



**NAYA RAIPUR DEVELOPMENT AUTHORITY**

**Tender Document for the  
Supply, installation, testing and commissioning of flow  
meters at various locations of Naya Raipur  
2<sup>nd</sup> Call**

**(Following Three-Envelope Tender Procedure)**

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

**NIT No. : 73/EE-PHE/SE(E)/ CE (E)/ NRDA /2016-17, Naya Raipur**

**Dated: 01.06.2016**

**Issued by:** Chief Executive Officer,  
Naya Raipur Development Authority (NRDA)  
1<sup>st</sup> Floor, Utility block, Capitol Complex, Sector- 19,  
Naya Raipur- 492 002, Chhattisgarh  
Tel No: + 91 771 2511500; Fax No.: +91 771 2511400.  
Website: [www.nayarapur.gov.in](http://www.nayarapur.gov.in)

## 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 –II .....Scope 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>

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 : “Supply, installation, testing and commissioning of flow meters at various locations of Naya Raipur (2<sup>nd</sup> Call) ”.

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****Supply, installation, testing and commissioning of flow meters at various locations of Naya Raipur**

<b>Sr. No</b>	<b>Component of Work</b>	<b>Amount in INR</b>	<b>Amount in Words ( In INR)</b>
A	Flow meters	Rs. -	
B	Electrical Works	Rs. -	
	<b>Total Project Cost</b>	<b>Rs. -</b>	

Bill of Quantities						
Supply, installation, testing and commissioning of flow meters at various locations of Naya Raipur						
A Flow Meters						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
1	Supply, installation, testing and commissioning of Multi Jet, dry-dial, inferential type, horizontal, Magentically coupled, class 'B'water meters Conforming to IS-779: 1994 and ISO 4064:1993 standard with EEC/MID certification mark, with IP68 protection class copper can register with 5 mm tempered mineral glass cover, successful Life Cycle Test Certificate from FCRI and AMR compatibility with 5 years warranty complete with brass nuts and nipples. Instrument shall be complete in all respects according to technical specifications <b>including all specials and fittings as per requirement of making connections with existing CPVC pipe line, including coupling, adaptor, union (typ), bends, reducer, suitable size of CPVC Ball valve (CTS sockets), Brick chamber inside dimension : 60cmx60cmx75cm, well burnt clay bricks of 35 kg/ cm<sup>2</sup> in cement mortar 1:4, inside 12mm thick plastering with cement mortar 1:3 and 110mm thick RCC top slab 1:2:4 mix, including steel 10mm dia. bar 150mm c/c, foundation concrete 150mm thick, PCC-1:5:10 Mix., including excavation, back filling, existing pipe line cutting and fitting with meter etc. including all material labour, testing and commissioning along with meter complete and as per direction of Engineer in Charge.</b>					
a	DN 40 mm	Nos.	3			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
2	Supply, installation, testing and commissioning of Woltman Type, dry dial, inferential type, Magnetically coupled, class 'B' accuracy water meters in any position with interchangeable mechanism. Confirming to ISO 4064:1993 standard with EEC certification mark, with IP 68 protection class copper can register with 5 mm tempered mineral glass cover, AMR compatibility with 5 years warranty complete and successful accuracy test certificate from FCRI, Palakkad with C.I. Body 'T' Type strainer. Instrument shall be complete in all respects according to technical specifications <b>including all specials and fittings as per requirement of making connections with existing CPVC pipe line, including coupling, adaptor, union (typ), bends, reducer, suitable size of CPVC Ball valve (CTS sockets), Brick chamber inside dimension : 60cmx60cmx75cm, well burnt clay bricks of 35 kg/ cm<sup>2</sup> in cement mortar 1:4, inside 12mm thick plastering with cement mortar 1:3 and 110mm thick RCC top slab 1:2:4 mix, including steel 10mm dia. bar 150mm c/c, foundation concrete 150mm thick, PCC-1:5:10 Mix., including excavation, back filling, existing pipe line cutting and fitting with meter etc. including all material labour, testing and commissioning along with meter complete and as per direction of Engineer in Charge.</b>					
a	DN 50 mm	Nos.	2			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
3	Supplying, installation, testing and commissioning of electromagnetic full bore meter complete as per specification includes transportation to site, storage, safety, installation, testing, commissioning, making connections with existing pipe line, including excavation at site, cuts in the existing pipe system, dewatering and reinstating the same after completion of installation as per specification and drawings including all taxes. Accuracy of meter +/- 0.3% - 0.5% of measured value, Flange connection as per AWWA & IS, fully welded sensor housing complying to IP 68 standard, Electrodes SS 316/Hastelloy C, cable gland 1/2" NPT, Sensor housing fully welded SS 304 housing with protective Polyurethane paint/Die Cast Aluminium with anti corrosive grade paint/Carbon Steel ASTM A 105 with corrosion resistant two component epoxy coating (min 150 µm), Flow Transmitter/ Converter: Microprocessor based, modular design display 2 line back lit LCD for indication of actual flow rate, forward, reverse, sumtotalizer, Perfection category: IP 65. Output: One current output (4-20 mA) one scalable pulse output. The required cable and mounting accessories for remote type transmitter mounting shall be included (maximum distance of 15 m or as per site condition).Instrument shall be based on open protocol and SCADA compatible, complete in all respect as per technical specification <b>including all specials and fittings as per requirement of making connections with existing pipe line, including coupling, adaptor, union (typ), bends, reducer, and including suitable size of Butterfly valve PN-1.6, Brick chamber inside dimension : 120cmx120cmx100cm, well burnt clay bricks of 35 kg/ cm<sup>2</sup> in cement mortar 1:4, inside 12mm thick plastering with cement mortar 1:3 and 110mm thick RCC top slab 1:2:4 mix, steel 10mm dia. bar 150mm c/c, foundation concrete 150mm thick, PCC-1:5:10 Mix., excavation, back filling, existing pipe line cutting and fitting with meter etc. including all material labour, testing and commissioning along with meter complete and as per direction of Engineer in Charge.</b>					
a	DN 65mm (Existing pipe line : HDPE pipe (PE-100) 6 Kg/sq.cm)	Nos.	2			Rs. -
b	DN 100mm (Existing pipe line : Ductile iron pipe (classK-7))	Nos.	2			Rs. -
c	DN 150mm (Existing pipe line : Ductile iron pipe (classK-7))	Nos.	2			Rs. -

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
d	DN 200mm (Existing pipe line : Ductile iron pipe (classK-7))	Nos.	2			Rs. -
	<b>Sub Total of Flow Metres</b>					-



Bill of Quantities						
Supply, installation, testing and commissioning of flow meters at various locations of Naya Raipur						
B						
Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
1	Fabrication, supply, installation, testing and commissioning of cubicle type compartmentalized wall/ floor mounted control panel board of suitable dimensions made out of not less than 2 mm thick CRCA MS sheet with suitable compartments in three parts for UPS,SCADA Equipments and for electrical arrgment like bus bars, switchgears and necessary cutouts for voltmeters, ammeters etc as per specifications including powder coating painting, busbars, switchgears and other accessories etc complete as required.	Set	8			Rs. -
	<b>Bus bar</b>					
	2 pole Al bus bar 100amps					
	<b>incomer</b>					
	2 pole MCCB, 63A, 35KA as incomer					
	<b>outgoing</b>					
	5 Nos 6 amps to 32 amps SP MCB					
2	Supplying, installation, testing and commissioning 2.0 KVA rating single phase in, single phase out ON-LINE UPS having DC bus voltage 24V including 6 kV surge protection with SMF (Sealed Maintenance Free) lead acid battery of minimum 1 hr back up ,connection etc as required.	Nos.	8			Rs. -
3	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.					

Sr. No.	Description of Items	Unit	Quantity	Rate in INR	Rate in words (in INR)	Amount in INR
i	40 mm dia	mtr	1200			Rs. -
4	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	2x16 sq.mm	mtr	1000			Rs. -
ii	2x 4 sq. mm	mtr	80			Rs. -
5	Supplying and fixing of following sizes PVC conduit along with accessories in concealed complete as required					
i	25 mm	meter	80			Rs. -
6	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	308			Rs. -
<b>Sub Total of Electrical Works</b>						<b>Rs. -</b>