

**PROCUREMENT OF CIVIL WORKS
THROUGH
REQUEST FOR QUOTATION
(RFQ)/SHOPPING PROCEDURES**

*(Lump sum and percentage rate tender)
(One-Envelope with e-Procurement)
(For Contracts valued less than the equivalent of US \$ 100,000 each)*

July 2014

REQUEST FOR QUOTATIONS
Procurement of Works under RFQ/Shopping Procedures
E-Procurement Notice
(Single-Envelope with e-Procurement Bidding Process)

Purchaser: Superintending Engineer (HQ), Ground Water Department, Jaipur

Project: NHP

Contract title: Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP.

RFQ No: NHP/SPMU/RFQ/06/2022-23

Date: 07.11.2022

Applicable Procurement Guidelines/Regulations Date: Revised July 2014

1. **The Government of India** has received financing from the World Bank in various currencies towards the cost of the National Hydrology Project and intends to apply part of the proceeds towards eligible payments under the contract for which this request for quotations is issued. The Superintending Engineer (HQ), Ground Water Department, Jaipur invites quotations electronically from eligible bidders for the following goods.

Brief Description of the Works	Period of Completion
Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP.	3 months

2. This Procurement notice includes the following documents to facilitate preparation and submission of quotations, criteria for qualification, and for award of contract; and relevant forms to be filled by the bidders. Implementing Agency has not issued a separate RFQ document for this purchase. Documents and forms to be filled etc. can be downloaded free of cost by logging on to the website <https://sppp.rajasthan.gov.in>
 - a. Instructions to Bidders;
 - b. Qualification Information;
 - c. Format for Submission of Quotation;
 - d. Criteria for Evaluation and Award of Contract;
 - e. Relevant Forms; and

3. Quotations, both Technical Part and Financial Part shall be submitted offline in separate envelopes which are placed together in a single envelop on or before 14.00 hours on 16.11.2022. The 'Technical Part' and Financial Part of the Quotations will be opened offline on 16.11.2022 at 14.30 hours.
4. If the implementing agency's office happens to be closed on the date of opening of the Quotations as specified, the 'The 'Technical Part' and Financial Part of the Quotations will be opened on the next working day at the same time.
5. Other details can be seen in the RFQ document. The implementing agency shall not be held liable for any delays due to system failure beyond its control. A Bidder requiring any clarification of the RFQ document may notify the Implementing agency through electronic mode or may visit the office of the implementing agency at the address given below.

Name and address of Purchaser

M.K. Gupta

Superintending Engineer (HQ) Ground Water Department, Jaipur

72 B, Jhalana Institutional Area, Jhalana Doongri, Jaipur-302004 91-141-2706056

mkgsehqgwd@gmail.com

Instructions to Bidders

SECTION - A

1. Scope of Works

The Superintending Engineer (HQ), Ground Water Department, Jaipur (Employer) invites quotations for the construction of works as detailed in the table given below

Brief Description of the Works	Period of Completion
Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP.	3 months

The successful bidder will be expected to complete the works by the intended completion date specified above.

2. Qualification of the bidder

2.1. Qualification Information to be provided by the Bidder: the bidder shall provide information on his qualification which shall include: -

- (a) Attach the registration certificate of PWD in reference to 2.2 (a).
- (b) List of Similar nature of works in last 3 years.

2.2. Qualification Criteria: to qualify for award of the contract the bidder: -

- (a) Should have registered in PWD as an electrical contractor under any class i.e. E-1 to E-4 ;

3. Eligibility – Conflict of Interest: A Bidder (a) shall not participate in more than one Quotation; (b) shall not have conflict of interest as defined in the Bank's Procurement Regulations/ Guidelines and (c) should not have been (i) temporarily suspended or debarred by the World Bank Group in compliance with the Bank's Anti-Corruption Guidelines and its Sanctions Framework; or (ii) blacklisted or suspended by Central or any State Government Departments in India.

4. Clarifications & Amendments: If the Employer receives any request for clarification of this RFQ document, it will upload its response together with any amendment to this document, on the SPPP portal for information of all Bidders. Bidders should check on the SPPP portal, for any amendments to this RFQ document.

5. Quotation Prices

- a) Bidder shall quote their rate in BOQ (attached) for whole items at proper place in excess /less %, figure as well as in words.
- b) The quotation shall be for construction of the whole works as described in the Bill of quantities.
- c) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
- d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- e) The rates should be quoted in Indian Rupees only.

6. Preparation of Quotations

6.1 The bidder is advised to visit the site of works at his own expense and obtain all information that may be necessary for preparing the quotation.

6.2 Each bidder shall submit only one quotation. Bidders shall not contact other Bidders on matters relating to this quotation.

6.3 The quotation shall comprise two Parts, namely the Technical Part and the Financial Part. Both Parts shall be submitted offline simultaneously.

6.4 The Technical Part of Quotation shall comprise the following:

- (a) **Letter of Quotation – Technical Part** as per Format given in Section B and should include information as per 2.1 and 2.2.
- (b) **Complete address** and contact details of the Bidder having the following information:

Name of Firm
Address for communication
Telephone No(s): Office
Mobile No.
Facsimile (FAX) No.
Electronic Mail Identification (E-mail ID)

6.5 The Financial Part of Quotation shall comprise the following:

- (a) **Letter of Quotation** - Financial Part;
- (b) **Priced Bill of Quantities:** (using the BOQ attached with the RFQ document) wherein the rates shall be entered offline in BOQ.

6.6 Signing of Quotations: The name and position held by each person signing the quotation and related documents must be typed or printed below the signature.

6.7 Deadline for Submission of Quotations: Quotations must be submitted offline no later than the deadline for submission of quotations viz. time 2.00PM (hours) and date 16.11.2022.

6.8 Validity of Quotation: Quotation shall remain valid for a period not less than 45 days after the deadline date specified for submission.

7. Quotation Submission:

- (a) The Letter of Quotation – Technical Part, and Letter of Quotation – Financial Part along with RFQ shall be filled, signed and submitted along with the Priced Bill of Quantities in the format attached.

8. Opening and Evaluation of Technical Parts and Financial Part of Quotations:

- 1. The 'Technical Part' and Financial Part of the Quotations will be opened simultaneously off-line on the specified date and time.

- (a) The Employer shall examine the technical part of the quotation to determine whether the bidder fulfill qualification criteria as 2.1 and 2.2.

- (b) The Employer shall examine and confirm that Letter of Quotation – Financial Part and Priced Bill of Quantities are in accordance with the requirements specified in the RFQ document. If any of these documents or information is missing, the offer shall be rejected.

10. Award of contract

The Employer will award the contract to the bidder who has offered the lowest evaluated quotation price and who meets the specified qualification criteria.

10.1 Notwithstanding the above, the Employer reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

10.2 The bidder whose quotation is accepted will be notified of the award of contract by the Employer prior to expiration of the quotation validity period.

11. Performance Security

No Performance Security is required.

12. Defect Liability Period:

The “**Defect Liability Period**” for the work is **six months** from the date of completion of work. During the “**Defect Liability Period**”, the contractor will be responsible for rectifying any defects in work free of cost to the Employer.

13. Security Deposit (SD) of 3% of contract price will be deducted from the payment of the contractor which shall be refunded after completion of Defect Liability Period.

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SECTION - B

- 1. Format for Qualification Information.**
- 2. Format for Submission of Quotation (BOQ).**

1. QUALIFICATION INFORMATION

1.1 Work performed as prime contractor (in the same name) on works of a similar nature over the last three years.

<u>Project Name</u>	<u>Name of Employer</u>	<u>Description of work</u>	<u>Contract No.</u>	<u>Value of contract (Rs.Lakhs)</u>	<u>Date of issue of work order</u>	<u>Stipulated period of completion</u>	<u>Actual date of completion*</u>	<u>Remarks explaining reasons for delay and work completed</u>

Authorized Signature : Date: _____

Name & Title of Signatory : _____

Name of Bidder : _____

Dated : _____

Letter of Quotation–Technical Part

The Bidder must prepare the Letter of Quotation on stationery with its letterhead clearly showing the Bidder's complete name and address. The italicized text is for Bidder's guidance in preparing these forms and shall be deleted from the final products.

Description of the Works **Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP**

RFQ No.: *NHP/SPMU/RFQ/06/2022-23*

To Superintending Engineer (HQ)

Ground Water Department, Jaipur

Subject : **Electricity related work at water Quality Lab, Jaipur**

Reference : RFQ No.: *NHP/SPMU/RFQ/06/2022-23* dated 07.11.2022

Sir,

1. We, the undersigned, hereby submit our Quotation in two parts, namely:

- (a) Technical Part; and
- (b) Financial Part

2. In submitting our Quotation, we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the RFQ document;
- (b) **Conformity:** We offer to execute the subject work in conformity with the RFQ document and in accordance with the Period of Completion specified in Section A.;
- (c) **Quotation Validity Period:** Our Quotation shall be valid for the period of 45 days, from the deadline fixed for the Quotation submission;
- (d) **Eligibility:** We meet the eligibility requirements and have no conflict of interest, we are not participating in more than one quotation in this bidding process, and we have not been temporarily suspended or debarred by the World Bank or blacklisted or suspended the Central or any State Government;
- (e) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of corrupt, fraudulent, collusive, coercive, or obstructive practices; and we will strictly observe the laws against fraud and corruption in force in India namely, "Prevention of Corruption Act 1988."

Yours faithfully,

Authorized Signature : Date: _____

Name & Title of Signatory : _____

In the capacity of *[insert legal capacity of person signing the Letter of Quotation]*

Name of Bidder : _____

Address : _____

Dated on _____ day of _____, _____ *[insert date of signing]*

Letter of Quotation–Financial Part

The Bidder must prepare the Letter of Quotation on stationery with its letterhead clearly showing the Bidder's complete name and address. The italicized text is for Bidder's guidance in preparing these forms and shall be deleted from the final products.

Description of the Works **Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP**

RFQ No.: *NHP/SPMU/RFQ/06/2022-23*

To Superintending Engineer (HQ)

Ground Water Department, Jaipur

Subject : **Electricity related work at water Quality Lab, Jaipur**

Reference : RFQ No.: *NHP/SPMU/RFQ/06/2022-23* dated 07.11.2022

Sir,

1. We, the undersigned, hereby submit the second part of our Quotation, the Financial Part including the Quotation Price and Bill of Quantities. In submitting our Financial Part we make the following additional declarations:
 - (a) **Validity:** Our Quotation shall be valid for the period of 45 days from the deadline fixed for the Quotation submission;
 - (b) **Quotation Price:** The total price of our Quotation including any unconditional discounts, offered in accordance with the Conditions of Contract is at percentage above / below the estimated rates, i.e., for a total Contract Price of –

Rs.** _____ [in figures]

Rs. _____ [in words];

- (c) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity. If none has been paid or is to be paid, indicate "none."]*

Yours faithfully,

Authorized Signature

Name & Title of Signatory _____

In the capacity of *[insert legal capacity of person signing the Letter of Quotation]*

Name of Bidder _____

Address _____

Dated on _____ day of _____, _____ *[insert date of signing]*

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2. BILL OF QUANTITIES

Financial Bid						
Name of Work: Electricity related work at water Quality Lab, Jaipur for NABL accreditation under NHP						
P.W.D. Rajasthan Electrical B.S.R. 2022						
S. no.	Code No.	Description	Unit	Rate	Qty	Amount
1	6.1	Providing & Fixing of 240/415 V AC MCB with positive isolation of 10 kA breaking capacity (B/ C/D tripping characteristic as per type of load and site requirement) 4 KV impulse withstand voltage, ISI marked IS 8828(1996) / conforming to IEC 60898-1 2002, IEC 60947- 2, low watt losses, trip free mechanism , energy limiting of class 3 as per IEC, minimum phase termination capacity of 35sq.mm. , conductor line load reversibility , IP 20 contact protection and fitted in existing distribution board/sheets, minimum electrical operation 20,000 upto 20 A rating and 10,000 upto 63 A, 5000 for 80 A & above rating including making connections, testing etc. as required. OEM shall have submit NABL / CPRI / ERDA accredited lab type test reports & All as per pre approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
2	6.1.4	Four pole MCB (With B/C curve tripping Characteristics)				
3	6.1.4.4	50/63 A rating	Each	1745	4	6980

4	8.1	<p>SITC of IP-42 and general construction confirming to IS:8623 : 1993, wall/ free standing floor mounted dust and vermin proof compartmentalised cubical panel as specifications and Other parameters required as per point (a) ,(b), (c),(d), (e), (f), (g), (h) as below:-</p> <p>(a) Thickness of CRCA sheet shall be 2.0 mm, cable alley compartments having concealed hinged type doors with key type lock with / without detachable extension type structure. Removable 3 mm. thick sheet steel gland plates with appropriate size of knockouts for cables shall be provided</p> <p>(b) complete panel shall undergo a process of degreasing, Water rinsing, Activation, derusting, pickling in acid bath, phosphatising & shall be subjected to nine tank process and then Powder coated with approved shade of minimum 70 microns on both side of panel. The panel having PE foam/ Neoprene rubber gasket of not less than 3mm thickness ,required hardware , concealed hinged door with key type locking arrangement for equipment/switchgear earthed with 2.5 sq.mm braided copper wire.</p> <p>[c] Interconnection between bus bar and switchgears /cable shall be rigidly supported and made out by flexible copper wires (up to 63 amp) and by solid bus bar (>63 amp) . control wiring will be carried out with 1.5 Sq.mm, Earth wire with 2.5 Sq.mm and CT with 2.5 sq.mm flexible copper wire only. All joints / interconnections of copper bus bar shall be dully tinned . Clearance between main bus bar and risers / metal parts shall be at least 10 mm additional to width of bus bar Bus bar is insulated by Heat Shrinkable sleeves . Earth and Neutral bus bar shall be half of the size of phase bus bar. (Cost of Bus bar / Flexible wire for Interconnection between Main busbar and Switchgear is to be Paid Extra)</p> <p>(d) Wiring between components within switchgear and Incoming / outgoing cable shall be done through the terminal block only. Direct connection shall not be permitted. Each terminal block shall be one piece moulded, barrier type, 650 volt grade, complete with washers, heads, studs with two nuts and identification strips and shall have adequate continuous current rating. For tap-offs, adjacent terminals with shorting strips shall be used. 10% Spare terminal blocks shall be provided. Wire identification on marking strip shall correspond to the designation of the wiring diagrams. All wire terminals on the equipment shall also be marked with designation corresponding to those of the wiring diagram.</p> <p>(e) All wiring shall be enclosed in plastic channels and neatly bunched and closed in metering chamber, Wiring between terminals of various devices shall be 'point to point' (no wire splitting or tee connections) with wires neatly trucked along the back of the panels, adequately supported to prevent sagging. (f) Floor mounted panel shall be mounted on Base frame of ISMC channel size 100 x 50 x 5 mm (to be paid Extra)</p> <p>(g) Tests: The insulation resistance (with 1000 V Megger) and High voltage Power frequency test (by applying a voltage of 2.5KV for one minute) shall be measured between phases, between phase and neutral and between phase and earth. both before and after high voltage power frequency test. The insulation resistance shall not be less than three megaohm. CT Secondary current injection test shall also be carried out.</p> <p>(h) only outer surface area on all sides shall be measured & panel to be fabricated only from CPRI approved fabricator only (CPRI Test certificates to be submitted) All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .</p>	Sq. Mtr	5975	9	53775
5	8.2	<p>Supplying and fixing of Aluminium (IEC 60105 ISO 209-1,2) / Copper (IEC 60028) bus bar by means of SMC / DMC type insulator with standard short circuit withstand capacity , high tensile nuts and bolts spring washers in existing panel including bending , cutting in required shape and size and colour coding with heat shrinkable PVC sleeves. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .</p>				
6	8.2.1	Electrolytic grade Aluminium bus bar 6010 grade	Kg	542	15	8130

7	8.3	Providing & Fixing of IS: 13875 & IEC :61326 confirming LED Digital type (up to 500) V range Volt meter / Direct- Ammeter / CT oertated ammeter/ Frequency meter / KWH meter / Multi Function Meter / Power analyzer of class 1 accuracy as per IS : 1248 of size 96mm x 96 mm including making connection by PVC insulated copper conductor with PVC sleeves / channel etc. as required. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
8	8.3.3	Three phase Ammeter with Inbuilt Selector Switch	Each	1689	1	1689
9	8.3.4	Three phase Voltmeter with Inbuilt Selector Switch	Each	1689	1	1689
10	8.3.5	Three phase KWH Meter	Each	3530	1	3530
11	8.3.6	Three phase KWH Meter Dual Source	Each	3858	1	3858
12	8.4	Providing & Fixing of BIS approved Current Transformer as per PWD specification for electrical Works ,ISI marked as per IS 2705-1992/ conforming to IEC 60044-1, with secondary terminal of CT shall be brought out suitable to a terminal block which shall be easier accessible for testing and terminal connection , with all necessary support in existing panel including connection etc. as required Current transformer Ring Type Tape Wound/Resin Cast Wound as per IS 16227 with, Accuracy Cl, CT ratio and burden as specified. ISF<=5, Cu cross section of secondary wire 1.5sqmm (minimum), including all necessary support in existing panel including connection etc. as required . All as per pre approved by Engineer in charge.All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
13	8.4.1.2	C T Class 1, Ratio 200/5 to 300/5, Burden 10 VA	Each	788	3	2364
14	8.8	Providing & Fixing of 110/220 V, unibody LED Indicating lamp IEC 60947 with integral circuit, IP 65 above panel & IP 20 terminal block, Approx. body dia for panel not less then 20 mm, length min. 50mm, front LED cover dia min. 29 mm, contact material phosphor bronze for Led, PCB contacts shall be of brass (tin plated), impulse dielectric tested for 2.5 KV, Rated insulation resistance shall be 100 M ohm at 500VDC including connection etc. as required. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
15	8.8.1	Red/yellow/Green colour	Each	170	3	510
16	9.3	SITC of 3 /4 pole current limiting Moulded case circuit breaker (MCCB) made of flame retardent & heat resistant material having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings , conforming to IS/IEC 60947 P -2 :2003 with front face and centralised adjustable, trip free mechanisum, true contact position indicator, line load interchangeability, designed for both horizontal & vertical mounting without any adverse effect on electrical performance, suitable for operation upto 55 degree and without derating upto 40 degree, pollution degree 3, having positive isolation capability, push (test) to trip, trip time less then 10 ms under s/c condition, Breaking capacity Ics = 100% Icu. U imp =8 KV, rated insulation voltage 690 V. provision for UVR , shunt trip , earth fault trip, door interlock, pad lock & rotary handle , including making connections etc. as required.OEM shall have submit NABL / CPRI / ERDA accredited lab type test certificate before execution All as per pre approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
17	9.3.1	3 pole MCCB With Thermal Magnetic release				
18	9.3.1.2	up to 100 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	5170	5	25850
19	9.3.1.4	160 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	9961	2	19922
20	9.3.1.5	200 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	13188	1	13188
21	9.3.3	4 pole MCCB With Thermal Magnetic release				
22	9.3.3.6	250 Amp , 25 kA, adjustable O/L & adjustable S/C setting,	Each	17480	1	17480

23	12.1	Supplying and making one end termination with Nickel plated heavy duty brass single compression gland (as per IS 12943-1990)) SIBG type consisting of Check Nut, Gland Body, Metal Washer(3 Nos.), Outer Seal Rubber Ring, Compression Nut, heavy duty aluminium lugs (as per IS 8309 -1993) duly crimped with crimping tool, PVC tape as per IS 8337-1976 of following size of PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required.All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR				
24	12.1.18	3.5 x 35.0 sq.mm	Set	258	4	1032
25	12.1.20	3.5 x 70.0 sq.mm	Set	382	6	2292
26	12.1.33	4 x 16.0 sq.mm	Set	189	4	756
27	14.3	Plate Earthing as per IS:3043 with copper Earth plate of purity >95% of size 600mm x 600mm x 3.0mm by embodying 3 mtr. below the ground level with 20 mm dia. G.I. 'B' class watering Pipe ,including all accessories like nut, bolts, reducer, nipple, wire meshed funnel, and Heavy duty weather proof poly-propylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. and embodying the pipe complete with alternate layers salt and coke/ charcoal, testing of earth resistance for value of 5 ohms or less as required & must record by engineer in charge during site visit and ensure to enter in measurment book. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .	Set	15144	2	30288
28	14.4	Supply and installation of high tensile low carbon steel rod molecularly bonded with 99.9 % Copper thickness (250 microns) and confirming to UL 467, IS/IEC 62561-2 of following size and length and as per point mentioned (a), (b), (c), (d), (e) below :- (a) Bore a hole of dia. 100 mm of required length, Place the rod in the centre of Hole (b) filled with anti corrosive conductive compounds with the permanent sealings at both the ends, CPRI/ ERDA tested with RMS capacity of minimum 30 KA for withstanding 1 second .To ensure the moisture content and electrical conductivity, 25 kg for 2000 mm & 50 Kgs for 3000mm of resistance lowering earth enhancement material shall be used as a backfill compound. The compound shall be tested form NABL acredeated lab for low resistivity (less than 0.12 Ohm - meter) & high conductivity in nature with carbon as a major content as per reference of IS 3043-1987,IEEE 80-2013 (clause 14.5d) , IEEE 837 & IER 1956 with latest amendemnts © Connect the rod with copper Strip/Conductor/Wire with suitable clamp made from tinned copper and SS 304 Bolt (d) Place Heavy duty weather proof poly-propylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. (d) Testing of earth resistance for value of 5 ohms or less as required & must record by engineer in charge during site visit and ensure to enter in measurment book. (e) Test certificates for confirming above standards from OEM is mandatory. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
29	14.4.1	17.2 mm thick and 3 Mtr. Long	Set	7010	2	14020
30	14.5	Supply & Laying following size earth strip in horizontal or vertical run in surface by means of Earth strip DMC Insulator including riveting/ soldering/ welding, Jointing shall be done by overlapping and with 2 set of Brass (for Cu strip) / GI (for GI Strip) nut bolt & spring washer spaced at 50cm making connection etc. as required.All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
31	14.5.2	25mm x 3mm copper strip	Mtr	1037	20	20740

32	14.6	Supply & Laying following size earth wire in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection with GI/Cu purity >95% thimble etc. as required. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
33	14.6.1	6 SWG tinned copper Wire	Mtr	232	20	4640
		Providing & Fixing of IK08, IP 66 protected LED Street Light Luminaire on existing bracket/pole. Fixture made of powder coated single piece pressure die cast aluminum material with heat dissipation fins on housing with UV stabilized PC (UV stablization report submitted for UV cover) /Toughened Glass cover and secondary lens on each LED & should be SMD type of 3 to 5 watt each . The System efficacy ≥ 125 lm/ wt and potted driver & has a unique BIS R number with Input Voltage AC 120 to 270 V AC with High voltage Cutoff ≥ 300 V AC and Auto resetting Safety , Power Factor >0.95 driver Efficiency $>85\%$,THD(I) $<10\%$ Humidity 10% to 90% RH Working Temp -5C to 45C . driver current <750 mA. The luminaire shall be BIS certified and Trade mark certified. Life Expectancy Equal or more than 50000 burning hrs with Minimum 70% lumen maintained , CRI >70 and CCT 5700K +355K. Surge protection shall be $\min \geq 4$ KV internal and $\min 10$ KV external inside driver compartment. driver should be Phase to phase protection of 440 V for 4 Hrs. Manufactures Word Mark/Name Engraved/Embossing on die cast housing to allow traceability/authenticity. Fixture shall be AS PER IS 10322 Comlianced.OEM Must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79/LM80) Certificate/ report with liable warranty of product/accessories from OEM shall be submitted. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				0
	18.12.5	LED Street Light fixture with Minimum lumen output 8700 lm	Each	5847.0	8	46776
	11.2	Providing & Laying P.V.C. / XLPE insulated & P.V.C. sheathed Armoured Aluminium cable confirming to IS:1554 P-1 / IS :7098 P - I of 1.1 KV with H4-Grade electrolytic aluminium conductor confirming to IS 8130 of purity $>99.6\%$, round / flat strip armouring of cables, Inner / outer sheath confirming to IS:5831 in existing RCC / Hume / Stoneware / PVC pipe/ open duct/cable trench / Cable tray(with cable tie) including testing etc. as required of following size. OEM must have it's own in house NABL accredited Laboratory for testing procedure as per IS:10810.For additional technical parameters of product / work refer Annexure 'A' ttached with this BSR				0
	11.2.2	6.0 Sq. mm				0
	11.2.2.1	2 core	Mtr	128.00	700	89600
	11.7	Add Extra for Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade direct in ground in the same trench in one tier horizontal formation including excavation of trench of size additional 20 cm in width, with procedure as per following points :- (a) Make a river sand bed of height 125 mm along the trench, (b) Lay another cable in middle of trench in such manner that spacing between another cable is 20 cm., (c) Provide river sand bed of height 125 mm on top of the cable. (d) Lay the protective Common burnt clay F.P.S. Bricks of Class designation 75 /Sand stone slabs of 50 mm thickness and 225 mm wide just above the sand bed vertically across the cable (Approx. 9 no. Bricks per Mtr.), (e) Backfill the excavated soil leaving 300 mm from the Ground level, (f)Lay the Cable warning tape and again back-fill the remaining portion of the trench upto the ground level and compacting the earth	Mtr	127.00	450	57150
	24.14	Providing, laying, testing & commissioning of 'C' class heavy duty G.I. pipe conforming to IS 1239 including welding, Forged GI fittings like elbows, tees, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required. (Pipe to be tested @ 10Kg/Sqcm for 2 Hrs.). All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached				

		with this BSR .				
	24.14.3	40 mm dia	Mtr.	737.00	10	7370
	4.1	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor as per PWD specification for electrical Works with ISI marked (IS:694) and as per IS 8130 : 2013 of 1.1 kV grade . Wire should be made from 99.90 % purity copper, class 5 stranding in acc. to IS:8130/IEC 60228 for lower watt loss , oxygen free for less chances of oxidization, insulation PVC type A/C/D , flame retardant as per IS 10810-53, better amperage rating as per IS:3961 part 5, in existing surface or recessed PVC/ MS conduit/casing capping making connections with Copper Lugs of suitable size, Ferrules,testing etc. as required. OEM Must have its own in house NABL lab setup for all testing facilities for wires. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				0
	4.1.7	2 x 2.5 sq. mm. + 1x1.5sqmm	Mtr.	81.00	200	16200
	6.1	Providing & Fixing of 240/415 V AC MCB with positive isolation of 10 kA breaking capacity (B/ C/D tripping characteristic as per type of load and site requirement) 4 KV impulse withstand voltage, ISI marked IS 8828(1996) / conforming to IEC 60898-1 2002, IEC 60947-2, low watt losses, trip free mechanism , energy limiting of class 3 as per IEC, minimum phase termination capacity of 35sq.mm. , conductor line load reversibility , IP 20 contact protection and fitted in existing distribution board/sheets, minimum electrical operation 20,000 upto 20 A rating and 10,000 upto 63 A, 5000 for 80 A & above rating including making connections, testing etc. as required. OEM shall have submit NABL / CPRI / ERDA accredited lab type test reports & All as per pre approved by Engineer in charge. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				0
	6.1.1	Single pole MCB (With B/C curve tripping Characteristics)				0
	6.1.1.2	6 A to 32 A rating	Each	187.0	8	1496
	6.1.3	Triple pole MCB (With B/C curve tripping Characteristics)				
	6.1.3.2	6 A to 32 A rating	Each	910.0	2	1820
	6.9	Providing & Fixing of Recessed/surface mounting heavy duty Enclosure made out from Galvanized steel / CRCA sheet not less then 1.2 mm thick conforming to IS-8623-1 & 3 / IEC 61439- 1 & 3. powder painted complete with din rail making internal DB terminations with copper lugs, detachable gland plate, including making connections, testing etc. as required.For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	6.9.2	Suitable for Six / Eight module for MCB/ RCCB	Each	1099.0	1	1099
	18.19	Providing & Fixing of IP - 65 protected impact resistant polycarbonate / Polyesterene enclosures with knock out for cable entry/out including fixing with nut, bolt, fatner etc as required complete in all respect of following sizes.All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .				
	18.19.1	180 x 180 x 91 mm	Each	1498.0	8	11984
	23.2	Supply & fabrication steel structure with MS channel / angle / joist / ISMB / sheet etc. including welding, rivetting, cutting, nut & bolt , one coat of primer & two coat of enamel paint etc. as required complete in all respect. All as per pre approved by Engineer in charge. For additional technical parameters of products/ work , refer Annexure "A" attached with this BSR .	Kg	135.0	15	2025

	1.4	S&F following sizes (dia.) of ISI marked virgin material MMS (IS:9537 P - III) PVC conduit along with ISI marked (IS:3419-1988) accessories as required in recess including cutting the wall, covering conduit and making good the same as required. For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	1.4.1	20 mm	R.Mtr	40.0	80	3200
	1.7	Rewiring of 3/5 pin 6 amp. Light plug point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade(IS:694) in recessed ISI marked MMS (IS:9537 P - III) virgin material PVC conduit & it's ISI marked (IS:3419-1988) accessories, 1.2 mm thick MS box with earth terminal of required size, 6 A switch, 3/5 pin 6 A socket, 3.0 mm thick ISI marked (IS:2036-1995) phenolic laminated sheet, Al.alloy / Cadmium plated iron/ brass screws, cup washers, making connections, testing etc. as required. For specification of copper Conductor, Phenolic Laminated sheet's & Electrical/ Wiring accessories refer Chapter E - 04, E - 05 & E - 07 For additional technical parameters of product / work refer Annexure 'A' attached with this BSR				
	1.7.1	On board	P. point	136.0	15	2040
		Total estimated cost Including GST				473493
Bidder shall fill the rates in below line			Less/Excess	in %	Amount in figure	
		Quoted Rates in Figure Including GST				
		Quoted Rates in Words Including GST				

We agree to execute the works in accordance with the approved PWD BSR items as per drawings and technical specifications related to BSR at percentage **above/below** the estimated rates, i.e., for a total Contract Price of Rs.(amount in figures)
(Rs. amount in words).

Signature of Contractor

(Where there is a discrepancy between the amount in figures and words, the amount in words will prevail)