

TENDER

(NIT NO. TA/TCL/09/21-22)

FOR

**REPAIR AND RELAYING OF SEWER LINES
IN BHEL TOWNSHIP, BHOPAL.**

PRICE BID

SECTION - VI



**TOWNSHIP CIVIL MAINTENANCE
BHARAT HEAVY ELECTRICALS LIMITED**

(A Government of India Undertaking)
BHOPAL - 462 022 (M.P)

PREAMBLE OF PRICE BID

1.0. This Price Bid consists of three Schedules:

1.1 Schedule A

Schedule A consists of single Annexure:

1) Annexure-I includes items based on GST Compliant DSR-2012 & Rate analysis.

Bidders are requested to quote their rate in Percentage above/below/at Par for Annexure-I.

2) Annexure-II – Scope of work

1.2 Schedule B

Schedule B gives the details of free issue materials given by BHEL.

1.3 Schedule C

Schedule C gives the details of Tools & Tackles provided by BHEL on Chargeable Basis.

- 2.0 The work to be carried out under the contract shall, except as otherwise provided in tender conditions, include all labour, materials, tools, plant, equipment, and transport which may be required in preparation of and for full & entire execution and completion of the Works. The descriptions given in the Schedule of Quantities shall, unless otherwise stated, be held to include waste on materials, carriage and cartage, carrying in return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles as laid down in Technical Specification & elsewhere in Tender Specification.
- 3.0 The price bid should not contain any condition. Conditional price Bids shall be summarily rejected.
- 4.0 The bidder should not leave any column blank in Price Schedules.
- 5.0 Price Quoted shall include all taxes, & duties except GST.
- 6.0 **Unless otherwise specified in the items involving cement or reinforcement steel, these items shall be issued free of cost by BHEL.**



TOWNSHIP CIVIL MAINT. & CONST. DIVISION

SCHEDULE 'A'

Annexure: I

Name of work : Repair and relaying of sewer lines in BHEL Township Bhopal.

S.No	It. Code	Description of items	Qty.	Unit	Rate	Amount
1	1.1	Carriage of materials by mechanical transport including loading, unloading and stacking.				
a	1.1.1	Lime, moorum, bldg. rubbish	50.00	Cum	66.23	3311.50
b	1.1.2	Earth (Lead upto 1 km)	200.00	Cum	82.78	16556.00
2	2.6	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5 m disposed earth to be levelled and neatly dressed.				
	2.6.1	All kind of soil	50.00	cum	129.35	6467.50
3	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	All kinds of soil.	50.00	cum	130.80	6540.00
4	2.10	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth up to 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :All kinds of soil.				
a	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia	200.00	Metre	165.60	33120.00
b	2.10.1.3	Pipes, cables etc exceeding 300 mm dia but not exceeding 600 mm	200.00	Metre	258.55	51710.00
5	2.11	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).				
a	2.11 (a)	Pipes, cables etc. exceeding 80 mm dia. But not exceeding 300 mm dia (165.60x1.35=223.56) (135% of item 2.10.1.2)	50.00	Metre	223.56	11178.00

6	2.12	Extra for excavating trenches for pipes, cables, etc, in all kinds of soil for depth exceeding 3 m in depth, but not exceeding 4.5 m. (Rate is over corresponding basic item for depth upto 1.5 metre.) (347% of item 2.10.1.3)	50.00	Metre	897.17	44858.50
7		Open timbering in trenches including strutting and shoring complete (measurements to be taken of the face area timbered):				
	2.20.2	Depth exceeding 1.5 m but not exceeding 3 m	85.00	Sqm	55.25	4696.25
8		Open timbering in case of shafts, wells, cesspits, manholes and the like including strutting and shoring complete (Measurements to be taken of the face area timbered):				
	2.21.2	Depth exceeding 1.5 m but not exceeding 3 m	40.00	Sqm	49.20	1968.00
9	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	100.00	Cum	83.80	8380.00
10		Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.				
	2.26.1	All kinds of soil.	56.00	Cum	34.60	1937.60
11	2.31	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	1600.00	Sqm	4.82	7712.00
12	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level.				
a	4.1.3 RA	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	40.00	Cum	2576.38	103055.20
b	4.1.8 RA	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	40.00	Cum	2528.82	101152.80
13	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement, with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	5.00	Cum	3556.89	17784.45

14	5.9	Centering and shuttering including strutting, propping etc. and removal of form for :				
	5.9.3 RA	Suspended floors, roofs, landings, balconies and access platform	200.00	sqm	301.28	60256.00
15	5.12 RA	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement, with 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size).	10.00	Cum	3361.12	33611.20
16	RA 5.22.6/ 5.22.6A	Steel reinforcement for RCC Work i/c straightening, cutting bending, placing in position and binding all complete upto/above plinth level : TMT bars (excluding cost of steel bars)	300.00	kg	7.40	2220.00
17		Coursed rubble masonry (second sort) with hard stone in foundation & plinth with :-				
	7.7.1 RA	Cement mortar 1:6(1 cement : 6 coarse sand)	40.00	cum	2754.46	110178.40
18		Extra for coursed rubble masonry with hard stone (first or second sort) in :				
	7.10.1	Square or rectangular pillars	10.00	Cum	289.92	2899.20
19	13.4	12 mm cement plaster of mix.				
	13.4.2 RA	1:6 (1 cement : 6 Coarse sand)				
			200.00	sqm	99.21	19842.00
20	13.5	15mm cement plaster of mix:				
	13.5.2RA	1 : 6 (1 cement : 6 coarse sand).	150.00	sqm	114.32	17148.00
21		20 mm cement plaster of mix :				
	13.6.2	1:6 (1 cement: 6 coarse sand)	200.00	sqm	135.50	27100.00
22	13.18 RA	Neat cement punning.	200.00	sqm	18.34	3668.00
23	15.2	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
	15.2.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	21.00	Cum	671.05	14092.05
24	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-charge.	10.00	Cum	978.95	9789.50

25	15.7	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	15.7.4	In cement mortar	15.00	cum	566.6	8499.00
26	15.9	Demolishing stone rubble masonry manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	15.9.2	In cement mortar	15.00	cum	676.05	10140.75
27		Dismantling manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge :				
	15.43.1	Water bound macadam road	110.00	sqm	61.70	6787.00
	15.43.2	bituminous road	117.00	sqm	119.95	14034.15
28	19.1 RA	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement :1 fine sand) including testing of joints etc complete.				
a	19.1.1 RA	100 mm diameter	160.00	Metre	133.59	21374.40
b	19.1.2 RA	150 mm diameter	100.00	Metre	192.60	19260.00
c	19.1.3 RA	200 mm diameter	100.00	Metre	280.17	28017.00
d	19.1.4 RA	250 mm diameter	60.00	Metre	381.87	22912.20
e	19.1.5 RA	300 mm diameter	70.00	Metre	507.21	35504.70
29	19.2 RA	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design :				
a	19.2.2 RA	150 mm diameter S.W. Pipe	45.00	Metre	457.06	20567.70
b	19.2.3 RA	200 mm diameter S.W. Pipe	40.00	Metre	532.82	21312.80
c	19.2.4 RA	250 mm diameter S.W. Pipe	30.00	Metre	616.15	18484.50
30	19.3 RA	Providing and laying cement concrete 1:5:10 (1cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) up to haunches of S.W. pipes including bed concrete as per standard design :				
a	19.3.1 RA	100 mm diameter S.W. Pipe	100.00	Metre	177.62	17762.00
b	19.3.2 RA	150 mm diameter S.W. Pipe	100.00	Metre	287.87	28787.00

c	19.3.3 RA	200 mm diameter S.W. Pipe	35.00	Metre	338.38	11843.30
d	19.3.4 RA	250 mm diameter S.W. Pipe	40.00	Metre	393.93	15757.20
e	19.3.5 RA	300 mm diameter S.W. Pipe	40.00	Metre	454.53	18181.20
31	19.5	Dismantling of old S.W. pipes including breaking of joints and bed concrete stacking of useful materials near the site within 50 m lead and disposal of unserviceable materials into municipal dumps:				
a	19.5.1	100 mm diameter	70.00	Metre	24.40	1708.00
b	19.5.2	150 mm diameter	85.00	Metre	26.95	2290.75
c	19.5.3	200 mm diameter	22.00	Metre	28.70	631.40
d	19.5.4	250 mm diameter	20.00	Metre	30.40	608.00
e	19.5.5	300 mm diameter	60.00	Metre	32.15	1929.00
32		Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
(A)	19.7.1.1 RA	Inside size 90x80 cm and 45 cm deep With Ghole bricks of class designation 5.0	16.00	Each	3298.60	52777.60
(B)	19.7.2.1 RA	Inside size 120x90 cm and 90 cm deep With Ghole bricks of class designation 5.0	13.00	Each	7001.38	91017.94
33		Extra for depth for manholes :				
(A)	19.8.1.1 RA	Size 90x80 cm With Ghole bricks of class designation 5.0	5.00	metre	5300.49	26502.45
(B)	19.8.2.1 RA	Size 120x90 cm With Ghole bricks of class designation 5.0	5.00	metre	6335.13	26489.65
34		Dismantling of manhole including R.C.C. top slab, C.I. cover with frame, including stacking of useful materials near the site and disposal of unserviceable materials into municipal dumps within 50 m lead :				
	19.24.1	Rectangular manhole 90x80 cm and 45 cm deep	16.00	Each	705.60	11289.60
	19.24.2	Rectangular manhole 120x90 cm and 90 cm deep	13.00	Each	1238.05	16094.65

[illegible]

ANNEXURE-II**SCOPE OF WORK****Name of work : Repair and maintenance of sewer lines in BHEL Township**

Scope of work includes the following activities in scattered areas of N'hood and dealing with the existing running sewer network, as described below:-

S. No.	Description of Activities
1	Earth work in excavation and backfilling.
2	Dismantling of old Stone Ware pipes.
3	Dismantling of old Brick Work & Coarse Rubble Masonry in manhole chambers.
4	Demolition of old PCC or RCC work.
5	PCC work of 1:2:4 and 1:4:8.
6	Brick work & Coarse Rubble Masonry work.
7	Laying of RCC & glazed stone ware pipes.
8	Construction of Manhole chambers.
9	The work is to be done under foul condition for which necessary arrangements such as cleaning of manholes, removal of sewage, scum, silt etc., through manual/mechanical means, blocking and diversion of running sewer line shall be made by the agency at its own cost. No extra payment shall be admissible for these supporting, enabling works over & above the awarded rate.

The above scope may undergo some minor changes based on final requirement of BHEL.

Signature of Contractor

SCHEDULE – “B”									
Name of work :Repair and relaying of sewer lines in BHEL Township Bhopal.									
Issued free of cost at Gadia Store/ sub-division									
1 Cement									
2 Reinforcement Steel									
Note: If the contractor fails to return to the department unconsumed portion of total quantities of respective free issue material after completion of work or as and when instructed by Engineer-incharge, recovery at twice the respective material cost of the item as procured/decided by BHEL shall be made from the contractor's bill(s).									
SCHEDULE – “C”									
----NIL----									
Signature of Contractor									