

NAYA RAIPUR DEVELOPMENT AUTHORITY

(2nd Call)

Tender document for the

Infrastructure Development for areas between North block and south Block at Sector 19at Naya Raipur

(Following Three-Envelope Tender Procedure)

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

NIT No.: 76 /NB & SB/ EEC-III / CE (E) / NRDA / 2013-14, Raipur, Dated: 03.03.2014

Issued by: Chief Executive Officer,

Naya Raipur Development Authority (NRDA) Utility block, Capitol Complex, Sector-19, Naya Raipur-492 002, Chhattisgarh

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Website: www.nayaraipur.com

Tender Document Contains

- (a) Only schedule "A" and Section-I of schedule "D" are to be filled & singed 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
- 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
 - 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

signature of Contractor	Signature of NRDA

8. Proforma of schedules (Schedule 'A' to Schedule 'F')

Naya Raipur Development Authority (NRDA) Raipur, Chhattisgarh

Document details

Namo	e of work	: Infrastructure Dev 19 at Naya Raipur	velopment for areas between North block and south Block at Sector
Nam	e of Tende	erer:	
Deta	nils		
a b	•	Tender Document	: Rs : Rs

Signature of	Tenderer
Date:	

	Cost Abstract for "Infrastructure Development for areas between North block and South Block at Sector 19 at Naya Raipur"								
Sl. No.	Description Of Items	Amount in Figure (In INR)	Amount in Words (In INR)						
A	Road Works	Rs							
В	Storm water Drainage and utilities	Rs							
С	Compound Wall	Rs							
D	Development of Soft scape	Rs							
	Grand Total	Rs							

	Bill Of Quantity for "Infrastructure Development for areas between North block and South Block at Sector 19 at Naya Raipur"							
SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR		
Α	Road Works							
	Clearing and grubbing road land including uprooting rank vegetation, grass bushes, shrubs, saplings and trees girth up to 300mm, removal of stumps of trees cut eariler and disposal of unserviceable materials and stacking of serviceable materials and stacking of serviceable materials to be used or auctioned up to a lead of 1000meters including removal and disposal of top organic soil not exceeding 150mm in thickness if required and as per relavant clauses of section-200							
а	In area of light jungle	hectare	4			Rs		
2	Construction of embankment/ sub grade with Material Obtained from Borrow Pits (Construction of embankment with approved material/selected soil having C.B.R. > 5 (unless specified otherwise in the contract) obtained from borrow pits with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement of table 300-2)	Cum	25738			Rs		
3	Construction of granular sub-base by providing close graded Material, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface watering, rolling and compacting with vibratory power roller at OMC to achieve the desired density, complete as per clause 401							
	By Plant Mix Method							
а	for grading -III material	Cum	6134			Rs		
4	Wet Mix Macadam (Providing, Laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed material by base course on well prepared surface and compacting with vibratory roller to achieve the desired dentsity.	Cum	3387.50			Rs		
5	Prime coat (Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.85 kg/sqm using mechanical means)	Sqm	13550			Rs		
6	Tack coat Providing and applying tack coat with bitumen using pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom.							

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
а	Granular surfaces treated with primes @ 0.45 kg / Sqm	Sqm	13550			Rs
7	Dense Graded Bituminous Macadam (Providing and laying dense bituminous macadam with 40-60 TPH HMP using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5% by weight of total mix of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects.)					
	With Sensor Paver finisher					
а	for Grading II (19 mm nominal size bitumen content 4.5%)	Cum	677.50			Rs
8	Tack coat Providing and applying tack coat with bitumen using pressure distributor on the prepared bituminous/granular surface cleaned with mechanical broom.					
а	Normal bituminous surface @ 0.35 kg / Sqm	Sqm	13550			Rs
9	Bituminous Concrete (Providing and laying bituminous concrete with 40-60 TPH hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder @ 5.0 to 6.0% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 509 complete in all respects)					
	With Sensor Paver finisher					
а	for Grading II (13 mm nominal size) with bitumen 6.0 %	Cum	542			Rs
10	Footpaths and Separators (Construction of footpath by providing a 150 mm compacted granular sub base as per clause 401 and 25 mm thick cement concrete grade M15, over laid with pre-polished cement concrete floor tiles confirm to IS: 1237:1980 (Reaffirmed in 1996) for heavy duty tiles (Exterior Grade) of 22-25mm thick in cement mortar 1:4 including provision of all drainage arrangements but excluding kerb channel.) as per pattern, size and colour as approved by engineer.	Sqm	16595			Rs

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
11	Precast interlocking concrete paver blocks: Providing & laying factory made confirm technical specification of Bureau of Indian Standards 15658 of 2006 of heavy duty pavers resulting in consistent and uniform quality, rubber moulded, white cement based, pigmented block lacquer coating and cured through drying process mechanically vibrated and compacted precast interlocking premium concrete paver blocks in M-40 grade, 60mm thickness of approved size, design and colour with providing and laying in position over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete. Coloured pigment precast interlock concrete blocks. as per direction of engineer in charge.	Sqm	13997			Rs
	Cast in Situ Cement Concrete M-20 Kerb (construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M20 grade PCC on M-10 grade foundation 150mm thick, foundation having 50mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually all complete as per clause 408)	Rmt	9640			Rs
13	Precast interlocking concrete grass paver blocks: Providing & laying factory made confirm technical specification of Bureau of Indian Standards 15658 of 2006 of heavy duty pavers resulting in consistent and uniform quality, rubber moulded, white cement based, pigmented block lacquer coating and cured through drying process mechanically vibrated and compacted precast interlocking premium concrete paver blocks in M-40 grade, 60mm thickness of approved size, design and colour with providing and laying in position over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete. Coloured pigment precast interlock concrete blocks.	Sq.m	675			Rs
14	Providing PCC precast factory made kerb stone of 500 x 400 x 150 mm size in M-25 grade of concrete using design mix with minimum cement content as per IS: 456 for moderate exposure condition including fixing in PCC 1:2:4, 100 mm thick botom and sides, filling the joint with CM 1:2, Finishing with smooth cement plaster in CM (1:3) Paintig two coats with synthetic enamel paint in approved shade etc.complete including excavation and disposal of excavated material, making good the road etc. complete. The rate is inclusive of all types of taxes, trasportation, wastage. all type of labour, material, royalty etc. complete.	Rmt	660			Rs
	Road Furniture	1	· · · · · · · · · · · · · · · · · · ·			
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SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
15	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous surface(Providing and Laying of hot applied thermoplastic compound 2.5mm thick including reflectorising glass beads @250	Sq.m	806			Rs
16	Retro- reflectrorized Traffic signs (Providing and fixing of retro-reflectrorized cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminum sheeting, 1.5 mm thick supported on a mild steel frame of size 40 x 40 x 5 mm and mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing)					
а	60 cm equilateral triangle	each	40			Rs
b	60 cm circular	each	40			Rs
С	80cm X 60cm rectangular	each	40			Rs
d	90 cm high octagon	each	40			Rs
17	Direction and Place Identification signs upto 0.9 sqmt size board. (Providing and erecting direction and place identification retroreflectrorized sign as per IRC:67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminum sheeting, 2 mm thick with area not exceeding 0.9 sqmt supported on a mild steel single angle iron post 75 x 75 x 6 mm firmly fixed to the ground by means of properly designed foundation with M-15 grade cement concrete 45 x 45 x 60 cm, 60 cm below ground level as per approved drawing)	Sqm	18			Rs
18	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	Cum	7960.50			Rs

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
19	Supplying, stacking, Spreading of good earth preparation of soil, earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20%: 1 part of stacked volume of manure after reduction by 8%) watering, dressing at site including royalty, loading, unloading, and carriage upto 10km all complete as per direction of engineer in charge.	Cum	6634			Rs
	Sub Total of A					Rs
В	Storm water Drainage and utilities					
	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.					
а	In all types of soils such as moorum, sand, sandy silt, clay, black cotton soil, kankar etc.					
i	Depth of excavation up to 1.5 m	Cum	3821			Rs
b	In ordinary rock					
i	Depth of excavation up to 1.5 m	Cum	202			Rs
2	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	Cum	1656			Rs
3	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.					
а	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	137			Rs
4	RCC work: Providing and laying design mix reinforcement cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto floor five level excluding cost of reinforcement and form work.					
а	M-20 (using minimum cement 390 kg/cum concrete)	Cum	1014			Rs
5	Providing, laying and placing of precast cement concrete cover of drain M-35 grade in superstructure including form work but excluding reinforcement complete.					

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
а	RCC M35 grade	Cum	55.70			Rs
6	Reinforcement: 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 all complete:					
а	Thermo-Mechanically treated bars	Kg	60754			Rs
7	Formwork: Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
а	Foundations, footings, base of columns and plinth beam in any shape and size.	Sqm	39			Rs
b	Wall of any thickness including attached pilasters, buttresses etc.	Sqm	8898			Rs
8	Providing and laying Reinforced Cement Concrete pipe NP-3/ prestressed concrete pipe. (Laying Reinforced cement concrete pipe NP-3 /prestressed concrete pipe for culverts including fixing collar with cement mortar 1:2 but excluding bedding below pipes, excavation, protection works, backfilling, concrete and masonry works in head walls and parapets.)					
а	450 mm dia	Rmt	230			Rs
b	600 mm dia	Rmt	210			Rs
9	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification.	Cum	1823			Rs
10	Providing, lowering, laying, aligning, fixing in position at and jointing at all level/ depths ISI marked HDPE pipes all accessories/ fittings of PE-100 grade for potable water as per IS 4984 (amended upto date) in trenches in complete including all material, labour, testing and commissioning as per Technical Specifications and as per direction of Engineer.					
а	50mm dia pipe	Rmt	50			Rs
b	110mm dia pipe	Rmt	600			Rs

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
11	Providing & fixing of Cast iron double flanged sluice valves as per IS:14846-2000 fitted with cast iron cap including jointing & testing with cost of jointing material such as bolts, nuts, rubber insertions etc. all complete. (Steel Spindle)					
а	Sluice Valve: 100 mm dia	Each	3			Rs
12	Providing and placing in position C.I. double acting air valve of approved make.					
а	100 mm dia category A	Each	1			Rs
13	Providing lowering laying in trenches, aligning, fixing in position and jointing socket rubber gasket type ISI marked uPVC pipe all fittings/ accessaries of class III (6kg/sq.cm)of Class-3 suitable for potable water with rubber ring joints as per IS:4985-2000 for following outer dia with all the accessories complete including all material labour, hydraulic testing and commissioning as per technical specifications and as per the direction of Engineers.					
а	250 mm dia	Rmt	500			Rs
14	Providing 1st class bedding below pipes with graded sand or other granular materials passing through 5.6 mm sieve as per clause 2904.					
а	250 mm dia	Rmt	67.23			Rs
15	Providing MS/ CI foot rests and fixing in manhole with CC blocks of Cement Concrete grade M-10 (Nominal Mix) with stone aggregate 20 mm nominal size of size 20 x 20 x 10cm.					
а	With 20mm round bar footrest (average weight of 1 foot rest 1.85kg)	Each	75			Rs
16	Providing sand cast iron drop connection externally for 60 cm drop from branch sewer line to main sewer manhole including inspection and cleaning eye with chain and lid, sand cast iron drop pipe and bend encased all-round with cement concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40 mm nominal size) with all centering and shuttering required, cutting holes in walls and making good with brick work in cement mortar 1:4 (1 cement: 4 coarse sand) plastered with cement mortar 1:3 (1 cement: 3 coarse sand) on inside of the manhole wall lead caulked joints between sand cast iron pipes and fittings, stiff cement mortar 1:1 (1 cement: 1 fine sand) joints between sand cast iron tee and S.W. pipe, making required channels complete as per standard design and specifications:					

SI. No	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
а	150 mm dia. sand cast iron drop connection	Each	1			Rs
17	Supplying & fixing Manhole Frame and Cover of following sizes circular Composite Resin (FRP/ GRP) Manhole Frame and Cover of approved brand, Conforming to relevant Grand Designation: as per IS:1726:1991 etc. Complete. (Inspection shall be as per guide lines of IS Specification)					
а	600 mm dia (Capacity 2.5Tonn)	Each	15			Rs
18	Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 40 in foundation and plinth in:					
а	Cement Mortar 1:6 (1 cement : 6 coarse sand)	Cum	86.40			Rs
19	12mm thick cement plaster of mix:					
а	In Cement Mortar 1:5 (1 cement : 5 fine sand)	Sqm	576			Rs
20	15 mm thick Table rubbed polished Granite stone slab flooring laid over 20mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing etc. complete. (Area of slab should					
а	Granite stone black	sqm	173			Rs
b	Granite stone grey/pink	sqm	173			Rs
	Sub Total of B					Rs
С	Compound Wall					
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.	Cum	6596			Rs
2	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	Cum	4618			Rs

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
3	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work					
а	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size).	Cum	416.40			Rs
4	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.					
а	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	Cum	377.90			Rs
5	Random rubble masonry with hard stone in foundation and plinth in Cement Mortar 1:6 (1 Cement : 6 Coarse Sand) including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand: 12 stone aggregate 20mm nominal size) at plinth level.	Cum	1236			Rs
6	Providing and laying hand cut, reddish pink Bilha stone or approved equivalent stone blocks, of average size 100 x 200 x 600mm thk neatly dresse to give an even surface and fixed in position with 1:6 cement mortar of approved quality in approved pattern, laid edge to edge on a bed of joints finished with neat cement slurry, laying as per design, including curing, cleaning complete as directed & as per detail drawing. (superstructure above plinth level)	Cum	326			Rs
7	Random rubble masonry with hard stone in superstructure above plinth level and upto floor five level in cement mortar (1 cement : 6 coarse sand) including leveling up with cement concrete 1:6:12 (1 Cement : 6 Coarse Sand : 12 stone aggregate 20mm nominal size) at window sills, ceiling level and like.	Cum	1574			Rs
8	Pointing on stone work with cement Mortar 1:3 (1 cement : 3 fine sand). Ruled/ Shunken pointing	Sqm	6407			Rs
9	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					
а	Foundations, footings, base of columns and plinth beam in any shape and size.	Sqm	1168			Rs
	Providing, fabricating and fixing M.S. grill/ Railing of approved pattern made of M.S. angel, flats, plates, square or round bars, M.S. Hollow square tube/ pipe welded to steel frame of grill or railings etc. including applying a priming coat of red oxide zinc chromate primer.	Kg	85153			Rs

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
11	Painting on new work (two or more coats) to give an even shade with: Satin synthetic enamel paint (top most approved branded quality)	Sqm	5413			Rs
12	Providing & Fixing G.I. chain link fabric fencing of required width in mesh size 50 x 50 mm including strengthing with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge. Made of G.I. wire of dia 4 mm.	Sqm	719			Rs
	Sub Total of C					Rs
D	Development of Soft scape					
1	Providing and planting following herbs in garden including preparation of soil, earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20%: 1 part of stacked volume of manure after reduction by 8%) watering, dressing including removal of rubbish and surplus earth, prepration of base plantation, providing and spreading different fertilizers, soil and sand if any with all leads and lifts including cost of manure, sludge or extra good earth if needed and as per instruction of Engineer in charge including maintenance of one year.					
а	Carpet grass	Sqm	6000			Rs
b	Dhoob grass	Sqm	29000			Rs
2	Planting Permanent Hedges including Digging of Trenches (Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 meters and supplying and planting hedge plants at 30 cm apart), including maintenance of one year. Species: (mehnde lawsonia inermis/ Clerodendron inerme)	Rmt	1189			Rs
3	SHRUBBARY PLANTATION: Providing and planting following herbs in garden including preparation of soil, base plantation, providing and spreading different fertilizers, soil and sand including required manuars including maintenance of one year.	Sqm	6973			Rs
	Ground covers		ı			
	Orodina covers				ļ	

SI. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in Words (in INR)	Amount in INR
4	Planting of Trees and their Maintenance for one Year (Planting of trees by the road side (Avenue trees) in 0.60 m dia holes, 1 m deep dug in the ground, mixing the soil with decayed farm yard/sludge manure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for Two year)					
а	TREES - 1 yr. old. Ht3 to 6 ft. Species: (Pongamia Glabra / Cassia Javenica/ Tabebuia Rosea /Casia Fistula / Tabebuia Crisanta / Alistonia Scholaris)	Each	1290			Rs
	Sub Total of D					