

राष्ट्रीय राजधानी क्षेत्र परिवहन निगम

(भारत सरकार एवं प्रतिभागी राज्य सरकारों का एक संयक्त उपक्रम)

National Capital Region Transport Corporation (A Joint venture of Government of India and participating State Governments)

DA/MS/COR-OF/019

Dated: 07.08.2020

LETTER OF ACCEPTANCE

To,

M/s L.R Sharma & Company V-17, Lower Ground Floor,

Green Park Extn., New Delhi-110016 Ph. 011-26174455,

Email: lrsrajesh99@gmail.com

(hereinafter termed as Contractor)

(Kind Attention- Mr. Rajesh Sharma)

Sub: -Bid No. DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipeline, road widening works, etc and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

Ref: -

- i. Press advertisement dated 26.02.2020
- ii. Bid reference No. DA/MS/COR-OF/019 dated 27.02.2020.
- iii. Addendum & Corrigendum-01 Published on 23.03.2020.
- iv. Addendum & Corrigendum-02 Published on 30.03.2020.
- v. Addendum & Corrigendum-03 Published on 15.04.2020.
- vi. Addendum & Corrigendum-04 Published on 16.04.2020.
- vii. Addendum & Corrigendum-05 Published on 08.05.2020.
- viii. Addendum & Corrigendum-06 Published on 27.05.2020.
 - ix. Technical Bid opened on 10.06.2020.
 - x. Post Bid clarifications uploaded on 20.06.2020.
- xi. Reply of Post Bid clarifications downloaded on 24.06.2020.
- xii. Financial Bid opened on 30.07.2020.

With reference to the above this is to inform to the Contractor that the Contractor's bid for the subject work of "Bid No. DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipeline, road

Bid No. DA/MS/COR-OF/019

Page 1 of 4

Registered & Corporate Office:

7/6, सिरी फोर्ट इंस्टीट्यूशनल एरिया, अगस्त क्रांति मार्ग, नई दिल्ली 110049 7/6, Siri Fort Institutional Area, August Kranti Marg, New Delhi 110049

CIN. U60200DL2013G0I256716 Sin Fort tresta P +91 11 41066943 F: +91 11 41066953 August Kranti M: contactus@ncrtc.in

widening works, etc and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor" (hereinafter termed as the "Works") has been accepted by National Capital Region Transport Corporation Ltd (hereinafter termed as "Employer") at total contract price of Rs.12,13,00,000/- (Rupees Twelve Crore Thirteen Lacs Only), hereinafter termed as "Contract value", inclusive of all taxes, duties, royalties etc. Including GST. The scope of work, accepted rates and terms/conditions applicable to this LOA are as under:

1.0 Scope of work

In terms of Clause ITB 1.1 (Instructions to Bidders), Section-1 of the bid documents, the Scope of Work covered under this LOA is as stipulated in Part-II Employer's Requirements of the bid documents read with amendment referred above, uploaded on e-portal and submitter by the Bidder with this Bid and considered by the Contractor in preparation and submission of their Bid. The Works shall be carried out as per the above Scope of Work.

2.0 Accepted Rates/Cost and Payment Schedule

2.1 The accepted rates for various items of work covered under this LOA are stipulated in the Bill of Quantities enclosed as Annexure-I (Bill of Quantities) to this LOA. The Accepted rates includes all duties, taxes, Goods and Services Tax (GST), royalties, cess and other levies payable by the Bidder under the Contract or for any other cause, as on the date 28 days prior to the deadline for submission of bids, are included in the rates and prices and the total Bid Price submitted by the Bidder. Contractor is required to submit GST invoice showing GST component separately as per statutory requirements. The GST component as applicable for first Interim payment certificate (IPC) shall be released upon submission of GST invoice. The subsequent Interim payment certificate shall be raised for payment upon submission of documentary evidence towards payment of GST collected on the previous bill to the GST Authorities. However, if subsequent bills are raised before return submission date of previous bill period, then the documentary evidence towards payment of GST shall be provided within 7 days from the due date of such return filing. The Final bill/single bill payment shall be released on the undertaking by the contractor/supplier for providing evidence within 7 days from the due date of such return filing for final bill based on GST provision for due dates.

2.2 In terms of **Clause ITB 14.5 of Section 2 BDS**, the quoted price shall be adjustable in accordance with Clause No. 11.1.3 (C) of the Particular Conditions of Contract.

August Krati Merg.
New Debi-11049
NGRTC

Bid No. DA/MS/COR-OF/019

3.0 Completion Period

In terms of Clause 1.2 (c) of IFB of the bid documents, the entire work shall be completed in a period of 24 months from the Commencement Date. As per Clause 8.1 of GCC, Section-5, the Commencement Date will start from 14.08.2020 i.e. 07 days from the date of issue of LOA.

4.0 Submission of Performance Security

In terms of ITB 40 (Instructions to Bidders), Section-1 of the bid documents, within 28 days of receipt of this LOA by the Contractor, the Contractor shall furnish to the Employer a Performance Security in any of the forms stipulated in Clause 4.2 of the General Condition of Contract (GCC), Section-5 and Appendix to Bid of the bid document, for an amount of Rs. 1,21,30,000/- (Rupees One Crore Twenty One Lac Thirty Thousand Only) being amount equal to 10% (Ten Percent) of the Contract Price. As per Clause 4.2 of GCC, the Performance Bank Guarantee must be issued on "Structure Financial Messaging System (SFMS)" platform. The Performance Security shall be valid till six months beyond the Defect Liability Period. The original Performance Security shall be submitted to Procurement Cell of NCRTC (Corporate Office) as per Clause 1.2 (k) of IFB.

5.0 Release of Bid Security

In terms of Clause ITB 19.5 (Instructions to bidders), Section-1 of the bid document, the bid security submitted by the Contractor with his bid shall be returned upon the execution of the Contract Agreement and on receipt of the Performance Security by the Employer or the condition stipulated in bid documents.

6.0 Signing of Contract Agreement

In terms of **Clause ITB 41 of Section-1 (Instructions to Bidders)** of the bid documents, the Contractor shall enter into a contract agreement with the Employer for the works covered under this LOA within the time limits as specified therein. The Contractor shall be informed by the Employer about signing of contract agreement on receipt of acceptance of this LOA and Performance Security by the Employer.

7.0 Other Terms and Conditions

The execution of this contract shall be governed by the various stipulations in the bid documents referred above. Any deviation from the above conditions, submitted by the Contractor in its bid, if any, stands withdrawn.

8.0 Nomination of Engineer in Charge

Bid No. DA/MS/COR-OF/019



Page 3 of 4

In terms of Clause 3.1 of General Conditions of Contract, Section-5, it is to inform that Dy. CE/Civil-1/GGN, National Capital Region Transport Corporation Limited, CPM Gurugram Office, Leisure Valley Road, near Westin Hotel, IFFCO Chowk, Gurugram, Haryana 122022, has been nominated as the Engineer for the subject Contract. The Contractor is advised to interact with the above official for further instructions as regards the execution of Works.

9.0 Acceptance of the LOA

This Letter of Acceptance (LOA) is being issued in Two Original and identical sets, in favour of the Contractor. Any one set may be retained by the Contractor and the other set is required to be returned by the Contractor, duly signed and stamped stating "Unconditionally accepted" on each page (including the enclosures) by the authorized signatory of the Contractor, as a token of Contractor's unconditional acceptance of the same so as to reach the undersigned within seven days of issue of this letter. This Letter of Acceptance shall constitute a binding Agreement between the Employer and the Contractor till such time a formal Agreement is signed between the Employer and the Contractor for the execution of this Contract.

Please acknowledge receipt of the letter.

Yours faithfully, For & on behalf of National Capital Region Transport Corporation Limited

> (Dilip Kumar Mehto) Deputy General Manager/Procurement

Encl: Annexure-I (Bill of Quantities: Total 07 pages).

Copy to: ED/DLI-SNB, CPM/GGN, GGM/Finance, GM/Planning, Sr. DGM HR.

NATIONAL CAPITAL REGION TRANSPORT CORPORATION LIMITED



DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

PART-III

Section-10

Bill of Quantities

7/6, Siri Fort Institutional Area, August Kranti Marg, New Delhi-110049, Phone: 011-41066943, Fax: 011-4106 6953 NATIONAL CAPITAL REGION TRANSPORT CORPORATION LTD.,



fage or of at

	PREAMBLE
1	The accepted Bill of Quantities shall be read in conjunction with Instruction to Bidders, General and Particulars Conditions of Contract, Notice for Invitation of bids, Technical specification, Employer's Requirements.
2	The accepted rate/price in the BOQ are for completed and finished items of work and complete in all respect.
т	Location where the road vehicles/ pedestrians are mixing along the construction site, shall be provided and maintained with barricading as per drawing provided by employer. The cost of barricading including shifting etc, are included in the accepted rates of respective items & nothing extra shall be paid separately for the same.
4	The work executed against the Bill of Quantity items would be paid on measurement basis.
2	The Contractor may raise their 'On Account' payments on monthly basis as per the status of work on the last day of the respective month.
9	The Accepted rates/percentage are inclusive of necessary lighting, drinking water, lead & lift of the materials, security guards, housekeeping, general safety of site, cost towards any other statutory compliances etc complete and any other cost towards in compliance of tender document.
7	All duties, taxes, Goods and Services Tax (GST), royalties, cess and other levies payable by the Bidder under the Contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder. Contractor is required to submit GST invoice showing GST component separately as per statutory requirements. The GST component as applicable for first Interim payment certificate (IPC) shall be released upon submission of GST component as applicable for first Interim payment certificate shall be raised for payment upon submission of documentary evidence towards payment of GST collected on the previous bill to the GST Authorities. However, if subsequent bills are raised before return submission date of previous bill period, then the documentary evidence towards payment of GST shall be provided within 7 days from the due date of such return filing for final bill based on GST provision for due date of such return filing for final bill based on GST provision for due dates.
00	The said financial amount categorised as Schedule A, B & C are inclusive of GST.



Page oz of 07

Bill of Quantity SUMMARY

DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

	NAME OF BIDDER			M/s L.R.Sharma & Co.	
		Financial Amount		Percentage'quoted by the bidder above/below/ at par the respective Schedule/ Section (including all Duties, & Taxes, Cess Etc. & GST)	Accepted Amount (in INR) (including all Duties, & Taxes, Cess Etc GST)
S.No.	Description	(Including all Duties, &- Taxes, Cess Etc.)	Above/below/at par	(Percentage (%age) in numerical figure)	(in fig.)
-	2	e	4	5	9
-	Schedule A: DSR Civil	14,00,00,000.00	Below	20.50	₹ 11,13,00,000.00
2	Shedule B: Non-DSR	50,00,000.00	At Par	00'0	₹ 50,00,000.00
9	Shedule C: DSR Electrical	50,00,000.00	At Par	00'0	₹ 50,00,000.00
	Total	15,00,00,000.00			₹ 12,13,00,000.00



		Bill of Quantity	.;4
DA/MS water p electric	//COR-OF/019: Executivipeline, storm water disal & telecom work betv	DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.	shifting such as c. and associated dor.
S.NO	DSR 2018 Ref.	Description of items	Amount (₹)
DSR Su	DSR Sub-Heads Schedule 'A'		
1	Chapter 1& 2	Carriage of material & Earth Work	10000000
2	Chapter 4, 5 & 10	Concrete, RCC Works & Steel Work	20000000
3	Chapter 15 & 16	Dismantaling & Demolising & Road Works	40000000
4	Chapter 17 ,18 & 19	Sanitary Installations, Water Supply & Drainage Works	00000009
5	Any Other Civil DSR Works	rks	10000000
		DSR 2018 Total- Schedule 'A'	₹ 14,00,00,000.00
NDSR I	NDSR Heads -Schedule 'B'		
1	NDSR Item		50,00,000.00
Electric	Electrical 2018 Items - Schedule 'C'	le 'C'	
1	Electrical DSR-2018 items	us	50,000,000.00
	Grand Total(Schedule	Grand Total(Schedule 'A'+ Schedule 'B'+ Schedule 'C') Inclusive of GST	₹ 15,00,00,000.00



DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

	Provisional sum for the cost of shifting/rearranging of utilities to be paid as per the rates detailed below		
Item	Description		Amount (Rs)
	Provisional sum for the cost of shifting/rearranging of utilities to be paid as per	the	
	Civil Utilities		50,00,000.0
	Total		50,00,000.0
S.No	Description of items Providing and laying S&S NP-3 RCC, pipes manufactured by using sulphate resistant cement	Unit	Rate (Inclu. GST)
1	including jointing with rubber ring and filling joints with cement mortar 1:2		
a)		Mtr	513,31
p)	250mm dia pipe 300mm dia pipe	Mtr	761.81
c)		Mtr	905,77
d)	400mm dia pipe 450mm dia pipe	Mir	1609,18
e)	600mm dia pipe	Mlr	1666.22
f)	900mm dia pipe	Mtr	2561,12
g) 2	Providing and laying S&S NP-4 RCC pipes manufactured by using sulphate resistant cement including jointing with rubber ring and filling joints with cement mortar 1:2	Mtr	4766.45
a)	600 mm dia pipe	Mtr	4060.31
b)	450 mm dia pipe	Mtr	2505,44
c)	400 mm dia pipe	Mtr	1979,91
d)	300 mm dia pipe	Mitr	1402.78
e)	250 mm dia pipe	Mtr	805,27
3	Plugging of water main with baloon of adequate size by inflating with air compressor including transportation of air compressor at site		
a)	400 mm dia	Job	17276.01
b)	600 mm dia	Job	25914.01
	minimum in wet and foul condition by placing gunny bags filled up with earth and stacked properly including supplying and laying the filled up gunny bags up to full length and required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer-in-charge, including pumping & bailing out of the water complete.		
a)	250 mm dia pipe	Job	1977,19
b)	300 mm dia pipe	Job	2846.29
c)	400 mm dia pipe	Job	4613,00
d)	450 mm dia pipe	Job	5710.23
e)	600mm dia pipe	Job	10150.77
f)	700mm dia pipe	Job	13204.83
5	Plugging the total storm water drain from the existing storm water line so as to reduce the drainage of storm line sewer line to minimum in wet and foul condition by placing gunny bags up to full longth and and stacked properly including supplying and laying the filled up gunny bags up to full longth and		
	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete.		
a)	required height as directed by Engineer and subsequent removal of the same after completion of the	Job	710.21
a) b)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete.	Job Job	710.21 1977.19
	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe		
b)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe	Job Job	1977.19 2846.29
b) c) d)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe	Job Job Job	1977.19 2846.29 5062.49
b) c) d) e)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe 450 mm dia pipe	Job Job Job	1977.19 2846.29 5062.49 5710.23
b) c) d) e)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe	Job Job Job Job	1977.19 2846.29 5062.49 5710,23 10150.77
b) c) d) e)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 450 mm dia pipe 600 mm dia pipe	Job Job Job	1977.19 2846.29 5062.49 5710.23
b) c) d) e) f) g) 6	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe 450 mm dia pipe 600 mm dia pipe 900 mm dia pipe Providing lead caulked joints including the cost of pig lead supply and fixing of rubber gaskets welding, and cutting of MS pipes and specials, including the cost of H/P of T&P at site (For watermains at interconnection point / Y-tee/ valve) including cost of dewatering.	Job Job Job Job	1977.19 2846.29 5062.49 5710,23 10150.77
b) c) d) e) f) g) 6 a) b)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe 600 mm dia pipe 600 mm dia pipe 900 mm dia pipe Providing lead caulked joints including the cost of pig lead supply and fixing of rubber gaskets welding, and cutting of MS pipes and specials, including the cost of H/P of T&P at site (For watermains at interconnection point / Y-tee/ valve) including cost of dewatering. upto 300 mm dia 400 - 600 mm dia	Job Job Job Job Job	1977.19 2846.29 5062.49 5710.23 10150.77 22840.93
b) c) d) e) f) g) 6	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe 450 mm dia pipe 600 mm dia pipe 900 mm dia pipe Providing lead caulked joints including the cost of pig lead supply and fixing of rubber gaskets welding, and cutting of MS pipes and specials, including the cost of H/P of T&P at site (For watermains at interconnection point / Y-tee/ valve) including cost of dewatering.	Job Job Job Job Job	1977.19 2846.29 5062.49 5710.23 10150.77 22840.93
b) c) d) e) f) g) 6 a) b)	required height as directed by Engineer and subsequent removal of the same after completion of the job to the entire satisfaction of the Engineer, including pumping & bailing out of the water complete. 150 mm dia pipe 250 mm dia pipe 300 mm dia pipe 400 mm dia pipe 600 mm dia pipe 600 mm dia pipe 900 mm dia pipe 900 mm dia pipe 900 mm dia pipe 900 mm dia pipe 100	Job Job Job Job Job	1977.19 2846.29 5062.49 5710.23 10150.77 22840.93



DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

	Provisional sum for the cost of shifting/rearranging of utilities to be paid as per the rates detailed below		
Item	Description		Amount (Rs)
8	Providing and laying of 100 mm GI pipe, medium class, of approved vendor/manufacturer, with all accessories like bends, sockets, etc all complete	Mtr	767.24
9	Providing and fixing 400 mm dia D/F non- return / check valve of PN 1.0 rating having Body/Door of CI Gr. 20, TRUNNION shaft AISI 410, Face & Seat ring of GM i.e. metal to metal seat & not Rubber to metal, generally confirming to IS: 5312, Fainge flat face drilled to ISI 538 Part IV & VI/BS 10 Table "D".	Each	193195,04
10	Providing and fixing CI D/F Sluice Valve with S&S (IS 6603 12 Sr 12) stain ang gun metal Parts confirming to IS 14846 of approved make/ of approved brand (withcap) in the existing pipe with bolts, nuts, rubber insertions etc. complete and as per the direction of Engineer		1977
a)	400 mm dia	Each	122243 83
b)	600 mm dia	Each	280651.58
11	Providing, Fabricating, painting, tranporting, erecting & securing in position Pre-engineered structural steel work for Building as per the design & drawing and specification provided by the NCRTC, approved shop drawings and instructions of Engineer in charge. Work under this item covers all structural steel work in the building including but not limiting to columns, beams, rafters, purlins, runners for cladding, brackets, hangers / sudpenders, bracings, roof sheeting and cladding as mentioned in specifications, rain water gutter and downtake pipes. Work to include all intermediate stages of activities not defined herein, but otherwise implied for total completion of work. Cost to include but not limited to all materials including wastage, all consumables, fasterners of all types for both temproary & permanant stages of work, all temperory stays, labour, temporary work including staging, scafolding, tools, plants & equipment, workmanship etc including cost of painting as per specifications. The approxmiate range of PEB span would be 10m to 25m. Measurement will be on over all areas basis between center line of exterior rows of columns of building.	Sqm	5642.56
12	P/L of MS pipe of 10 mm wall thickness on agreed line andgrade (as per IS: 3589 and made from steel confirming to IS: 2062) the steel pipe surface internal and external shall be blasted to near white and then coated with solvent less P U. coating of nominal 750 microns and nominal 1000 microns on exterior and interior surface respectively all approved/used by railway/concerned goverment department project for sewer and water lines with design and construction of Man holes at approximate 30 meter interval or required distance with trenchless construction technique below the water table preferably without the need of dewatering, Accuracy of level at required gradient/slope to be achieved by use of Laser/CCTV controlled by suitable equipment. In the last pit, the equipment to be positioned at surface in a single traffic lane. The work shall be done in such a manner that it will not disturb the smooth movement of traffic. The item includes excavation of trenches and recovery pit andr backfilling after work completed at the site of work mobilization and demobilization of equipment consumable etc as needed to complete the work and cleaning of site complete including disposal of surplus earth within 10 km lead and making water and manhole connections. Traffic control arrangement and lighting display of sign board. Insurance of work man etc complete including removal of all hindrances, unforeseen items permission of other dept. (dept. shall only assist in getting permissions etc.) nothing extra shall be paid on this account to complete the job.		
a)	900mm dia pipe by trenchless technology	Mtr	89132 62
a)	additing did bibe by trend ness red indicate.	AND	0010202



DA/MS/COR-OF/019: Execution of enabling civil works and works related to utilities shifting such as water pipeline, storm water drain, sewer line, gas pipelines, road widening works, etc. and associated electrical & telecom work between IDPL Complex and SNB of Delhi-SNB RRTS Corridor.

	Provisional sum for the cost of shifting/rearranging of utilities to be paid as per the rates detailed below		
tem	Description		Amount (Rs)
13	P/IL of MS pipe of 12 mm wall thickness on agreed line and grade (as per IS 3589 and made from steel confirming to IS 2062) the steel pipes surface internal and external shall be blasted to near white and then coated with solvent less PU coating of nominal 750 microns and nominal 1000 microns on exterior and interior surface respectively of approved make/used by railway/concerned government department in sewer and water line projects with design and construction of manholes at required distance, Pipe to be laid with trenchless construction technique. Accuracy of level at required gradient/slope to be achieved by use of laser /CCTV controlled by any suitable equipment. In the last pit the equipment to be positioned at surface in a single traffic lane for the work. The item includes excavation of trenches and recovery pits, excavated earth taken out and their backfilling after work completed at the site. Work includes mobilization and demobilization of equipment consumable etc as needed to complete the work and cleaning of site complete including disposal of surplus earth within 10 km lead and making water and manhole connections, traffic control arrangement, lighting of complete work site area, display of sign board, Insurance of work man etc complete including removal of all hindrances, unforeseen items permission of other deptt (deptt shall only assist in getting permissions etc.). Nothing extra shall be paid on this account to complete the job. The firm will also supply the test certificate w.r.t MS pipe design and P.U coating etc, during the execution of work. Dewatering of pit and making good by back filling in layers of 20 cm each as per the relevant CPVMD specifications and disposal of surplus earth as per direction of Engineer-in charge. The firm has to make connections and disposal of surplus earth as per direction of Engineer-in charge. In firm has to make connections in the u/s and d/s manholes at the same existing invert level including necessary plugging in the existing line by dismantling and rest		
a)	1400 mm dia pipe by Trenchless technology	Mtr	171357.52
14	Providing and laying of 1500 mm dia, M.S. Pipe made up of 16mm thk. M.S. Plate as per IS2062 through trenchless technology by Specialized Laser guided Tunnel boring Machine with steering kit to cross the carriage way i/c maintain levels with the help of laser guided equipment, excavation of thrust & receiving pit side shoring, providing thrust bed & blocks, welding cutting the steel pipes surface internal & external painted with Epoxy paint on each face of pipe, filling back compaction disposal of surplus earth, i/c, generator, JCB, cranes, trenchless machine, jacks, hydraulic technology, testing etc. all material, Labour and T&P complete job as per direction of Engineer-in-charge.	Rm	234998,98
15	Supply and installation of 450 mm dia MS pipe of 10 mm wall thickness confirming to IS 2062 suitable for welding joints with 750 Micron P.U. coating internally and anti-corrosive bituminous paint on external surface, with tolerance of 6" in or gradient by trenchless technology method at an average depth of 4-4.5m below the road level including interconnection with existing chambers (with required excavation and its restoration including dewatering arrangement) including thrust pil and receiving pit and the supporting system of soil should be got approved from the department before execution. The trenchless has to be carried out below existing deep nallah below road, in sub-soil and existing services. The firm will also supply the tost cortificate w.r.t MS pipe design and P.U. coating etc, during the execution of work. The work also involved necessary number of thrust pit and receiving pit as per the site condition to perform boring including road cutting under ground mapping of service. Dewatering of pit and making good by back filling in layers of 20 cm each as per the relevant CPWD specifications and disposal of surplus earth as per direction of Engineer-in charge. The firm has to make connections in the u/s and D/S manholes at the same existing invert level including necessary plugging in the existing line by dismantling and restoration of the connection manholes complete.	Mtr	39664,04

Note The above rate are inclusive of all taxes, duties, levies, cess, Goods and Services Tax (GST), Royalities, insurances & all other incidental charges etc.

