



NAYA RAIPUR DEVELOPMENT AUTHORITY

**Tender Document for the
Construction of Horizontal directional drilling (HDD) and
other miscellaneous works at Naya Raipur
(Following Three-Envelope Tender Procedure)**

**Schedule – A
Price Tender
To be submitted in ENVELOPE-3**

NIT No.: 65 /EE-PHE/ CE (E)/ NRDA /2016-17, Raipur

Dated: 11.04.2016

Issued by: Chief Executive Officer,
Naya Raipur Development Authority (NRDA)
1st floor, Utility block, Capitol Complex, Sector-19,
Naya Raipur 492 002, Chhattisgarh
E-mail: ceo@nayarapur.com

Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & signed by the tenderer
 (b) All the certificates as per pre qualification criteria shall be appended with relevant forms of schedule "D"

1. PART ONE (NRDA F-1)-(Attached herewith, to be submit along the tender)

Part (A)

- a) Press Notice
 b) Detailed NIT

Part (B)

a) Schedule-A

- (i) Cost Abstract
 (ii) Bill of Quantities

- b) Schedule-B –NIL
 c) Schedule-C –NIL
 d) Schedule-D

Section-I..... Technical tender forms

- (i) Letter of Technical Tender
 (ii) Tenderer's Information Sheet
 (iii) Annual Turnover
 (iv) Specific Construction Experience
 (v) Declaration
 (vi) Check list for Technical tender evaluation

Section –IIScope of work

Section –III..... Technical specifications of work

Section –IV..... Special Conditions of Contract

Section –V..... List of approved makes

Section –VI..... Drawings

- e) Schedule-E
 f) Schedule-F

2. PART TWO (NRDA F-2/3)-Standard form (Not Attached herewith, and not to be submitted along the tender) Important note: - Link site [http:// nayaraipur.com/documents/gcc.pdf](http://nayaraipur.com/documents/gcc.pdf)

1. General Guidelines
2. Tender
3. General rules and directions
4. Conditions of contract
5. Clauses of contract
6. Model rules relating to labour, water supply and sanitation in labour camps safety code
7. Contract forms
 - (a) Draft Format for Performance Security
 - (b) Earnest Money Deposit Form (Bank Guarantee)
 - (c) Format of Contract Agreement
 - (d) Draft Format for Performance Guarantee for Water Proofing and Anti-termite Works
 - (e) Indemnity Bond
 - (f) Indenture Bond
 - (g) Notice for Appointment of Arbitrator
8. Proforma of schedules (Schedule 'A' to Schedule 'F')

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Name of work: Construction of Horizontal directional drilling (HDD) and other miscellaneous works at Naya Raipur.

Name of Tenderer:

Details

- a) Cost of Tender Document : Rs
- b) EMD : Rs

Signature of Tenderer

Date: _____

Signature of Contractor.....

Signature of NRDA.....

COST ABSTRACT**Construction of Horizontal directional drilling (HDD) and other miscellaneous works at Naya Raipur**

Sr. No	Component of Work	Amount in INR	Amount in Words (In INR)
A	Civil Works	Rs. -	
B	Electrification Works	Rs. -	
	Total Project Cost (INR)	Rs. -	

Bill of Quantities						
"Construction of Horizontal directional drilling (HDD) and other miscellaneous works at Naya Raipur						
A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
	Septic tank					
1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.,(including dressing and leveling of pits.(work is Inclusive of All Lead ,Lift and Dewatering complete)					
a	In all types of soils.	Cum	347.76			Rs. -
2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	Sqm	144.00			Rs. -
3	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc.complete.	Cum	23.11			Rs. -
4	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.					
a	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	Cum	11.35			Rs. -

A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
5	Providing and laying design mix reinforced cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto plinth level excluding cost of form work.					
a	M-20 (using minimum cement 410 kg/cum concrete)	Cum	63.66			Rs. -
6	Providing and mixing water proofing material in PCC/ RCC work in the proportion recommended by the manufacturer.	kg	397.42			Rs. -
7	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete:					
a	Thermo-Mechanically treated bars FE 500D	kg	6430.71			Rs. -
8	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
a	Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	Sqm	8.91			Rs. -

A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
b	Beams, lintels, cantilevers & walls	Sqm	375.84			Rs. -
9	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	84.84			Rs. -
10	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	Each	40.00			Rs. -
11	Providing and fixing in position precast circular 560mm internal dia SFRC/mR.C.C. manhole cover or cover and frame of approved quality:					
a	Cover and frame H D - 20	Each	3.00			Rs. -

A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
12	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in					
a	Cement Mortar 1:8 (1 cement : 8 coarse sand)	cum	1.92			Rs. -
13	Providing, laying and jointing following P.V.C.-U pipes with solvent cement joint for Non-pressure gravity drain and sewer applications including testing of joints, cost of jointing materials etc. complete in all respect. [Conform to IS15328:2003, solvent cement shall Conform to IS 14182]. SN-8					
a	315MM	Metre	6.00			Rs. -
14	Providing, laying and placing of precast cement concrete cover of drain M-35 grade in superstructure including form work but excluding reinforcement complete .					
a	RCC M35 grade	Cum	3.51			Rs. -
15	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.					

A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
i	Vent cover					
a	75 mm	Each	1.00			Rs. -
16	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.					
a	75 mm dia. Pipe	Metre	3.00			Rs. -
17	Providing and constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	Each	2.00			Rs. -
18	Providing and placing in position C.I. sluice valves category "B" (with cap) complete:					
a	100 mm diameter	Each	2.00			Rs. -

A CIVIL WORKS						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
19	Providing & fixing following cast iron double flanged single door reflux (non return) valves including jointing & teting with cost of jointing material such as bolts, nuts and rubber insertion all complete as per IS: 5312(part I), complete as per specifications and as directed by the Engineer etc.					
a	100 mm dia. class PN-1.0	Each	1.00			Rs. -
20	Supplying, installation, testing and commissioning of Vertical submersible non clog pump set for sewerage system having 5.0 HP, three phase, 230 volts AC induction submersible motor directly coupled with solid coupling to Vertical submersible non clog pump of discharge capacity of 300 LPM at a head of 20 metres, delivery size 100 mm, including 2 sets of suitable size holding clamps made out of 100 mm X 6 mm MS flat, connection etc. as required.	set	2.00			Rs. -
21	Supply, installation, testing and commissioning of cubicle type wall/ floor mounted power cum control panel made out of not less than 1.6 mm thick MS sheet and comprising of following panel mounting switchgears there in including connection inter-connection etc. as required. a) Phase indicating lamps with fuses and toggle switches 1 set b) DOL. starter suitable for 5 HP 3 phase AC induction motor with over load and no volt relay c) 32 A "C" series TPMCB 1 No d) Voltmeter 0-500 V with selector switch 1 set e) Ammeter 0-10 A with CT's and selector switch 1 set.	Set	1.00			Rs. -

A	CIVIL WORKS					
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
22	Construction of RCC Drain/Cover/Chamber					
	Excavation for drain (Earth work in excavation for drain/chamber as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.),(including dressing and leveling of pits.(work is Inclusive of All Lead ,Lift and Dewatering complete)	Cum	471.00			Rs. -
23	Providing and making 12mm thick cement plaster on the rough side of single or half brick wall of mix:					
a	In Cement Mortar 1:4 (1 cement : 4 fine sand)	Sqm	113.04			Rs. -
	Providing, Laying, Jointing, and commissioning of sewer networks by trench less method by carrying out horizontal directional drilling (HDD) along roads as per the requirement at various locations as per detailed design and drawing approved by the NRDA, including survey, information collection regarding under ground utilities, sensing of utilities by sensing equipment, pit making, pilot drilling, pre-reaming pulling the ducts of suitable size as per the designed invert levels.					

A	CIVIL WORKS					
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
24	Providing barricades and necessary signal lights, closing of pits with excavated earth including cost of casing pipe of 12mm thick MS pipe, consolidating pit are, including road restoration, cost of all materials, labour, conveyance, hire charges etc. complete preparation of pit by excavated soil/ hard morum & refilling compacting surface as it is position / horizontal drilling across road for pipe line laying propose as per guide line and detail technical specifications all complete as per direction of Engineer in charge. The rate shall be inclusive of supplying, laying and testing of casing pipe and all other structures need to be constructed to meet the requirements of the sanctioning authority including necessary excavation, dewatering, refilling, transportation of surplus stuff of earth,as per technical specification and as per direction of Engineer in charge etc, complete.					
	1600mm dia. M.S pipe 12mm thick	metre	215.00			Rs. -
Sub total of CIVIL Works						Rs. -

Bill of Quantities						
Construction of Horizontal directional drilling (HDD) and other miscellaneous works at Naya Raipur						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
B	ELECTRICAL WORKS					
1	Designing and providing suitable RCC foundation in Cement Concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) for 3 mere to 12 metre high GI octagonal pole including steel reinforcement (minimum 90kg per cum), form work, embedding 2 nos 50mm dia PVC pipe for cable entry in each foundation, excavation disposal of surplus soil and curing etc. as requiredd.	Cum	0.4			Rs. -
2	Supply of hot dipped galvanized (in single dip to average 65 micron) octoganal pole made of 3mm thick steel sheet having window and flush cover with locking arrangement at suitable height from base for cable termination block, pole suitably reinforced with welded steel section at window cut section to make the strength of pole unaffected, with following minimum specifications including 3mm thick anchor plate, 4 nos 20mm dia foundation bolts of EN8 grade. (designed for wind speed upto 150km/hr)					
i	7 metre high, dia 130mm at bottom and 70mm at top, base plate size 220x220x12mm, foundation bolts 700mm long	No	1			Rs. -
3	Erection of GI octogonal pole on existing cement concrete foundation having grouted bolts and nuts, aligning in true vertical position as required.					
i	7 metre high	Each	1			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
4	Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia MS "B" class pipe welded to 300 mm long MS pole canopy of suitable dia at a angle of 102.50 including having MS triangular stiffner of size 150 X 50 X 5 mm thick, making arrangement for tightening the bracket with pole by providing suitable size heavy duty nuts and bolts in canopy, painting with one coat of approved steel primer etc. as required.					
i	Single Over Hang 1.00 metre Long	Each	1			Rs. -
5	Supplying and laying double wall HDPE pipe having corrugation on the outer wall and plan surface on inner wall in ground below road, path etc at a depth not less than 40 cm including excavation, dismantling of road if required and refilling the trench etc. as required.					
i	40 mm dia	Metre	200			Rs. -
6	Supplying and laying following sizes one number PVC insulated/ XLPE, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade in existing RCC/ HUME/ STONEWARE/ METAL/ HDPE pipe as required.					
i	4x16	Metre	200			Rs. -
ii	2x 10 sq. mm	Metre	10			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
iii	3x 10 sq. mm	Metre	10			Rs. -
7	Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with gear box, igniter, with IP 65 protection on pole bracket complete .					
i	65 watt	Each	1			Rs. -
8	Earthing with G.I. earth pipe 4.5 Metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.	Each	1			Rs. -
9	Supplying and laying 6 SWG G.I. wire at 0.50 Metre below ground level for conductor earth electrode, including soldering, excavation and refilling the trench etc. as required.	Metre	20			Rs. -
10	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted control panel board of 500x500 mm size and 300 mm depth made out of not less than 2 mm thick CRCA MS sheet with suitable compartments for electrical arrgment like bus bars, switchgears and necessary cutouts for voltMetres, amMetres etc as per specifications including powder coating painting but without busbars,switchgears and other accessories etc complete as required Incomer 4 pole MCCB, 63A, 35KA outgoing 2 Nons 32 amps TP MCB 4 nos 32 amps SP MCB bus bar 4 pole Al bus bar 100 amp	set	1			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
11	Supply, drawing and terminating either ends 3 core FR PVC insulated 2.5 sqmm copper cable inside the pole from JB to fixtures with accessories, hardwares etc as required for completeness and as per attached specification, direction of engineer, CGPWD standards and Electrical inspectorate standards.	Metre	10			Rs. -
12	Supplying, fixing and cramping suitable size and all type aluminium ferule/ lugs to following size 1.1 KV grade power cable core/ lead, pressed with high pressure cramping tool including connection to switch gear/ MCCB etc as required.					
i	6 sq. mm	Each	8			Rs. -
13	Supplying and making end termination with brass compression gland and aluminum lugs for following size armoured aluminum conductor power cable of 1.1 KV grade as required					
i	2x10 sq.mm	Each	2			Rs. -
ii	3x10 sq.mm	Each	2			Rs. -
iii	4x16 sq.mm	Each	2			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
14	Providing and fixing steel door made of angle iron of suitable sizes with M.S. grill of approved pattern made of M.S. flats or square or round bars coat of red oxide zinc chromate primer.	Kg	50			Rs. -
Sub total of Electrical Works						Rs. -