALL BE PAYABLE EXTRA AS PER TENDER PROVISIONS. (PRESENT RATE OF GST@18%).
THE DETAILED BREAKUP OF ABOVE ORDER VALUE IS ENCLOSED AS ANNEX-1(.)

THE COMPLETION PERIOD SHALL BE AS PER TENDER DOCUMENT(.)

PLEASE SUBMIT CONTRACT PERFORMANCE BANK GUARANTEE@ 3% OF ANNUALISED CONTRACT/ORDER VALUE [EXCLUDING GST] AS PER CL. NO.37 OF ITB AND CONTRACT AGREEMENT AS PER CL. NO.36 OF ITB OF TENDER DOCUMENT (.)

YOU ARE REQUESTED TO CONTACT PROJECT COORDINATOR (MR. PRATEEK MAHESHWARI, MANAGER (CGD), MECON LIMITED, EMAIL ID: pmaheshwari@mecon.co.in) FOR FURTHER INSTRUCTIONS (.)

ALL OTHER TERMS AND CONDITIONS SHALL BE AS PER BIDDING DOCUMENT & CORRIGENDUM THERE OF AS STATED ABOVE AND AS AGREED TILL DATE (.)

A DETAILED ORDER SHALL FOLLOW (.)

FOR & ON BEHALF OF GAIL (INDIA) LIMITED

राकेश शर्मा / RAKESH SHARMA

वरि. महाप्रबंधक (अनुबंध) / SR. GM (CONTRACTS)

मेकॉन लिमिटेड, दिल्ली / MECON LIMITED, DELHI

CC: BY COURIER TO:

M/s Balaji Construction

A 11/20, Naya Mahadev Road, Varanasi, Uttar Pradesh, 221001

Tel No.: +91-8960212222

प्रधान कार्यालय / Head Office :

कार्यालय / Office :

राँची / Ranchi	बैंगलूर / Bangalore	मुम्बई / Mumbai	कोलकाता / Kolkata	चेन्नई / Chennai
+91-651-248 3000 (Phone)	+91-80-2657 1661-63 (Phone)	+91-22-2781 2155-58 (Phone)	+91-33-2282 2381-82 (Phone)	+91-44-2618 4873 (Phone)
+91-651-248 2189/248 2214 (Fax)	+91-80-2625 2000 (Phone)	+91-80-2781 2275 (Fax)	+91-33-2282 4441 (Fax)	+91-44-2618 4874 (Fax)
ranchi@meconlimited.co.in	+91-80-2657 6352 (Fax)	Mumbai@meconlimited.co.in	kolkata@meconlimited.co.in	chennai@meconlimited.co.in
	banglore@meconlimited.co.in			

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
1	PE PIPELINE	A00100				
2	Pipe Laying(including crossing) in any type of surface like unprepared surface (Katcha surface)/ Normal Surface/ Hard surface/Rock surface etc using open cut/ Moling (without Casing)/ Moling (with Casing)/Directional Drilling technique (with and without casing pipe) methodology.	A00101				
3	Receipt, Loading, unloading, storing, reloading, transportation, unloading, stringing and laying of PE100, SDR11 line pipes of all sizes including, proper stacking, identification, and supply of accessories of all sizes & thickness like PE Bends, Couplers, Endcaps, Tee, Reducer, CS / GI to PE Fittings (i.e. Transition Fittings of sizes 20 mm to 32 mm), Warning Mat etc. Handling, Stringing / uncoiling, aligning of the PE line pipe on the pipeline Right-of-Use / route, laying / installation of PE line pipe alongwith required accessories as mentioned above as per specification wherever required depending on site condition including execution of all works; Storage of material in contractor's store, fabrication, access for construction procurement and supply of all materials, consumables, equipments, labour and other inputs. In the case of free issue items, the scope also includes, receiving and loading from Owner's designated store, transportation, unloading and stacking of free issue items at Contractor's store. -Laying of all PE pipe (PE 100 SDR11), Including supply of HDPE casing pipe (in case of HDD (with case).Moling(with case) , Couplers, End caps etc. (Ref. cl. 4.3 of Particular Job specification). -Survey of under ground utilities, execution of the work as per specification, including excavation of pits moling with the hole size not exceeding 20% of the pipe dia, jointing and insertion of carrier pipe with casing, testing & commissioning and restoration of the pits to original condition, submission of As-Built Graph as per specifications and the instruction of Engineer-in-charge. -Casing details is as given below:- 1. For 20/32 mm PE pipe (in 75 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 2. For 63 mm PE pipe (in 125 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 3. For 90 mm pipe (in 180 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 4. For 125 mm pipe (in 250 mm dia. HDPE Casing Pipe, PE63/80 PN 6.0).					
4	Carrying out all temporary, ancillary, auxiliary works required to make the PE pipeline ready for commissioning as per drawings.					
5	Specifications, scope of work indicated in PJS and other provisions of Contract document and instructions of Engineer-in-charge, including but not limited to carrying out the following works:					
6	Surveying of route and detours required at the time of execution, preparation of construction drawings showing survey details and submit same to Owner for review / approval.					
7	Carrying out preliminary activities such as preparation of drawings wherever required for crossing etc.					
8	Preparation and getting approval of schedules, execution procedures, drawings/ sketches/ wherever required, making trial pits to determine the underground utilities/ services etc., restoration of the abandoned trial pits to original condition.					
9	Stacking and installation of construction markers, clearing, fencing, grubbing, cutting of trees, full filling all the requirements of various statutory/ environment authorities to the entire satisfaction of concerned authorities, grading of work area.					
10	Barricading the work area as per local authorities norms & to the satisfaction of Owner/ Engineer -in-charge, installation of safety signs.					
11	Barricading the pipeline construction area prior to execution of the works as per drawing no. MEC/23QH/05/25/M/000/011 & MEC/23QH/05/25/M/000/10 enclosed with tender document and to the entire satisfaction of owner / engineer- in -charge.					
12	Laying using open trench without casing includes survey of under ground utilities (through trial pits), execution of work as per specification including Trenching to all depths by excavation in all types of soils including soft/ rocky strata (Rock Cutting to be paid separately as per SOR no 1.120) and different type of pavement / footpath / roads etc. including rock breaking, chiselling or otherwise cutting etc. as required and storing excavated soil, reusable materials at designated area as directed by Engineer in charge and to a width to accommodate the pipeline as per the relevant standard/ specification etc. [The minimum depth of the top of pipeline shall be 1.0 m measured from top of pipeline to the top of undisturbed surface of the soil or as per Specification/ OISD- 226 & PNGRB latest guidelines whichever is higher]. Dewatering of trenches / pits if required as per site condition. Repairing of all damaged utilities if any, and payment of any compensation (if claimed by owner / other utility agencies)					
13	Uncoiling / stringing & aligning of PE pipes, clamping, jointing of the pipe ends / fittings / valves by qualified personnel using approved electro-fusion techniques as per specification.					

SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s GAIL (INDIA) LIMITED

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
14	Installation / lowering the pipeline in trench to required depth as per PJS, Technical Specification & drawings, supply & placement of HDPE Yellow colour warning mat (refer PJS item.- 4.2) over the pipeline along the complete route as per standard drawings, data sheets & technical specifications, padding around pipeline including supply of suitable padding material duly approved by EIC, backfilling to its original condition with excavated earth / borrowed select soil/sand duly approved by EIC & its compaction & crowning. At certain specific area of ROU, trench shall be backfilled & compacted and shall be made ready for motorable. All tiles / slabs / curb stones etc removed during excavation shall be placed properly and no separate payment shall be admissible against this activity. Restoration shall be carried as per separate SOR item mentioned elsewhere in the SOR or to be done by Owner / concerned authorities.					
15	The scope of work against this item also include Electro-fusion jointing of valves, fittings wherever required and as directed by Engineer-in-charge.					
16	The scope of work against laying of 20/32 mm pipe also includes works like making of PCC pedestal of grade (1:2:4) and size ((300mm(L)X200mm(W) XHeight (H)), (H>=300mm & will be as per site condition)), supply and installation of GI Sleeve (Heavy (C-Class) as per IS-1239), filling of sand and installation of TF (along with supply).					
17	Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per the instructions of the Engineer-in-charge.					
18	Final clean-up of right-of-use or area disturbed by contractor during their construction activities for laying of pipeline works and disposal of debris and surplus material to designated disposal areas and backfilling of trench and compaction of the same as per satisfaction of Owner and / or as directed by Engineer-in-charge.					
19	Maintaining the completed pipelines and installation for any defect or failures during defect liability period (i.e. 12 months from date of completion of work).					
20	Handing over the completed works to Owner for their operation/ use, reconciliation of material area wise and obtaining "no objection certificate" from Owner/PMC					
21	Preparation and submission of Daily progress report, Laying Graphs / PE line cards on daily basis.					
22	On completion of gas charging of pipelines. Preparation and submission of As-built drawings, crossings details, termination, utility graphs and deviation statements.					
23	In case, the minimum required depth is not possible due to site condition, necessary mitigation measures (for minimum top cover of 600mm) shall be required to be taken by contractor in consultation with EIC as per PNGRB Guidelines. No additional payment shall be admissible against the same. However required top cover can further be reduce till 375mm and payment against the same shall be made according to SOR item no. A00300.					
24	Submission of all documents required for contract closure in numbers as mentioned in contract.					
25	Any other activities not mentioned / covered explicitly above, but otherwise required for satisfactory completion / operation / safety / statutory / maintenance of the works shall also be covered under the scope of work and has to be completed by the Contractor within specified schedule at no extra cost to Owner. All the work shall be executed in accordance with the provision of contract.					
26	Pipeline Laying through Open Cut (Without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00102				
27	20 mm PE 100 pipe		Meter	1,200	190.92	2,29,106
28	32 mm PE 100 pipe	A00104	Meter	3,000	190.92	5,72,765
29	63 mm PE 100 pipe	A00105	Meter	150	223.84	33,576
30	90 mm PE 100 pipe	A00106	Meter	150	280.90	42,134
31	125 mm PE 100 pipe	A00107	Meter	150	337.95	50,693
32	Pipeline Laying Through Moling(without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00108				
33	20 mm PE 100 pipe	A00109	Meter	3,600	241.40	8,69,022
34	32 mm PE 100 pipe	A00110	Meter	14,700	241.40	35,48,507
35	Pipeline Laying Through HDD (without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00114				
36	32 mm PE 100 pipe	A00115	Meter	19,200	412.57	79,21,267
37	63 mm PE 100 pipe	A00116	Meter	4,500	438.90	19,75,050
38	90 mm PE 100 pipe	A00117	Meter	600	653.96	3,92,327
39	125 mm PE 100 pipe	A00118	Meter	900	882.19	7,93,970
40	Pipeline Laying through Open Cut(With casing) in unprepared surface (Katcha surface)/ Normal Surface	A00119				
41	20 mm PE 100 pipe	A00120	Meter	300	285.29	85,586
42	32 mm PE 100 pipe	A00121	Meter	600	285.29	1,71,171
43	63 mm PE 100 pipe	A00122	Meter	60	474.01	28,441
44	90 mm PE 100 pipe	A00123	Meter	60	798.80	47,928
45	125 mm PE 100 pipe	A00124	Meter	60	1,338.65	80,319
46	Pipeline Laying Through Moling(with casing) in unprepared surface (Katcha surface)/ Normal Surface	A00125				
47	20 mm PE 100 pipe	A00126	Meter	300	346.73	1,04,019

SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s GAIL (INDIA) LIMITED

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (Inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (Inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
48	32 mm PE 100 pipe	A00127	Meter	300	346.73	1,04,019
49	Pipeline Laying Through HDD (with casing) in unprepared surface (Katcha surface)/ Normal Surface/Hard Surface	A00131				
50	32 mm PE 100 pipe	A00132	Meter	600	570.57	3,42,342
51	63 mm PE 100 pipe	A00133	Meter	60	1,242.09	74,525
52	90 mm PE 100 pipe	A00134	Meter	30	1,887.27	56,618
53	125 mm PE 100 pipe	A00135	Meter	30	2,611.46	78,344
54	NOTE: i) The lengths of pipelines are tentative. ii) For restoration of asphalt / concrete roads, the item for construction of asphalt top / concrete top / Tiles/Stone slab/Paver Blocks/Curb Stones/RCC Top shall be paid separately as per the rates quoted for the same elsewhere in the SOR. iii) For SOR Item No. A00102 to A00135 payment for length of PE pipe will be done as per casing pipe length.					
55	Restoration	A00200				
56	Restoration of the roads, pavements, channels, footpaths, tiles, stones etc. to original condition including supply of the approved quality material required, as per local authorities norms, obtaining NOC from concerned local authorities / land owners / third party inspection agencies (if any) designated by owner and to the satisfaction of Engineer-in-charge.					
57	Asphalting	A00201	Meter	300	193.12	57,935
58	Cement Concrete	A00202	Meter	300	539.85	1,61,954
59	Tiles / Paver / Blocks / Curb Stones, Red sand stone	A00203	Meter	7,200	197.51	14,22,036
60	Brick Solina / Channels, etc.	A00204	Meter	600	140.45	84,269
61	RCC	A00205	Meter	60	658.35	39,501
62	Pipe laying inside Private Property i.e. Multistorey buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall where pipe top cover could not be achieved 600 mm.	A00300				
63	Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar.					
64	Necessary mitigation measures such as RCC slab (150mm thick and 300mm width) at the top, the RCC slab of the roof of basement shall be treated as bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC as per latest PNGRB Guidelines. No additional payment shall be admissible against the same.					
65	Receipt, Loading, unloading, storing, reloading, transportation, unloading, stringing and laying of 20mm, 32mm & 63mm PE pipe (PE 100 SDR11) including proper stacking, identification, and supply of accessories of below mentioned sizes & all thickness like PE Bends, Couplers, Endcaps, Tee, Reducer, CS / GI to PE Fittings (i.e. Transition Fittings of sizes 20 mm to 63 mm), Warning Mat etc. Handling, Stringing / uncoiling, aligning of the PE line pipe on the pipeline Right-of-Use / route, laying / installation of PE line pipe alongwith required accessories as mentioned above as per specification wherever required depending on site condition including execution of all works; Storage of material in contractor's store, fabrication, access for construction procurement and supply of all materials, consumables, equipments, labour and other inputs. In the case of free issue items, the scope also includes, receiving and loading from Owner's designated store, transportation, unloading and stacking of free issue items at Contractor's store.					
66	Carrying out all temporary, ancillary, auxiliary works required to make the PE pipeline ready for commissioning as per drawing.					
67	Surveying of route and detours required at the time of execution, preparation of construction drawings showing survey details, and submit same to Owner for review / approval.					
68	Preparation and getting approval of schedules, execution procedures, drawings/ sketches/ wherever required, making trial pits to determine the underground utilities/ services etc., restoration of the abandoned trial pits to original condition.					
69	Barricading the pipeline construction area prior to execution of the works as per drawing no. MEC/23QH/05/25/M/000/011 & MEC/23QH/05/25/M/000/10 enclosed with tender document and to the entire satisfaction of owner / engineer-in-charge.					
70	Laying using open trench without casing includes survey of under ground utilities (through trial pits), execution of work as per specification including Trenching to all depths by excavation in all types of soils including soft/ rocky strata (Rock Cutting to be paid separately as per SOR no 1.120) and different type of pavement / footpath / roads etc. including rock breaking, chiselling or otherwise cutting etc. as required and storing excavated soil, reusable materials at designated area as directed by Engineer in charge and to a width to accommodate the pipeline as per the relevant standard/ specification etc. [The minimum depth of the top of pipeline shall be 1.0 m measured from top of pipeline to the top of undisturbed surface of the soil or as per Specification/ OISD- 226 & PNGRB latest guidelines whichever is higher]. Dewatering of trenches / pits if required as per site condition. Repairing of all damaged utilities if any, and payment of any compensation (if claimed by owner / other utility agencies)					
71	Uncoiling / stringing & aligning of PE pipes, clamping, jointing of the pipe ends / fittings / valves by qualified personnel using approved electro-fusion techniques as per specification.					



SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s GAIL (INDIA) LIMITED

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
72	Installation / lowering the pipeline in trench to required depth, supply & placement of HDPE Yellow colour warning mat (refer PJS item.- 4.2) over the pipeline along the complete route as per drawing no. MEC/U999/05/11/C/ and backfilling to its original condition with excavated earth / borrowed select soil / sand duly approved by EIC & its compaction & crowning. At certain specific area of ROU, trench shall be backfilled & compacted and shall be made ready for motorable. All tiles / slabs / curb stones etc removed during excavation shall be placed properly and no separate payment shall be admissible against this activity. Restoration shall be carried as per separate SOR item mentioned elsewhere in the SOR or to be done by Owner / concerned authorities.					
73	The scope of work against laying of 20/32 mm pipe also includes works like making of PCC pedestal of grade (1:2:4) and size (300mm(L)X200mm(W) XHeight (H)), (H>=300mm & will be as per site condition) , supply and installation of GI Sleeve (Heavy (C-Class) as per IS-1239), filling of sand and installation of TF (along with supply).					
74	Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per the instructions of the Engineer-in-charge.					
75	Final clean-up of right-of-use or area disturbed by contractor during their construction activities for laying of pipeline works and disposal of debris and surplus material to designated disposal areas and backfilling of trench and compaction of the same as per satisfaction of Owner and / or as directed by Engineer-in-charge.					
76	Maintaining the completed pipelines and installation for any defect or failures during defect liability period (i.e. 12 months from date of completion of work) .					
77	Handing over the completed works to Owner for their operation/ use, reconciliation of material area wise and obtaining "no objection certificate" from Owner/ Consultant.					
78	On completion of gas charging of pipelines. Preparation and submission of As-built drawings, crossings details, termination, utility graphs and deviation statements.					
79	Any other activities not mentioned / covered explicitly above, but otherwise required for satisfactory completion / operation / safety / statutory / maintenance of the works shall also be covered under the scope of work and has to be completed by the Contractor within specified schedule at no extra cost to Owner. All the work shall be executed in accordance with the provision of contract.					
80	20 mm PE 100 pipe	A00301	Meter	600	313.81	1,88,288
81	32 mm PE 100 pipe	A00302	Meter	2,400	326.98	7,84,753
82	Supply of GI/ MS/ Concrete Sleeves (wherever required as a Special Case as per instructions of the Engineer-in-charge)	A00400				
83	Supply, installation of sleeve, insertion of pipe, sealing the annuals, firm fixing of Sleeves with concrete mix. Breaking through any obstructions and their subsequent restoration, as per specifications and instructions of the Engineer-in-charge. GI/MS Pipes shall be Heavy (C-Class) as per IS-1239					
84	GI Sleeves /Concrete Sleeves					
85	2 1/2" NB, 1' Length	A00401	Nos.	150	127.28	19,092
86	4" NB, 1' Length	A00402	Nos.	6	223.84	1,343
87	MS Enamel Coated					
88	4" NB, 3' Length	A00403	Sq. Metre	6	513.51	3,081
89	Concrete Sleeve (NP-2 Class)					
90	4" NB, 3' Length	A00404	Sq. Metre	6	127.28	764
91	6" NB, 3' Length	A00405	Sq. Metre	6	206.28	1,238
92	Note: The decision regarding use of type of sleeves to be used at various locations shall be made by Engineer In-Charge / Owner					
93	Installation of valve(Normal stem) in pit including supply of valves	A00500				
94	Supply of isolation valves (as per data sheet) and installation of valves in the valve pits as per typical drawing and specification enclosed and instructions of Engineer-in-charge. Payment of valve pits shall be paid separately as per SOR.					
95	PE Valve 32 mm dia	A00501	Nos.	12	3,028.41	36,341
96	PE Valve 63 mm dia	A00502	Nos.	4	6,688.84	26,755
97	PE Valve 90 mm dia	A00503	Nos.	1	10,401.93	10,402
98	PE Valve 125mm dia	A00504	Nos.	1	14,365.20	14,365
99	Installation of valve(Long stem) in pit including supply of valves	A00500				
100	Supply of isolation valves (as per data sheet) and installation of valves in the valve pits as per typical drawing and specification enclosed and instructions of Engineer-in-charge. Payment of valve pits shall be paid separately as per SOR.					
101	PE Valve(Long stem) 32 mm dia	A00601	Nos.	6	3,335.64	20,014
102	PE Valve(Long stem) 63 mm dia	A00602	Nos.	2	7,373.52	14,747
103	PE Valve(Long Stem) 90 mm dia	A00603	Nos.	1	11,455.29	11,455
104	PE Valve(Long stem) 125mm dia	A00604	Nos.	1	15,800.40	15,800

SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s GAIL (INDIA) LIMITED

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
105	Construction of Valve Pits as per the enclosed tender drawing and specification. The item includes supply of all the material including Pre-cast RCC cover, shuttering, reinforcement, labour, curing etc as per the drgs, specification and instruction of EIC. (Double rods and Round Manhole)	A00701				
106	Type-I having Internal size of Minimum 1000 x 1000mm	A00702	Nos	12	14,172.08	1,70,065
107	Type-II having Internal size of Minimum 600 x 600mm	A00703	Nos	33	8,685.83	2,86,632
108	Note: The tender drawing enclosed is only for reference purpose and contractor shall be required to prepare drawings (in line with reference tender drawing) for specific sizes of Valve pits and the same shall be approved by EIC.					
109	Fabrication & Installation of Markers	A00800				
110	RCC Route Markers					
111	Supply, fabrication and installation of RCC route markers as per the attached drawing in technical volume, along the route including all associated civil works such as excavation and construction in all types of soils, construction and pedestals and grouting with concrete.	A00801	Nos.	750	263.34	1,97,505
112	Pole Markers with Foundation					
113	Supply, fabrication and installation of plate markers as per the attached drawings in technical volume including all associated civil works such as excavation and construction in all types of soils, construction and pedestals and grouting with concrete, cleaning, stencil let.	A00802	Nos.	150	1,465.93	2,19,889
114	Warning Plate Markers					
115	Supply, fabrication and installation of plate markers, including application of approved color and quality of primer and paint, stencil letter cutting of lettering, numbers, direction, etc. as per the attached drawing in technical volume to be installed near regulator.	A00803	Nos	300	272.12	81,635
116	Paver Block-Tiles Markers					
117	Supply, fabrication and installation of Paver Block-Tiles markers, including application of approved color and quality of primer and paint, stencil letter cutting of lettering, numbers, direction, etc. as per the attached drawings to be installed on Paver Block/Tiles on foot Path/As per the instruction of EIC.	A00804	Nos	60	254.56	15,274
118	Construction of RCC structure for protection of service line for drain/nallah Crossings	A00900				
119	Construction of Non suspended slabs/pavement slabs including pedestal/ramp etc.using reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix with 20 mm & down size graded crushed stone aggregates) to protect the PE pipe laid. All necessary form work, finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. shall be as specified and directed by EIC. The rates shall include grouting of pockets, supply of all material, tools, reinforcement steel etc.	A00901	Cubic Meter	6	9,019.40	54,116
120	GPR Survey (Scope includes submission of GPR survey report before/after obtaining permission for excavation from land owning agencies with complete satisfaction of the land owning agency & Owner)	A01000				
121	GPR Survey - Length up to 100 meter	A01001	Nos.	24	5,705.70	1,36,937
122	GPR Survey - Length more than 100 meter	A01002	RM	1,500	57.06	85,586
123	Note :-In case GPR survey length exceeds 100m, for quantity beyond 100m, amount in addition to SOR item no.- A01001, shall be payable based on per meter rate quoted against SOR item No. A01002					
124	Excavation of Hard rock/surface	A01100				
125	Excavation of trench or pits, wherever hard rock presence is exceeding 1.5 m in any direction of the trench and excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc and removable only by pneumatic chisel / drill as per the specifications and direction of EIC. The rates are payable over and above the Laying rates as per relevant SOR Item No. A00101					
126	Cutting of PCC/RCC surface with thickness more than 12" or Continuous asphalt multi-layer/ Malba/ Brick / Boulders more than 24".(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	A01101	RM	120	109.73	13,167
127	Additional Backfilling of Sand in excavated trench/Pit as per site requirement	A01200				
128	Filling of M-Sand/Soft soil as per the site requirement and as per the instructions of EIC (except the sand padding as mentioned SOR Item No. A00101)					
129	Laying of the carrier pipeline (for both water body and road crossing) by the approved HDD method across the crossing including, strings preparation of carrier , welding, testing, 100% radiography by x-ray, welding repair and retest, coating of field joints with special type Dirax Heat Shrink Sleeve or equivalent (including supply of coating material) and repair of pipeline coating with special PERP-80 repair patch or equivalent material (including supply of repair patch) as per specification, pre-hydrotest of complete strings made for crossing as per specification etc.	A01201	Cu-Meter	15	636.41	9,546
130	DRS/DCU/DRS cum DCU works	B00100				
131	Installation of DRS/DCU/DRS cum DCU	B00101				

**SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s
GAIL (INDIA) LIMITED**

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
132	Receiving and taking over, handling, loading, transportation and unloading of DRS/DCU/DRS cum DCU from Owner's designated stockyards to site, installation at foundation (including supply of all structural items) and hooking up with PE pipe including all works as required to complete the job as per the drawings and specification, scope of work mentioned in tender document. The scope includes supply of transition fittings and other PE and CS fittings as per requirements and various associated works (including steel welding) to commission DRS/DCU/DRS cum DCU. Note: 1) Amount towards civil work shall be payable as per related SOR items. 2) Rate to include cost of all labour, tools, tackles, equipment, hire charges. 3) Bolts, nuts, washer, U-clamps, gaskets etc. if required during installation shall be procured and supplied by the Contractor within the rate quoted. These items shall not be separately measured and paid.					
133	DCU/DRS cum DCU. (Maximum weight of single DCU/DRS cum DCU shall be about 6.0 T)	B00102	Nos.	1	24,705.68	24,706
134	Note: i) The quantities mentioned are indicative only. ii) For all the supply items mentioned above, procurement shall be made as per specification after due approval of engineer-in-charge.					
135	CIVIL WORKS	C00100				
136	Earth Work Earth in excavation and filling to the grades and levels shown in the approved drawings in all kinds of conditions including for Road embankments, using approved quality good earth from designated borrow area, for all heights and depths including clearing and stripping (min. 150 mm) of the area marked for filling, taking spot levels, consolidating the exposed natural soil surface, excavating the earth from borrow area loading, transporting & unloading, spreading in layers not exceeding 150 mm thickness, breaking clods, watering (if reqd.), ramming and compacting by manual/ mechanical means to give minimum 92% of modified Proctor's density of earth, testing & dressing including disposal of all unserviceable material all complete as per specifications and directions of Engineer-in-charge. (Rate to include cost of all labour, tools, tackles, equipment, hire charges, cost of borrow earth by way of royalties, right of way, cess etc., as applicable with all bye works and sundry works).	C00101	Cubic Meter	12	250.17	3,002
137	PCC 1:2:4 1 Cement : 2 Coarse sand : 4 stone aggregate 20mm nominal size.	C00200	Cubic Meter	6	3,322.47	19,935
138	PCC 1:4:8 1 Cement : 4 Coarse sand : 8 stone aggregate 40mm nominal size.	C00300	Cubic Meter	3	2,677.29	8,032
139	(Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials, shuttering, earthwork in excavation and backfilling using approved earth in all conditions etc. with all bye works and sundry works.)					
140	Reinforced Cement Concrete	C00400				
141	Providing and laying reinforced cement of grade M-25 with 20mm and down grade crushed stone aggregate in all types of structures like foundations, pedestals, pedestal bases, pipe supports, sleepers, column, equipment foundation, cable trench including construction joints, bitumen painting on surface in contact with soil, supplying and fixing reinforcing steel, shuttering, inserts, finishes etc. at all depths and heights complete as per drawings, specifications and direction of the Engineer-in-charge.	C00401	Cubic Meter	6	9,019.40	54,116
142	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement including sulphate resistant cement for sub-structures, R/F steel, Inserts, bolts, conduits, bitumen, other minor construction materials, shuttering, staging, earthwork in excavation and backfilling using serviceable earth in all conditions, shorting bailing and pumping out water, testing of concrete, curing etc. with all bye works and sundry works.					
143	Brick Work	C00500				
144	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-in-charge.	C00501	Cubic Meter	12	3,423.42	41,081
145	(Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor construction materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).					
146	Note: The quantities of individual item can varied as per site requirement. The payment will be made as per actual certified measurement at site.					
147	Laying of Brick layer/ Concrete	C00600				

SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s GAIL (INDIA) LIMITED

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
148	Providing single layer of Brick / Concrete / or impact resistant tape to entire width of trench above Warning Mat placed in trench over the laid pipeline as per OISD 226, standard drawing, specification and instruction of Owner. (Rate to include cost of all labour, tools, tackles, equipment, hire charges & supply of all materials, etc)					
149	Brick Layer for width of PE pipeline trench as per drawing (75 mm thk.)	C00601	Square Meter	12	153.62	1,843
150	Concrete for width of PE pipeline trench as per drawing (80 mm thk.)	C00602	Square Meter	12	232.62	2,791
151	Demolition of PCC work below plinth level	C00700				
152	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc., disposal of unserviceable material outside the boundary limits keeping the owner indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed	C00701	Cubic Meter	6	1,316.70	7,900
153	Excavation for foundation works	C00800				
154	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.					
155	Upto 3.0 Mtrs	C00801	Cubic Meter	6	921.69	5,530
156	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	C00802	Cubic Meter	6	1,601.99	9,612
157	Structural Works	D00100				
158	Providing and fixing Fencing Structure	D00101				
159	Supplying, fabricating & fixing GI wire fencing fabricated from GI wire conforming to IS: and GI weldmesh made from 3mm GI wire @ 75 mm bothways to structural steel frame by means of welding/bolting, including applying two coats of approved quality of synthetic enamel paint over a priming coat of in approved shade including supply of all raw materials, bolts, electrodes, transportation, including making pockets & pouring with PCC (1:2:4) in of block for fixing of posts etc including Y type angle and barbed wire (900 mm) complete as per enclosed drawing, technical specifications, scope of works and directions of the Engineer-In-Charge.					
160	Fencing height 2.1m alongwith barbed wire of height atleast 900 mm on Y type angle.	D00102	RM	24	1,935.55	46,453
161	Providing and fixing Fencing Gates	C00201				
162	Supplying, fabricating & fixing fencing gates fabricated from pipes conforming to IS:1161 and plates conforming to IS:2062 & fixing of GI weldmesh made from 3mm GI wire @ 75 mm bothways to structural steel frame by means of welding/bolting, painting with enamel paint in approved shade including supply of all raw materials, bolts, electrodes, transportation etc complete as per enclosed sketch, technical specifications and directions of the Engineer-In-Charge.					
163	4m Wide x 2.1m High	D00202	Nos.	1	33,874.30	33,874
164	3m Wide x 2.1m High	D00203	Nos.	1	19,355.49	19,355
165	1m Wide x 2.1m High	D00204	Nos.	1	8,712.17	8,712
166	Preservation of Pipeline	E00100				
167	Preservation of pipeline sections and associated facilities (in event of delay in commissioning, other unforeseen reasons) including supply of nitrogen, all consumables, all equipment, man-power, etc. complete as per the requirements of specifications, other provisions of Contract document and instructions of Engineer-in-charge.					
168	By filling and pressurizing with nitrogen to a pressure of 2 bar(g) for a period of one month or part thereof	E00101				
169	For 125 mm Pipeline	E00102	Meter	300	8.34	2,502
170	For 90 mm Pipeline	E00103	Meter	300	7.46	2,238
171	For 63 mm Pipeline	E00104	Meter	300	6.14	1,843
172	For 32 mm Pipeline	E00105	Meter	600	5.27	3,160
173	For 20 mm Pipeline	E00106	Meter	600	4.83	2,897
174	For every additional period of one month or part thereof limited to 6 month	E00201				
175	For 125 mm Pipeline	E00202	Meter	300	4.39	1,317
176	For 90 mm Pipeline	E00203	Meter	300	3.95	1,185
177	For 63 mm Pipeline	E00204	Meter	300	3.51	1,053
178	For 32 mm Pipeline	E00205	Meter	600	3.07	1,843
179	For 20 mm Pipeline	E00206	Meter	600	2.63	1,580
180	Notes: i) The above length is not for a single section but for no. of sections. ii) All accessories ie; End caps and two nos tappings of 3/4 inches, PG to be considered per section and rate for the same shall be quoted by bidder under this item. iii) If month is partially complete, payment shall be made on prorata basis. iv) Scope includes pressure holding for a period of 6 months or as per EIC and jointing of PE pipe (if required) due to damage by any means and further filling of nitrogen for pressure holding.					

**SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY PROJECT OF M/s
GAIL (INDIA) LIMITED**

Sl. No.	Item Description	Item Code	Units	M/s Balaji Construction, Varanasi		
				Quantity	Unit Rate (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
181	Note: (i) The quantities of individual item can varied as per site requirement. The payment will be made as per actual certified measurement at site. For the supply items the quantities shall be procured after approval from client/ consultant/EIC. (ii) The bidder must indicate currency(ies) against each quoted item of the SOR. (iii) The total amount shall also be given by the bidder in the quoted currency(ies). (iv) Some of the may / may not be execute as per site requirements.					
182	Liaisoning with Land Owning Agencies for Permission Submission of applications as per approved drawing provided by owner / owner's representative (Initial Route survey, preparation of drawing, measuring and providing details of surface type shall be in scope of contractor), obtaining and submission of demand note, coordination, Liaisoning, obtaining written permission from land owing agencies like NHAI, AAI, Indian Railways and any other government agencies who maintains the public lands and agencies owing Private lands etc. (all fee paid to authorities excluding demand charges or Bank Guarantees shall be reimbursed against documentary evidence). This rates are not applicable for Private lands i.e. Apartments etc. Permissions required from various authorities like NHAI / Railways / Irrigation (Canal) etc. falling enroute shall be inclusive in the item rate.	F00100	KM	6	11,736.19	70,417
Total Excluding GST						2,21,63,243
Total Including 18% GST						2,61,52,627

Sh



मेकॉन लिमिटेड (भारत सरकार का संस्थान) MECON LIMITED (A GOVT. OF INDIA ENTERPRISES)



13वां एवं 15वां तल, नार्थ टॉवर, स्कोप मीनार, लक्ष्मी नगर व्यवसायिक केन्द्र, दिल्ली-110092, (भारत)
13th & 15th Floor, North Tower, Scope Minar, Laxmi Nagar District Center, Delhi-110092, (INDIA)

फ़ोन / Phone : +91-11-2244 7417, CIN : U74140JH1973GOI001199
GSTIN : 07AACCM2119B1Z4 वेबसाइट / Website : <http://meconlimited.co.in>

स्वीकृति का फैक्स / FAX OF ACCEPTANCE (FOA)

FOA NO. 05/51/Q7NT/GAIL/001-II-06/FOA- 917

DATE: 13.03.2023

TO : M/S RICH EARTH INFRATEL PVT. LTD.
PHONE : +91- 9811025095
EMAIL : mpsbbhatia@richearthinfra.com , richearthinfra@gmail.com
ATTN : MR. MANVINDER PAL SINGH BHATIA, DIRECTOR
FROM : SR. GM (CONTRACTS), MECON LIMITED, DELHI

PLEASE REFER TO YOUR OFFER NO. NIL DTD. NIL (NIC BID ID: 473703) AND ALL OTHER SUBSEQUENT CORRESPONDENCE AGAINST BIDDING DOCUMENT NO. 05/51/Q7NT/GAIL/001-II-06 DATED 17.09.2022 (TENDER ID: 2022_GAIL 128415), COMMERCIAL CORRIGENDUM#1 DATED 01.10.2022, COMMERCIAL CORRIGENDUM#2 DATED 07.10.2022 & REPLY TO PRE-BID QUERIES DATED 07.10.2022 FOR LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA FOR CGD PROJECT AT SIX GAS FOR GAIL (INDIA) LIMITED (.)

WE HEREBY ISSUE THIS FAX OF ACCEPTANCE (FOA) FOR AWARD FOR APPROX. 40% OF SCOPE OF WORK OF TENDER AT AN ESTIMATED CONTRACT VALUE OF RS. 1,47,35,528/- (INDIAN RUPEES ONE CRORE FORTY-SEVEN LAKHS THIRTY-FIVE THOUSAND FIVE HUNDRED TWENTY-EIGHT ONLY) EXCL. GST. GST SHALL BE PAYABLE EXTRA AS PER TENDER PROVISIONS. (PRESENT RATE OF GST@18%).
THE DETAILED BREAKUP OF ABOVE ORDER VALUE IS ENCLOSED AS ANNEX-1(.)

THE COMPLETION PERIOD SHALL BE AS PER TENDER DOCUMENT(.)

PLEASE SUBMIT CONTRACT PERFORMANCE BANK GUARANTEE@ 3% OF ANNUALISED CONTRACT/ORDER VALUE [EXCLUDING GST] AS PER CL. NO.37 OF ITB AND CONTRACT AGREEMENT AS PER CL. NO.36 OF ITB OF TENDER DOCUMENT (.)

YOU ARE REQUESTED TO CONTACT PROJECT COORDINATOR (MR. PRATEEK MAHESHWARI, MANAGER (CGD), MECON LIMITED, EMAIL ID: pmaheshwari@mecon.co.in) FOR FURTHER INSTRUCTIONS (.)

ALL OTHER TERMS AND CONDITIONS SHALL BE AS PER BIDDING DOCUMENT & CORRIGENDUM THERE OF AS STATED ABOVE AND AS AGREED TILL DATE (.)

A DETAILED ORDER SHALL FOLLOW (.)

FOR & ON BEHALF OF GAIL (INDIA) LIMITED

राकेश शर्मा / RAKESH SHARMA

वरि. महाप्रबंधक (अनुबंध) / SR. GM (CONTRACTS)
मेकॉन लिमिटेड, दिल्ली / MECON LIMITED, DELHI

CC: BY COURIER TO:
M/s Rich Earth Infratel Pvt. Ltd.
UNIT NO. DTJ 407 FOURTH FLOOR DLF TOWER-B
JASOLA DISTRICT CENTRE, NEW DELHI-110025
Tel No.: +91-9811025095

प्रधान कार्यालय / Head Office :

राँची / Ranchi
+91-651-248 3000 (Phone)
+91-651-248 2189/248 2214 (Fax)
ranchi@meconlimited.co.in

बैंगलूर / Bangalore
+91-80-2657 1661-63 (Phone)
+91-80-2625 2000 (Phone)
+91-80-2657 6352 (Fax)
bangalore@meconlimited.co.in

कार्यालय / Office :

मुम्बई / Mumbai
+91-22-2781 2155-58 (Phone)
+91-80-2781 2275 (Fax)
Mumbai@meconlimited.co.in

कोलकाता / Kolkata
+91-33-2282 2381-82 (Phone)
+91-33-2282 4441 (Fax)
kolkata@meconlimited.co.in

चेन्नई / Chennai
+91-44-2618 4873 (Phone)
+91-44-2618 4874 (Fax)
chennai@meconlimited.co.in

**SCHEDULE OF RATES: LAYING OF PE PIPELINE NETWORK INCLUDING ASSOCIATED WORKS FOR VARANASI GA : CGD SIX CITY
 PROJECT OF M/s GAIL (INDIA) LIMITED**

Sl. No.	Item Description	Item Code	Units	M/s Rich Earth Infratel Pvt. Ltd., Delhi		
				Quantity	Unit Rate (Inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR	TOTAL AMOUNT (Inclusive of all applicable taxes & duties & other levies [if any] payable by the Contractor under the Contract, or for any other cause except final GST) in INR
1	PE PIPELINE	A00100				
2	Pipe Laying (including crossing) in any type of surface like unprepared surface (Katcha surface)/ Normal Surface/ Hard surface/Rock surface etc using open cut/ Molding (without Casing)/ Molding (with Casing)/ Directional Drilling technique (with and without casing pipe) methodology.	A00101				
3	Receipt, Loading, unloading, storing, reloading, transportation, unloading, stringing and laying of PE100, SDR11 line pipes of all sizes including, proper stacking, identification and supply of accessories of all sizes & thickness like PE Bends, Couplers, Endcaps, Tee, Reducer, CS / GI to PE Fittings (i.e. Transition Fittings of sizes 20 mm to 32 mm), Warning Mat etc. Handling, Stringing / uncoiling, aligning of the PE line pipe on the pipeline Right-of-Use / route, laying / installation of PE line pipe alongwith required accessories as mentioned above as per specification wherever required depending on site condition including execution of all works; Storage of material in contractor's store, fabrication, access for construction procurement and supply of all materials, consumables, equipments, labour and other inputs. In the case of free issue items, the scope also includes, receiving and loading from Owner's designated store, transportation, unloading and stacking of free issue items at Contractor's store. -Laying of all PE pipe (PE 100 SDR11), Including supply of HDPE casing pipe (in case of HDD (with case). Molding (with case), Couplers, End caps etc. (Ref. cl. 4.3 of Particular job specification). -Survey of under ground utilities, execution of the work as per specification, including excavation of pits molding with the hole size not exceeding 20% of the pipe dia, jointing and insertion of carrier pipe with casing, testing & commissioning and restoration of the pits to original condition, submission of As-Built Graph as per specifications and the instruction of Engineer-in-charge. -Casing details is as given below:- 1. For 20/32 mm PE pipe (in 75 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 2. For 63 mm PE pipe (in 125 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 3. For 90 mm pipe (in 180 mm dia. HDPE Casing Pipe, PE 63/80 PN6.0). 4. For 125 mm pipe (in 250 mm dia. HDPE Casing Pipe, PE 63/80 PN 6.0).					
4	Carrying out all temporary, ancillary, auxiliary works required to make the PE pipeline ready for commissioning as per drawings.					
5	Specifications, scope of work indicated in PJS and other provisions of Contract document and instructions of Engineer-in-charge, including but not limited to carrying out the following works:					
6	Surveying of route and detours required at the time of execution, preparation of construction drawings showing survey details and submit same to Owner for review / approval.					
7	Carrying out preliminary activities such as preparation of drawings wherever required for crossing etc.					
8	Preparation and getting approval of schedules, execution procedures, drawings/ sketches/ wherever required, making trial pits to determine the underground utilities/ services etc., restoration of the abandoned trial pits to original condition.					
9	Stacking and installation of construction markers, clearing, fencing, grubbing, cutting of trees, full filling all the requirements of various statutory/ environment authorities to the entire satisfaction of concerned authorities, grading of work area.					
10	Barricading the work area as per local authorities norms & to the satisfaction of Owner/ Engineer -in- charge, installation of safety signs.					
11	Barricading the pipeline construction area prior to execution of the works as per drawing no. MEC/23QH/05/25/M/000/011 & MEC/23QH/05/25/M/000/10 enclosed with tender document and to the entire satisfaction of owner / engineer- in -charge.					

12	Laying using open trench without casing includes survey of under ground utilities (through trial pits), execution of work as per specification including Trenching to all depths by excavation in all types of soils including soft/ rocky strata (Rock Cutting to be paid separately as per SOR no 1.120) and different type of pavement / footpath / roads etc. including rock breaking, chiselling or otherwise cutting etc. as required and storing excavated soil, reusable materials at designated area as directed by Engineer in charge and to a width to accommodate the pipeline as per the relevant standard/ specification etc. [The minimum depth of the top of pipeline shall be 1.0 m measured from top of pipeline to the top of undisturbed surface of the soil or as per Specification/ OISD- 226 & PNGRB latest guidelines whichever is higher]. Dewatering of trenches / pits if required as per site condition. Repairing of all damaged utilities if any and payment of any compensation (if claimed by owner / other					
13	Uncolling / stringing & aligning of PE pipes, clamping, jointing of the pipe ends / fittings / valves by qualified personnel using approved electro-fusion techniques as per specification.					
14	Installation / lowering the pipeline in trench to required depth as per PJS, Technical Specification & drawings, supply & placement of HDPE Yellow colour warning mat (refer PJS item.- 4.2) over the pipeline along the complete route as per standard drawings, data sheets & technical specifications, padding around pipeline including supply of suitable padding material duly approved by EIC, backfilling to its original condition with excavated earth / borrowed select soil/sand duly approved by EIC & its compaction & crowning. At certain specific area of ROU, trench shall be backfilled & compacted and shall be made ready for motorable. All tiles / slabs / curb stones etc removed during excavation shall be placed properly and no separate payment shall be admissible against this activity. Restoration shall be carried as per separate SOR item mentioned elsewhere in the SOR or to be done by Owner / concerned authorities.					
15	The scope of work against this item also include Electro-fusion jointing of valves, fittings wherever required and as directed by Engineer-in-charge.					
16	The scope of work against laying of 20/32 mm pipe also includes works like making of PCC pedestal of grade (1:2:4) and size (300mm(L)X200mm(W) XHeight (H)), (H>=300mm & will be as per site condition)), supply and installation of GI Sleeve (Heavy (C-Class) as per IS-1239), filling of sand and installation of TF (along with supply).					
17	Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per the instructions of the Engineer-in-charge.					
18	Final clean-up of right-of-use or area disturbed by contractor during their construction activities for laying of pipeline works and disposal of debris and surplus material to designated disposal areas and backfilling of trench and compaction of the same as per satisfaction of Owner and / or as directed by Engineer-in-charge.					
19	Maintaining the completed pipelines and installation for any defect or failures during defect liability period (i.e. 12 months from date of completion of work).					
20	Handing over the completed works to Owner for their operation/ use, reconciliation of material area wise and obtaining "no objection certificate" from Owner/PMC					
21	Preparation and submission of Daily progress report, Laying Graphs / PE line cards on daily basis.					
22	On completion of gas charging of pipelines. Preparation and submission of As-built drawings, crossings details, termination, utility graphs and deviation statements.					
23	In case, the minimum required depth is not possible due to site condition, necessary mitigation measures (for minimum top cover of 600mm) shall be required to be taken by contractor in consultation with EIC as per PNGRB Guidelines. No additional payment shall be admissible against the same. However required top cover can further be reduce till 375mm and payment against the same shall be made according to SOR item no. A00300.					
24	Submission of all documents required for contract closure in numbers as mentioned in contract					
25	Any other activities not mentioned / covered explicitly above, but otherwise required for satisfactory completion / operation / safety / statutory / maintenance of the works shall also be covered under the scope of work and has to be completed by the Contractor within specified schedule at no extra cost to Owner. All the work shall be executed in accordance with the provision of contract.					
26	Pipeline Laying through Open Cut (Without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00102				
27	20 mm PE 100 pipe		Meter	800	190.92	1,52,737
28	32 mm PE 100 pipe	A00104	Meter	2,000	190.92	3,81,843
29	63 mm PE 100 pipe	A00105	Meter	100	223.84	22,384
30	90 mm PE 100 pipe	A00106	Meter	100	280.90	28,090
31	125 mm PE 100 pipe	A00107	Meter	100	337.95	33,795
32	Pipeline Laying Through Moling(without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00108				

8

33	20 mm PE 100 pipe	A00109	Meter	2,400	241.40	5,79,348
34	32 mm PE 100 pipe	A00110	Meter	9,800	241.40	23,65,671
35	Pipeline Laying Through HDD (without casing) in unprepared surface (Katcha surface)/ Normal Surface	A00114				
36	32 mm PE 100 pipe	A00115	Meter	12,800	412.57	52,80,845
37	63 mm PE 100 pipe	A00116	Meter	3,000	438.90	13,16,700
38	90 mm PE 100 pipe	A00117	Meter	400	653.96	2,61,584
39	125 mm PE 100 pipe	A00118	Meter	600	882.19	5,29,313
40	Pipeline Laying through Open Cut(With casing) in unprepared surface (Katcha surface)/ Normal Surface	A00119				
41	20 mm PE 100 pipe	A00120	Meter	200	285.29	57,057
42	32 mm PE 100 pipe	A00121	Meter	400	285.29	1,14,114
43	63 mm PE 100 pipe	A00122	Meter	40	474.01	18,960
44	90 mm PE 100 pipe	A00123	Meter	40	798.80	31,952
45	125 mm PE 100 pipe	A00124	Meter	40	1,338.65	53,546
46	Pipeline Laying Through Moling(with casing) in unprepared surface (Katcha surface)/ Normal Surface	A00125				
47	20 mm PE 100 pipe	A00126	Meter	200	346.73	69,346
48	32 mm PE 100 pipe	A00127	Meter	200	346.73	69,346
49	Pipeline Laying Through HDD (with casing) in unprepared surface (Katcha surface)/ Normal Surface/Hard Surface	A00131				
50	32 mm PE 100 pipe	A00132	Meter	400	570.57	2,28,228
51	63 mm PE 100 pipe	A00133	Meter	40	1,242.09	49,683
52	90 mm PE 100 pipe	A00134	Meter	20	1,887.27	37,745
53	125 mm PE 100 pipe	A00135	Meter	20	2,611.46	52,229
54	NOTE: i) The lengths of pipelines are tentative. ii) For restoration of asphalt / concrete roads, the item for construction of asphalt top / concrete top / Tiles/Stone slab/Paver Blocks/Curb Stones/RCC Top shall be paid separately as per the rates quoted for the same elsewhere in the SOR. iii) For SOR Item No. A00102 to A00135 payment for length of PE pipe will be done as per casing pipe length					
55	Restoration	A00200				
56	Restoration of the roads, pavements, channels, footpaths, tiles, stones etc. to original condition including supply of the approved quality material required, as per local authorities norms, obtaining NOC from concerned local authorities / land owners / third party inspection agencies (if any) designated by owner and to the satisfaction of Engineer-in-charge.					
57	Asphalting	A00201	Meter	200	193.12	38,623
58	Cement Concrete	A00202	Meter	200	539.85	1,07,969
59	Tiles / Paver / Blocks / Curb Stones, Red sand stone	A00203	Meter	4,800	197.51	9,48,024
60	Brick Soling / Channels, etc.	A00204	Meter	400	140.45	56,179
61	RCC	A00205	Meter	40	658.35	26,334
62	Pipe laying inside Private Property i.e Multistory buildings / apartments with no movement of Heavy Vehicles, surrounded with Boundary wall where pipe top cover could not be achieved 600 mm.	A00300				
63	Minimum pipe top cover of 375 mm is required and the line pressure shall not exceed 110mbar.					
64	Necessary mitigation measures such as RCC slab (150mm thick and 300mm width) at the top, the RCC slab of the roof of basement shall be treated as bottom. There shall be sand filling across three sides of the line pipe of 100mm each shall be required to be taken by contractor in consultation with EIC as per latest PNGRB Guidelines. No additional payment shall be admissible against the same.					
65	Receipt, Loading, unloading, storing, reloading, transportation, unloading, stringing and laying of 20mm, 32mm & 63mm PE pipe (PE 100 SDR11) including proper stacking, identification, and supply of accessories of below mentioned sizes & all thickness like PE Bends, Couplers, Endcaps, Tee, Reducer, CS / GI to PE Fittings (i.e. Transition Fittings of sizes 20 mm to 63 mm), Warning Mat etc. Handling, Stringing / uncoiling, aligning of the PE line pipe on the pipeline Right of-Use / route , laying / installation of PE line pipe alongwith required accessories as mentioned above as per specification wherever required depending on site condition including execution of all works; Storage of material in contractor's store, fabrication, access for construction procurement and supply of all materials, consumables, equipments, labour and other inputs. In the case of free issue items, the scope also includes, receiving and loading from Owner's designated store, transportation, unloading and stacking of free issue items at Contractor's store.					
66	Carrying out all temporary, ancillary, auxiliary works required to make the PE pipeline ready for commissioning as per drawing.					
67	Surveying of route and detours required at the time of execution, preparation of construction drawings showing survey details, and submit same to Owner for review / approval.					
68	Preparation and getting approval of schedules, execution procedures, drawings/ sketches/ wherever required, making trial pits to determine the underground utilities/ services etc., restoration of the abandoned trial pits to original condition.					

69	Barricading the pipeline construction area prior to execution of the works as per drawing no. MEC/23QH/05/25/M/000/011 & MEC/23QH/05/25/M/000/10 enclosed with tender document and to the entire satisfaction of owner / engineer-in-charge.					
70	Laying using open trench without casing includes survey of under ground utilities (through trial pits), execution of work as per specification including Trenching to all depths by excavation in all types of soils including soft/ rocky strata (Rock Cutting to be paid separately as per SOR no 1.120) and different type of pavement / footpath / roads etc. including rock breaking, chiselling or otherwise cutting etc. as required and storing excavated soil, reusable materials at designated area as directed by Engineer in charge and to a width to accommodate the pipeline as per the relevant standard/ specification etc. [The minimum depth of the top of pipeline shall be 1.0 m measured from top of pipeline to the top of undisturbed surface of the soil or as per Specification/ OISD- 226 & PNGRB latest guidelines whichever is higher]. Dewatering of trenches / pits if required as per site condition. Repairing of all damaged utilities if any, and payment of any compensation (if claimed by owner / other					
71	Uncoiling / stringing & aligning of PE pipes, clamping, jointing of the pipe ends / fittings / valves by qualified personnel using approved electro-fusion techniques as per specification.					
72	Installation / lowering the pipeline in trench to required depth, supply & placement of HDPE Yellow colour warning mat (refer PJS item.- 4.2) over the pipeline along the complete route as per drawing no. MEC/U999/05/11/C/ and backfilling to its original condition with excavated earth / borrowed select soil / sand duly approved by EIC & its compaction & crowning. At certain specific area of ROU, trench shall be backfilled & compacted and shall be made ready for motorable. All tiles / slabs / curb stones etc removed during excavation shall be placed properly and no separate payment shall be admissible against this activity. Restoration shall be carried as per separate SOR item mentioned elsewhere in the SOR or to be done by Owner / concerned authorities.					
73	The scope of work against laying of 20/32 mm pipe also includes works like making of PCC pedestal of grade (1:2:4) and size (300mm(L)X200mm(W) XHeight (H)), (H>=300mm & will be as per site condition)), supply and installation of GI Sleeve (Heavy (C-Class) as per IS-1239), filling of sand and installation of TF (along with supply).					
74	Pneumatic testing, purging with nitrogen and commissioning as per specification and approved procedures providing all tools and tackles, nitrogen, instruments, manpower and other related accessories and as per the instructions of the Engineer-in-charge.					
75	Final clean-up of right-of-use or area disturbed by contractor during their construction activities for laying of pipeline works and disposal of debris and surplus material to designated disposal areas and backfilling of trench and compaction of the same as per satisfaction of Owner and / or as directed by Engineer-in-charge.					
76	Maintaining the completed pipelines and installation for any defect or failures during defect liability period (i.e. 12 months from date of completion of work) .					
77	Handing over the completed works to Owner for their operation/ use, reconciliation of material area wise and obtaining "no objection certificate" from Owner/ Consultant.					
78	On completion of gas charging of pipelines. Preparation and submission of As-built drawings, crossings details, termination, utility graphs and deviation statements.					
79	Any other activities not mentioned / covered explicitly above, but otherwise required for satisfactory completion / operation / safety / statutory / maintenance of the works shall also be covered under the scope of work and has to be completed by the Contractor within specified schedule at no extra cost to Owner. All the work shall be executed in accordance with the provision of contract.					
80	20 mm PE 100 pipe	A00301	Meter	400	313.81	1,25,525
81	32 mm PE 100 pipe	A00302	Meter	1,600	326.98	5,23,169
82	Supply of GI/ MS/ Concrete Sleeves (wherever required as a Special Case as per instructions of the Engineer-in-charge)	A00400				
83	Supply, installation of sleeve, insertion of pipe, sealing the annuals, firm fixing of Sleeves with concrete mix. Breaking through any obstructions and their subsequent restoration, as per specifications and instructions of the Engineer-in-charge. GI/MS Pipes shall be Heavy (C-Class) as per IS-1239					
84	GI Sleeves /Concrete Sleeves	A00401	Nos.	100	127.28	12,728
85	2 1/2" NB, 1' Length	A00402	Nos.	4	223.84	895
86	4" NB, 1' Length					
87	MS Enamel Coated					
88	4" NB, 3' Length	A00403	Sq. Metre	4	513.51	2,054
89	Concrete Sleeve (NP-2 Class)					
90	4" NB, 3' Length	A00404	Sq. Metre	4	127.28	509

91	6" NB, 3' Length	A00405	Sq. Metre	4	206.28	825
92	Note: The decision regarding use of type of sleeves to be used at various locations shall be made by Engineer In-Charge / Owner					
93	Installation of valve(Normal stem) in pit including supply of valves	A00500				
94	Supply of isolation valves (as per data sheet) and installtion of valves in the valve pits as per typical drawing and specification enclosed and instructions of Engineer-in-charge. Payment of valve pits shall be paid separately as per SOR.					
95	PE Valve 32 mm dia	A00501	Nos.	8	3,028.41	24,227
96	PE Valve 63 mm dia	A00502	Nos.	2	6,688.84	13,378
97	PE Valve 90 mm dia	A00503	Nos.	1	10,401.93	10,402
98	PE Valve 125mm dia	A00504	Nos.	1	14,365.20	14,365
99	Installation of valve(Long stem) in pit including supply of valves	A00600				
100	Supply of isolation valves (as per data sheet) and installtion of valves in the valve pits as per typical drawing and specification enclosed and instructions of Engineer-in-charge. Payment of valve pits shall be paid separately as per SOR.					
101	PE Valve(Long stem) 32 mm dia	A00601	Nos.	4	3,335.64	13,343
102	PE Valve(Long stem) 63 mm dia	A00602	Nos.	2	7,373.52	14,747
103	PE Valve(Long Stem) 90 mm dia	A00603	Nos.	1	11,455.29	11,455
104	PE Valve(Long stem) 125mm dia	A00604	Nos.	1	15,800.40	15,800
105	Construction of Valve Pits as per the enclosed tender drawing and specification. The item includes supply of all the material including Pre-cast RCC cover, shuttering, reinforcement, labour, curing etc as per the drgs, specification and instruction of EIC. (Double rods and Round Manhole)	A00701				
106	Type-I having Internal size of Minimum 1000 x 1000mm	A00702	Nos	8	14,172.08	1,13,377
107	Type-II having Internal size of Minimum 600 x 600mm	A00703	Nos	22	8,685.83	1,91,088
108	Note: The tender drawing enclosed is only for reference purpose and contractor shall be required to prepare drawings (in line with reference tender drawing) for specific sizes of Valve pits and the same shall be approved by EIC.					
109	<u>Fabrication & Installation of Markers</u>	A00800				
110	<u>RCC Route Markers</u>					
111	Supply, fabrication and installation of RCC route markers as per the attached drawing in technical volume, along the route including all associated civil works such as excavation and construction in all types of soils, construction and pedestals and grouting with concrete.	A00801	Nos.	500	263.34	1,31,670
112	<u>Pole Markers with Foundation</u>					
113	Supply, fabrication and installation of plate markers as per the attached drawings in technical volume including all associated civil works such as excavation and construction in all types of soils, construction and pedestals and grouting with concrete, cleaning, stencil let.	A00802	Nos.	100	1,465.93	1,46,593
114	<u>Warning Plate Markers</u>					
115	Supply, fabrication and installation of plate markers, including application of approved color and quality of primer and paint, stencil letter cutting of lettering, numbers, direction, etc. as per the attached drawing in technical volume to be installed near regulator.	A00803	Nos	200	272.12	54,424
116	<u>Paver Block-Tiles Markers</u>					
117	Supply, fabrication and installation of Pvaer Block-Tiles markers, including application of approved color and quality of primer and paint, stencil letter cutting of lettering, numbers, direction, etc. as per the attached drawings to be installed on Paver Block/Tiles on foot Path/As per the instruction of EIC.	A00804	Nos	40	254.56	10,182
118	Construction of RCC structure for protection of service line for drain/nallah Crossings	A00900				
119	Construction of Non suspended slabs/pavement slabs including pedestal/ramp etc.using reinforced cement concrete of M-25 grade (Concrete shall be design mix/nominal mix with 20 mm & down size graded crushed stone aggregates) to protect the PE pipe laid. All necessary form work, finishing the top surface rough/smooth as required in any position, shape, level and thickness etc. shall be as specified and directed by EIC. The rates shall include grouting of pockets, supply of all material, tools, reinforcement steel etc.	A00901	Cubic Meter	4	9,019.40	36,078
120	GPR Survey (Scope includes submission of GPR survey report before/after obtaining permission for excavation from land owning agencies with complete satisfaction of the land owning agency & Owner)	A01000				
121	GPR Survey - Length up to 100 meter	A01001	Nos.	16	5,705.70	91,291
122	GPR Survey - Length more than 100 meter	A01002	RM	1,000	57.06	57,057
123	Note :-In case GPR survey length exceeds 100m, for quantity beyond 100m, amount in addition to SOR item no.- A01001, shall be payable based on per meter rate quoted against SOR item No. A01002					
124	<u>Excavation of Hard rock/surface</u>	A01100				

125	Excavation of trench or pits, wherever hard rock presence is exceeding 1.5 m in any direction of the trench and excavation of trench or pits in Malba/Multiple layers of asphalt/ brick / PCC/RCC etc and removable only by pneumatic chisel / drill as per the specifications and direction of EIC. The rates are payable over and above the Laying rates as per relevant SOR Item No. A00101					
126	Cutting of PCC/RCC surface with thickness more than 12" or Continuous asphalt multi-layer/ Malba/ Brick / Boulders more than 24".(Malba shall be considered as a strata where soil is in mixed form of debris/building rubbish or discarded pieces of bricks/stones)	A01101	RM	80	109.73	8,778
127	Additional Backfilling of Sand in excavated trench/Pit as per site requirement	A01200				
128	Filling of M-Sand/Soft soil as per the site requirement and as per the instructions of EIC (except the sand padding as mentioned SOR Item No. A00101)					
129	Laying of the carrier pipeline (for both water body and road crossing) by the approved HDD method across the crossing including, strings preparation of carrier, welding, testing, 100% radiography by x-ray, welding repair and retest, coating of field joints with special type Dirax Heat Shrink Sleeve or equivalent (including supply of coating material) and repair of pipeline coating with special PERP-80 repair patch or equivalent material (including supply of repair patch) as per specification, pre-hydrotest of complete strings made for crossing as per specification etc.	A01201	Cu-Meter	10	636.41	6,364
130	DRS/DCU/DRS cum DCU works	B00100				
131	Installation of DRS/DCU/DRS cum DCU	B00101				
132	Receiving and taking over, handling, loading, transportation and unloading of DRS/DCU/DRS cum DCU from Owner's designated stockyards to site, installation at foundation (including supply of all structural items) and hooking up with PE pipe including all works as required to complete the job as per the drawings and specification, scope of work mentioned in tender document. The scope includes supply of transition fittings and other PE and CS fittings as per requirements and various associated works (including steel welding) to commission DRS/DCU/DRS cum DCU. Note: 1) Amount towards civil work shall be payable as per related SOR items. 2) Rate to include cost of all labour, tools, tackles, equipment, hire charges. 3) Bolts, nuts, washer, U-clamps, gaskets etc. if required during installation shall be procured and supplied by the Contractor within the rate quoted. These items shall not be separately measured and paid.					
133	DCU/DRS cum DCU. (Maximum weight of single DCU/DRS cum DCU shall be about 6.0 T)	B00102	Nos.	0	-	-
134	Note: i) The quantities mentioned are indicative only. ii) For all the supply items mentioned above, procurement shall be made as per specification after due approval of engineer-in-charge.					
135	CIVIL WORKS	C00100				
136	Earth Work Earth in excavation and filling to the grades and levels shown in the approved drawings in all kinds of conditions including for Road embankments, using approved quality good earth from designated borrow area, for all heights and depths including clearing and stripping (min. 150 mm) of the area marked for filling, taking spot levels, consolidating the exposed natural soil surface, excavating the earth from borrow area loading, transporting & unloading, spreading in layers not exceeding 150 mm thickness, breaking clods, watering (if reqd.), ramming and compacting by manual/ mechanical means to give minimum 92% of modified Proctor's density of earth, testing & dressing including disposal of all unserviceable material all complete as per specifications and directions of Engineer-in-charge. (Rate to include cost of all labour, tools, tackles, equipment, hire charges, cost of borrow earth by way of royalties, right of way, cess etc., as applicable with all bye works and sundry works).	C00101	Cubic Meter	8	250.17	2,001
137	PCC 1:2:4 1 Cement : 2 Coarse sand : 4 stone aggregate 20mm nominal size.	C00200	Cubic Meter	4	3,322.47	13,290
138	PCC 1:4:8 1 Cement : 4 Coarse sand : 8 stone aggregate 40mm nominal size.	C00300	Cubic Meter	2	2,677.29	5,355
139	(Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials, shuttering, earthwork in excavation and backfilling using approved earth in all conditions etc. with all bye works and sundry works.)					
140	Reinforced Cement Concrete	C00400				

141	Providing and laying reinforced cement of grade M-25 with 20mm and down grade crushed stone aggregate in all types of structures like foundations, pedestals, pedestal bases, pipe supports, sleepers, column, equipment foundation, cable trench including construction joints, bitumen painting on surface in contact with soil, supplying and fixing reinforcing steel, shuttering, inserts, finishes etc. at all depths and heights complete as per drawings, specifications and direction of the Engineer-in-charge.	C00401	Cubic Meter	4	9,019.40	36,078
142	Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement including sulphate resistant cement for sub-structures, R/F steel, Inserts, bolts, conduits, bitumen, other minor construction materials, shuttering, staging, earthwork in excavation and backfilling using serviceable earth in all conditions, shorting bailing and pumping out water, testing of concrete, curing etc. with all bye works and sundry works.					
143	Brick Work	C00500				
144	Providing brick work with brick class designation M-7.5 of IS:1077 in cm1:4 (1 cement : 4 sand) in steps, walls, retaining walls and load bearing structures drains, or any shape with all lead, depths & height including curring, scaffolding, etc., as per specifications and drawings with all bye-works and direction of the Engineer-in-charge.	C00501	Cubic Meter	8	3,423.42	27,387
145	(Rate to include cost of all labour, tools, tackles, equipment, hire charges, supply of all materials such as minimum 43 grade cement, bricks, finishes, bitumen, other minor construction materials, shuttering, staging, masonry work, plastering, painting etc. with all bye-works and sundry works).					
146	<u>Note: The quantites of individual item can varied as per site requirement. The payment will be made as per actual certified measurement at site.</u>					
147	Laying of Brick layer/ Concrete	C00600				
148	Providing single layer of Brick / Concrete / or impact resistant tape to entire width of trench above Warning Mat placed in trench over the laid pipeline as per OISD 226, standard drawing, specification and instruction of Owner. (Rate to include cost of all labour, tools, tackles, equipment, hire charges & supply of all materials, etc)					
149	Brick Layer for width of PE pipeline trench as per drawing (75 mm thk.)	C00601	Square Meter	8	153.62	1,229
150	Concrete for width of PE pipeline trench as per drawing (80 mm thk.)	C00602	Square Meter	8	232.62	1,861
151	Demolition of PCC work below plinth level	C00700				
152	Demolishing plain cement concrete (PCC) work (taking all necessary safety precautions) for all depths below plinth level including supply of all tools & tackles, necessary scaffolding, propping, underpinning, etc. , disposal of unserviceable material outside the boundary limits keeping the owner indemnified of any liabilities from statutory/ local bodies, all complete work as specified and directed.	C00701	Cubic Meter	4	1,316.70	5,267
153	Excavation for foundation works	C00800				
154	Excavation as per plan, upto 3 meters and upto any lead in all conditions, backfilling using serviceable earth and disposal of surplus and unserviceable earth. Soil to be levelled and neatly dressed complete in all respect as per scope of work, technical specification and directions of EIC.					
155	Upto 3.0 Mtrs	C00801	Cubic Meter	4	921.69	3,687
156	Dismantling of RCC & cutting of reinforcement (Thickness above 3")	C00802	Cubic Meter	4	1,601.99	6,408
157	Structural Works	D00100				
158	Providing and fixing Fencing Structure	D00101				
159	Supplying, fabricating & fixing GI wire fencing fabricated from GI wire conforming to IS: and GI weldmesh made from 3mm GI wire @ 75 mm bothways to structural steel frame by means of welding/bolting, including applying two coats of approved quality of synthetic enamel paint over a priming coat of in approved shade including supply of all raw materials, bolts, electrodes, transportation, including making pokets & pouring with PCC (1:2:4) in of block for fixing of posts etc including Y type angle and barbed wire (900 mm) complete as per enclosed drawing, technical specifications, scope of works and directions of the Engineer-In-Charge.					
160	Fencing height 2.1m alongwith barbed wire of height atleast 900 mm on Y type angle.	D00102	RM	16	1,935.55	30,969
161	Providing and fixing Fencing Gates	C00201				
162	Supplying, fabricating & fixing fencing gates fabricated from pipes conforming to IS:1161 and plates conforming to IS:2062 & fixing of GI weldmesh made from 3mm GI wire @ 75 mm bothways to structural steel frame by means of welding/bolting, painting with enamel paint in approved shade including supply of all raw materials, bolts, electrodes, transportation etc complete as per enclosed sketch, technical specifications and directions of the Engineer-In-Charge.					
163	4m Wide x 2.1m High	D00202	Nos.	0	-	-
164	3m Wide x 2.1m High	D00203	Nos.	0	-	-
165	1m Wide x 2.1m High	D00204	Nos.	0	-	-

166	Preservation of Pipeline	E00100				
167	Preservation of pipeline sections and associated facilities (in event of delay in commissioning, other unforeseen reasons) including supply of nitrogen, all consumables, all equipment, man-power, etc. complete as per the requirements of specifications, other provisions of Contract document and instructions of Engineer-in-charge.					
168	By filling and pressurizing with nitrogen to a pressure of 2 bar(g) for a period of one month or part thereof.	E00101				
169	For 125 mm Pipeline	E00102	Meter	200	8.34	1,668
170	For 90 mm Pipeline	E00103	Meter	200	7.46	1,492
171	For 63 mm Pipeline	E00104	Meter	200	6.14	1,229
172	For 32 mm Pipeline	E00105	Meter	400	5.27	2,107
173	For 20 mm Pipeline	E00106	Meter	400	4.83	1,931
174	For every additional period of one month or part thereof Limited to 6 month	E00201				
175	For 125 mm Pipeline	E00202	Meter	200	4.39	878
176	For 90 mm Pipeline	E00203	Meter	200	3.95	790
177	For 63 mm Pipeline	E00204	Meter	200	3.51	702
178	For 32 mm Pipeline	E00205	Meter	400	3.07	1,229
179	For 20 mm Pipeline	E00206	Meter	400	2.63	1,053
180	Notes: i) The above length is not for a single section but for no. of sections. ii) All accessories ie; End caps and two nos tappings of 3/4 inches, PG to be considered per section and rate for the same shall be quoted by bidder under this item. iii) If month is partially complete, payment shall be made on prorata basis. iv) Scope includes pressure holding for a period of 6 months or as per EIC and jointing of PE pipe (if required) due to damage by any means and further filling of nitrogen for pressure holding.					
181	Note: (i) The quantities of individual item can varied as per site requirement. The payment will be made as per actual certified measurement at site. For the supply items the quantities shall be procured after approval from client/ consultant/EIC. (ii) The bidder must indicate currency(ies) against each quoted item of the SOR. (iii) The total amount shall also be given by the bidder in the quoted currency(ies). (iv) Some of the may / may not be execute as per site requirements					
182	Liaisoning with Land Owning Agencies for Permission Submission of applications as per approved drawing provided by owner / owner's representative (Initial Route survey, preparation of drawing, measuring and providing details of surface type shall be in scope of contractor), obtaining and submission of demand note, coordination, Liaisoning, obtaining written permission from land owning agencies like NHAI, AAI, Indian Railways and any other government agencies who maintains the public lands and agencies owing Private lands etc. (all fee paid to authorities excluding demand charges or Bank Guarantees shall be reimbursed against documentary evidence). This rates are not applicable for Private lands i.e. Apartments etc. Permissions required from various authorities like NHAI / Railways / Irrigation (Canal) etc. falling enroute shall be inclusive in the item rate.	F00100	KM	4	11,736.19	46,945
Total Excluding GST						1,47,35,528
Total Including 18% GST						1,73,87,923

Signature Not Verified

Digitally signed by RAKESH SHARMA

Date: 2023.03.23 10:59:20 IST

Location: eProcurement System for Central PSUs

