



**CENTRAL RAILWAY  
PUNE DIVISION  
ELECTRICAL DEPARTMENT (GENERAL)**

**REGULATIONS FOR TENDER AND CONTRACT  
CONDITIONS OF TENDER, SCHEDULE OF RATES AND QUANTITIES**

**Tender No.PUNE\_ELECT\_G\_26\_13**

for

**Name of Work:- Provision of standard signages at Pune Railway Station.**

Date and time of Closing: 03/07/2026, 12:00 Hrs

Bid Security : Rs. 4,78,000/-

**Tender No. PUNE\_ELECT\_G\_26\_13**

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# 1.0 TENDER NOTICE

3729476/2026/O/O SR DEE/PA/CR

CENTRAL RAILWAY

ELECTRICAL DEPARTMENT

**TENDER NOTICE**

Divisional Railway Manager (General Services) Central Railway, Pune for and on behalf of The President of India invites open e- tenders from reputed and experienced contractors for the following work:-

Tender No.	PUNE_ELECT_G_26_13
Name of work	Provision of standard signages at Pune Railway Station.
Approx. cost of work	Rs.2,39,00,442.02/-(Rupees Two Crore Thirty-Nine Lakh Four Hundred Forty-Two and Paise Two Only)
Bid Security Rs.	Rs.4,78,000/-(Rupees Four Lakh Seventy Eight Thousand Only)
Cost of tender form	NIL.
Completion period	12 (Twelve) Months.
Validity of offer	60 days from the date of opening of tender.
Mode of payment for cost of Bid Security	The Bid Security shall be deposited either in cash through e payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per <b>Annexure-VIA</b> and shall be valid for a period of 90 days beyond the bid validity period.
Tender document is available	From <b>.00.2026 to 03.07.2026 up to specified time of website mentioned below.</b>
Website address	Tender notice, corrigendum if any & complete tender document will be available on website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
Date & time of submission of tender.	As mentioned on official website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
Date & time of closing of tender	03/07/2026, 12: 00 Hrs.
Consignee of work	SSE/EM/Pune will be Consignee of subject work
Eligibility Criteria	As per Chapter 2 of tender document.
<b>Note</b>	Tenderer may participate in above e-tender electronically through website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> only & submission of manual offers against e-tender are not allowed. Manually, if submitted shall neither be opened nor considered.

OPEN TENDER NOTICE No. PUNE\_ELECT\_G\_26\_13

Divisional Railway Manager (Electrical)  
Central Railway, Pune  
On behalf of the President of India

## CENTRAL RAILWAY

Open Tender Notice No. PUNE\_ELECT\_G\_26\_13

Divisional Railway Manager (Electrical), Central Railway, Pune for and on behalf of the President of India invites open 'E'-tenders, **ON LINE** from the reputed contractors for following work:

1.	Name of the work with its location	<b>Provision of standard signages at Pune Railway Station.</b>
2.	Approximate cost of the work	<b>Rs.2,39,00,442.02/- (Rupees Two Crore Thirty-Nine Lakh Four Hundred Forty-Two and Paise Two Only)</b>
3.	Bid Security Rs.	<b>Rs.4,78,000/- (Rupees Four Lakh Seventy Eight Thousand Only)</b>
4.	Date & time of closing of tender	<b>03.07.2026, 12:00 Hrs.</b>
5.	Website, Notice Board location for complete information.	Tender notice, Eligibility Criteria, complete tender document & corrigendum if any will be available on website <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
6.	System of tendering	The 'E' tender documents shall be submitted online only by following the guide line on the CRIS web site given above.

**Divisional Railway Manager (Electrical)**  
**Central Railway, Pune**  
**On behalf of the President of India**

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**CHECK LIST**

FOR DOCUMENT TO BE SUBMITTED BY THE TENDERER FOR TENDER ALONG WITH THE TENDER: -

SN	Description	Remarks
1	Tender is being signed and uploaded by a valid digital signature of Owner or by the person who is authorized by the Owner/Management/Board of Director's resolution.	
2	BID SECURITY details as per clause 2.12 of Chapter-2 of this Tender Document. (As per PART I, Instructions to Tenderers (ITT), Clause No 5 of uploaded GCC April 2022 with correction slips)	
3	<b>Annexure-V:-</b> “ On IREPS Module, a facility has been already been created for online submission of Annexure-V. Same must be filled and submitted online on IREPS by firm at the time of submission of offer/Bid. <b>In addition to Annexure-V (online on IREPS), in case of other than Company/Proprietary firm, Physically signed copy of Annexure-V(A)'s shall also be submitted/uploaded (along with the Bid on IREPS) by the each member of a Partnership Firm/Joint Venture (JV)/Hindu Undivided Family (HUF)/ Limited Liability Partnership (LLP) etc. as the case may be. Non submission of above certificate(s) (i.e. Annexure-V (online) and Physically signed copy of Annexure-V(A)'s (along with the Bid on IREPS)) by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. (As per Railway Board letter No. 2022/CE-I/CT/GCC Correspondence New Delhi, dated 14.05.2024).</b>	
4	Copy of PAN Card, GST Registration, Aadhar Card, Shop Act License, EPF Registration, ESI Registration, Labour Registration, etc.	
5	<b>Technical Eligibility Criteria:</b> All available work Experience certificates of similar nature of work, shall be submitted by the bidder.	
6	List of work completed with evidence of Work Order/ Contract Agreement should be submitted.	
7	Tenderer should submit <b>ANNEXURE – I - TENDER FORM (First Sheet)</b> along with the bid.	
8	<b>ANNEXURE 'E' Declaration-</b> As per GCC April 2022, Clause No.16 Employment / Partnership etc. of Retired Railway Employees	
9	<b>The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm /Company / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern as applicable.</b>	
10	<b>Sole Proprietor -</b> In case a tenderer is participating as <b>Sole Proprietor</b> then it is mandatory for him to submit an undertaking on suitable stamp paper to this effect clearly mentioning PAN number. Non submission of above undertaking by bidder shall result in summarily rejection of his/their bid. A copy of PAN card to be attached in support of this.	
11	In case Tenderer is a company then they should submit Power of Attorney, Board Resolution, Article of Association, Memorandum of Association, certificate of Incorporation, etc.	
12	In case of Partnership Firm/ LLP then tenderer should submit Power of Attorney, Authorization Letter, All Partnership Deeds from Formation of Partnership Firm to present status, Annexure-V(A) of all Partners, etc.	
13	In case of Hindu Undivided Family (HUF) then tenderer should submit Power of Attorney, Authorization Letter signed by all family members, Annexure-V(A) of all Partners, etc.	
14	<b>The contractor shall fulfill valid Electrical Contractor License requirement as per IE Rule 1956 clause no-45. Electrical Contractors license shall be submitted along with the offer, failing which the offer will summarily be rejected. Note: The submitted/uploaded license must be valid on the date of tender opening to consider as eligible offer.</b>	
15	Supporting documents for <b>Technical Eligibility Criteria:</b> as per clause 2.2 of Chapter-2 of this Tender Document. <b>(Applicable for works costing more than Rs. 50 Lakh)</b> (As per Clause 10.1 of GCC April 2022)	
16	Supporting documents for <b>Financial Eligibility Criteria:</b> as per clause 2.2 of Chapter-2 of this Tender Document. <b>(Applicable for works costing more than Rs. 50 Lakh)</b> (As per Clause 10.2 of GCC April 2022)	
17	Bidders should carefully submit the document regarding eligibility criterion with the Bid. No post tender correspondence will be done by the Railways	
<b>Note-The above check list should be submitted duly filled &amp; signed. Where ever the clause is not applicable it should be mentioned as "Not Applicable".</b>		

2.0  
INSTRUCTIONS TO TENDERER  
&  
CONDITIONS OF CONTRACT

## 2.0 INSTRUCTIONS TO TENDERER

### 2.1 GENERAL CONDITION OF CONTRACT:

1. Subject contract shall be governed by latest "General Condition of Contract and as per latest correction slip of the same (if any)" applicable for Central Railway, copy of which is available, for reference in the office of the **Senior Divisional Electrical Engineer, Pune**. Special conditions and all other terms and conditions given in the contract should also be noted while submitting the offer.
2. For all concrete works, cement, ballast, sand etc shall be supplied by the Contractor.
3. All the works shall be carried out by the Contractor with tools and equipment arranged by the Contractor.
4. Water/ electricity / transports shall be arranged by the Contractor at his own cost. The Purchaser shall not provide the same under any circumstances. The site for depot / workshop can be provided to the Contractor on his request.
5. The Contractor shall arrange at his own cost, all tools & plants, facilities required for erection, Testing and commissioning of all the equipment in compliance with the respective specifications.
6. The schedule of rates and quantities enclosed should be read in conjunction with the explanatory Notes given in the tender papers.

### 2.2 TENDERER'S CREDENTIALS & MINIMUM ELIGIBILITY CRITERIA:

**Minimum eligibility criteria of tenderer (Applicable for works costing more than Rs. 50 Lakh):-**

#### 2.2.1. TECHNICAL ELIGIBILITY CRITERIA:

- (a) The tenderer must have successfully completed or substantially completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:  
Three similar works each costing not less than the amount equal to 30% of advertised value of the tender,  
OR  
Two similar works each costing not less than the amount equal to 40% of advertised value of the tender,  
OR  
One similar work each costing not less than the amount equal to 60% of advertised value of the tender.
- (b) (i) In case of tenders for composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges – substructure, superstructure etc.), tenderer must have successfully completed or substantially completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:  
Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender,  
OR  
Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender,  
OR  
One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender

**Note for b(i):**

Separate completed works of minimum required values shall also be considered for fulfillment of technical eligibility criteria for different components.

- (ii) In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity.
- (iii) To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in clause 7 of the Standard GCC or through subcontractor fulfilling the requirements as per clause 7 of the Standard GCC or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief Engineer in writing.



However, if required in tender documents by way of Special Conditions, a formal agreement duly notarized, legally enforceable in the court of law, shall be executed by the main contractor with the subcontractor for the component(s) of work proposed to be executed by the subcontractor(s), and shall be submitted along with the offer for considering subletting of that scope of work towards fulfilment of technical eligibility. Such subcontractor must fulfill technical eligibility criteria as follows: The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, costing not less than 35% value of work to be subletted, in last 5 years, ending last day of month previous to the one in which tender is invited through a works contract.

**Note:** for subletting of work costing up to Rs 50 lakh, no previous work experience of subcontractor shall be asked for by the Railway.

In case after award of contract or during execution of work it becomes necessary for contractor to change subcontractor, the same shall be done with subcontractor(s) fulfilling the requirements as per clause 7 of the the Standard GCC, with prior approval of Chief Engineer in writing.

**Note for Item 2.2.1:**

**Work experience certificate** from private individual shall **not be considered**. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by **Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender**, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

**Note:** The similar work mean having experience of following types of works:

**SIMILAR WORK (definition of similar work):** (Applicable for works costing more than Rs. 50 Lakh):-

**“Supply, Erection, Testing and commissioning of LED Boards/LED Signage boards at stations, airports, Metro Rail etc.**

**"OR"**

**Electrification/Rewiring of service or Residential building/Yard/HT/LT substation work/HT/LT cable work/Street Lighting/Platform or building lighting management/circulating area lighting/Electrical overhead power supply work/Electrical pump work etc”.**

**2.2.2. FINANCIAL ELIGIBILITY CRITERIA:**

The tenderer must have minimum average annual contractual turnover of V/N or ‘V’ whichever is less; where

V= Advertised value of the tender in crores of Rupees

N= Number of years prescribed for completion of work for which bids have been invited.

The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.

The tenderers shall submit requisite information as per Annexure-VIB, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI GCC(or latest correction slip).

**2.2.4. No Technical and Financial credentials are required for tenders having advertised value up to Rs 50 lakh.**

**2.2.5. Credentials if submitted in foreign currency shall be converted into Indian currency i.e. Indian Rupee as under:**

The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India or entity authorized by RBI to do so for the relevant date or immediately previous date for which rates have been published. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date or immediately previous date for which rates have been published.

**Explanation for clause 2.2 including clause 2.2.1 to 2.2.5 - Eligibility Criteria:**

1. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.
2. In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.
3. If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials.
4. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.  
In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work.
5. If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 2.2.1 Para 2.2 of the Tender document, the same shall be considered for the purpose of fulfillment of credentials.
6. **In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost of that work including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.**
7. In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of  $0.3 \times 0.2$  value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
8. In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
9. In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of

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 credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.

10. Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.
11. In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.
12. If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.
13. In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or partner in some other partnership firm "AX", credentials of A in propriety firm "P" or in other partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
14. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
15. In case company A is merged with company B, then company B would get the credentials of company A also.

### 2.3 TENDERER CREDENTIALS:

Documents testifying tenderer previous experience and financial status should be produced along with the tender.

Tenderer(s) who is / are not borne on the approved list of the Contractors of Central Railway shall submit along with his / their tender:

- (i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
- (ii) Audited Balance Sheet duly certified by the Chartered Accountant etc regarding contractual payments received in the past.
- (iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
- (iv) **Annexure-V:-** "On IREPS Module, a facility has already been created for online submission of **Annexure-V. Same must be filled and submitted online on IREPS by firm at the time of submission of offer/Bid.** In addition to **Annexure-V (online on IREPS)**, in case of other than Company/Proprietary firm, Physically signed copy of Annexure-V(A)'s shall also be submitted/uploaded (along with the Bid on IREPS) by the each member of a Partnership Firm/Joint Venture (JV)/Hindu Undivided Family (HUF)/ Limited Liability Partnership (LLP) etc. as the case may be. Non submission of above certificate(s) (i.e. **Annexure-V (online)** and Physically signed copy of Annexure-V(A)'s (along with the Bid on IREPS)) by the bidder shall result in **summarily rejection of his/their bid.** It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly **self attested/digitally signed** by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. **(As per Railway Board letter No. 2022/CE-I/CT/GCC Correspondence New Delhi, dated 14.05.2024).**
- (v) **The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway thereunder.**
- (vi) (a) In case of any information submitted by tenderer is found to be false forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto two years.  
 (b) In case of any information submitted by tenderer is found to be false forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of upto two years.

**2.4 Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.**  
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**2.5 Execution of Contract Documents:**

The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the \_\_\_\_\_, \_\_\_\_\_ Railway for carrying out the work according to Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Standard Specifications (Works and Materials) of Railway as amended/corrected upto latest correction slips, mentioned in tender form (First Sheet).

**2.6 DOCUMENTS TO BE SUBMITTED ALONG WITH TENDER:**

2.6.1. The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.

2.6.2. **FOLLOWING DOCUMENTS SHALL BE SUBMITTED BY THE TENDERER:** (as per GCC April 2022)

**(a) SOLE PROPRIETORSHIP FIRM:**

(i) All documents in terms of Para 2.2-2.3 above.

(ii) **Sole Proprietor** - In case a tenderer is participating as **Sole Proprietor** then it is mandatory for him to submit an undertaking on suitable stamp paper to this effect clearly mentioning PAN number. Non submission of above undertaking by bidder shall result in summary rejection of his/their bid. A copy of PAN card to be attached in support of this.

**(b) HUF:**

(i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

(ii) All other documents in terms of Para 2.2-2.3 above.

**(c) PARTNERSHIP FIRM:** All documents as mentioned in para 18 of the Tender Form (Second Sheet) of GCC April 2022.

**(d) JOINT VENTURE (JV):** All documents as mentioned in para 17 of the Tender Form (Second Sheet) of GCC April 2022. **(JV NOT Applicable for Subject work)**

**(e) COMPANY REGISTERED UNDER COMPANIES ACT 2013:**

(i) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company.

(ii) A copy of Certificate of Incorporation.

(iii) A copy of Authorization / Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.

(iv) All other documents in terms of Para 2.2-2.3 above.

**(f) LLP (Limited Liability Partnership):**

(i) A copy of LLP Agreement.

(ii) A copy of Certificate of Incorporation.

(iii) A copy of Power of Attorney / Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.

(iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

(v) All other documents in terms of Para 2.2-2.3 above

**(g) Registered Society & Registered Trust:**

(i) A copy of the Certificate of Registration.

(ii) A copy of Memorandum of Association of Society/Trust Deed.

(iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust.

- 2.6.3. If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.
- 2.6.4. After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suomoto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
- 2.6.5. A tender from JV / Partnership firm etc. shall be considered only where permissible as per the tender conditions.
- 2.6.6. The Railway will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
- 2.6.7. The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) /registered society / registered trust / HUF / LLP etc. if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, specifically authorizing him/them to sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association /Board resolution, failing which tender shall be summarily rejected.

A separate power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required.

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Appostille certificate.

2.6.8. **The following documents are required to be submitted along with tender with offer:**

- (i) Copy of GST registration certificate.
- (ii) PAN Card.
- (iii) Partnership deed/association deed and Power of Attorney duly notarized / registered.
- (iv) Audited balance sheets and profit and loss accounts statments of last 3/4 Financial years and Audited Balance Sheets should be duly certified by the Chartered Accountant.
- (iv) List of personnel along with their qualifications, trade certification / licenses, designation, available in organization and proposed to be engaged for the subject work.
- (v) List of Plants & Machineries available on hand (own) and proposed to be inducted (own and hired to be given separately) for the subject work.
- (vi) Attested copy of Tax deducted at source (TDS) certificate/Form26AS.
- (vii) Attested copy of Annual Income Tax Returns filed with Income Tax Department.
- (viii) Audited balance sheet distinctly showing the amount received from contracts duly certified by theChartered Accountant.
- (ix) Attested certificate from employer / Clients about contractual payment received for the workdone.
- (x) List of all ongoing works awarded to the contractor but not completed along with supporting documents issued by competent authority.
- (xi) Completion Certificates for the work executed in qualifying period.
- (xii) List of works completed in the qualifying period giving description of work, organization for whom executed approximate value of contract at the time of award, payment received in the qualifying period date of award and date of scheduled completion of work. Date of actual start, actual

3729476/2026/O/O SR DEE/PUNE completion and final value of contract. The certificate submitted by the tenderer should not be signed by an Officer below the rank of Executive Engineer of the concerned department.

(xiii) Any other documents the tenderer/s may like to submit in support of his /scheme.

(xiv) **The contractor shall fulfill valid Electrical Contractor License requirement as per IE Rule 1956 clause no-45. Electrical Contractors license shall be submitted along with the offer, failing which the offer will summarily be rejected. Note: The submitted/uploaded license must be valid on the date of tender opening to consider as eligible offer.**

**Note:**

- (1) Tenderer should not quote any conditional offer, giving rebate for early finalization of their offer. Such conditional offer will be summarily rejected and no correspondence in this matter will be entertained. (Other Terms & Conditions & Drawings are available in this office).
- (2) Tenderer may carefully note that their contract agreement for this work is liable to be terminated at any time later. In case any of the information furnished by them is found to be untrue / misleading or any adverse point comes to light subsequently. The decision of Railway in this regard shall be final and binding.
- (3) For any additional information / clarification office of the Sr. DEE/Pune may be contacted on any working day between 09.30 hrs to 5:30 hrs.
- (4) The prospective tenderers are advised to visit website "www.ireps.gov.in" before one week to the date of tender opening to note any changes / corrigendum of any tender.

**2.7** Make in India Policy: Provisions of Make in India Policy 2017 issued by Govt. of India, as amended from time to time, shall be followed for consideration of tenders.

"This tender complies with Public Procurement Policy (Make in India) Order, 2017 – Revision dated 16/09/2020, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2020/RS(G)/779/2/Pt.1 dated 25/09/2020 and amendments / revisions thereof." The full details of the order can be seen at <http://dipp.nic.in/whats-new/publicprocurement-preference-make-india-order-2017>. (Authority Railway Boards L. No. 2020/RS(G)/779/2/Pt.1 dated 25-09-2020)

**Reciprocity Clause (d) of revised 'Make in India' policy (vide vide Railway Board letter no. 2015/RS(G)/779/5 dated 01.06.2021)**

- (i) "When a Nodal Ministry/Department identifies Indian suppliers of an item are not allowed to participate and/or compete in procurement by any foreign government, due to restrictive tender conditions which have direct or indirect effect of barring Indian companies such as registration in the procuring country, execution of projects of specific value in the procuring country etc. it shall provide such details to all its procuring entities including CMDs/CEOs of PSEs/PSUs, State Governments and other procurement agencies under their administrative control and GeM for appropriate reciprocal action."
- (ii) Entities of countries which have been identified by the nodal Ministry/Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry / Department, except for the list of items published by the Ministry / Department permitting their participation.
- (iii) The stipulation in (ii) above shall be part of all tenders invited by the Central Government procuring entities stated in (i) above. All purchases on GeM shall also necessarily have the above provisions for items identified by nodal Ministry / Department.
- (iv) State Governments should be encouraged to incorporate similar provisions in their respective tenders.
- (v) The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.

**2.8** Permission to Bid for a bidder from a country which shares Land boundary with India: Any bidder from the countries sharing a land border with India will be eligible to bid in any procurement of works (including turnkey projects) only if the bidder is registered with the Competent Authority. The Competent Authority for registration will be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT), Government of India. For interpretation of this para, Department of Expenditure, Ministry of Finance, Government of India letter F.No.6/18/2019-PPD dated 23/07/2020 shall be referred.



**2.9 Clarification of Bids:** To assist in the examination, evaluation & comparison and prequalification of the Tender, the Bidder may, at his discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Railway shall not be entertained or considered. The Railway request for clarification and the response of the bidder in this regard shall be in writing. However, if a Bidder does not provide clarification of its bid by the date and time communicated in the Railway request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.

**2.10 Tenderer should submit Tender form as per Annexure I (Attached below) of Indian Railways Standard General Conditions of Contract (G.C.C.) April 2022.**

**ANNEXURE - I**

**RAILWAY  
TENDER FORM (First Sheet)**

Tender No. \_\_\_\_\_

Name of Work \_\_\_\_\_

To

The President of India

Acting through the \_\_\_\_\_ Railway

I/We \_\_\_\_\_ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of \_\_\_\_\_ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for \_\_\_\_\_ Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within \_\_\_\_\_ months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.
3. A Bid Security of ₹ \_\_\_\_\_ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:
  - (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
  - (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
  - (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.
4. (a) I/We am/are a Startup firm registered by \_\_\_\_\_ Department of Industrial Policy and Promotion (DIPP) and my registration number is \_\_\_\_\_ valid upto \_\_\_\_\_ (Copy enclosed) and hence exempted from submission of Bid Security.
5. We are a Labour Cooperative Society and our Registration No. is \_\_\_\_\_ with \_\_\_\_\_ and hence required to deposit only 50% of Bid Security.
6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Tenderer(s)

Date \_\_\_\_\_

Address of the Tenderer(s)

\_\_\_\_\_

**ANNEXURE - I (Contd. ...)**

1. **Instructions to Tenderers and Conditions of Tender:** The following documents form part of Tender / Contract:
  - (a) Tender Forms – First Sheet and Second Sheet
  - (b) Special Conditions/Specifications (enclosed)
  - (c) Bill(s) of quantities (enclosed)
  - (d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of \_\_\_\_\_ or obtained from the office of the Chief Engineer, \_\_\_\_\_ Railway on payment of prescribed charges.
  - (e) Standard Schedule of Rates (SSOR) as amended / corrected upto latest correction slips, copies of which can be seen in the office of \_\_\_\_\_ or obtained from the office of the Chief Engineer, \_\_\_\_\_ Railway on payment of prescribed charges.
  - (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.
2. **Drawings for the Work:** The Drawing for the work can be seen in the office of the \_\_\_\_\_ and / or Chief Engineer, \_\_\_\_\_ Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.
3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Standard Schedule of Rates (SSOR) of \_\_\_\_\_ Railway as applicable to \_\_\_\_\_ Division except where he/they are required to quote item rates and must tender for all the items shown in the Bill(s) of Quantities attached. The quantities shown in the attached Bill(s) of Quantities are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Bill(s) of Quantities. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.
4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.
5. The works are required to be completed within a period of \_\_\_\_\_ months from the date of issue of acceptance letter.
6. **Bid Security:**
  - (a) Subject to exemptions provided under para 5(1) (a) of Part-1 (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
  - (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to \_\_\_\_\_ Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.
  - (c) If his tender is accepted,
    - (i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;



3729476/2026/O/O SR DEF/PA/CR (ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be and shall be per security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.

The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.

(d) In case Contractor submits the Term Deposit Receipt/Bank Guarantee Bond towards either the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security so retained as per sub para(c) above, to the Contractor.

**7. Rights of the Railway to deal with Tender:** The authority for the acceptance of the tender will rest with the Railway. It shall not be obligatory on the said authority to accept the lowest tender or any other tender, and tenderer(s) shall neither demand any explanation for the cause of rejection of his/ their tender nor the Railway to assign reasons for declining to consider or reject any particular tender or tenders.

8. If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates / create circumstances for the acceptance of his / their tender, the Railway reserves the right to reject such tender at any stage.

9. If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the Railway shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the Railway shall deem such tender as cancelled / contract as terminated under clause 61 of the Standard General Conditions of Contract.

#### 2.11 SIGNING OF TENDER:

When work is tendered for by a firm or company of contractors, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf. The Railways will not be bound by any Power of Attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however recognize such Power of Attorney and changes after obtaining proper legal advice, the cost of which will be charged to the Contractor.

#### 2.12 Bid Security: ( As per Advance Correction Slip No.11, IR GCC April-2022)

1.a) The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. The Bid Security shall be as under:

Value of the Work Bid Security	
For all works	2% of the estimated cost of the work

**Note:**(i) The Bid Security shall be rounded off to the nearest Rs.100/-. This Bid Security shall be applicable for all modes of tendering.

(ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as 'Startups' shall be exempted from payment of Bid Security detailed above.

(iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.

b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway.

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c) If his tender is accepted Bid Security mentioned in sub clause (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

2. The Bid Security shall be deposited either in cash through e payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per **Annexure-VIA** and shall be valid for a period of 90 days beyond the bid validity period.

**6. In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:**

- (i) A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
- (ii) The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document before closing date for submission of bids (i.e. excluding the last date of submission of bids) As per Indian Railways Standard General Conditions of Contract, April 2022 (Advance Correction Slip No.5) dated 20.10.2023
- (iii) Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
- (iv) The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.
- (v) The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected.
- (vi) The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification "Bid for the \*\*\*\*\* Project" and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope.
- (vii) The envelope shall be addressed to the officer and address as mentioned in the tender document.
- (viii) If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.

**2.13 INTEREST ON BID SECURITY:**

No interest on Bid Security will be paid by Senior Divisional Finance Manager, Central Railway, Pune. Further, Senior Divisional Finance Manager, Central Railway, Pune are not responsible for loss of any interest in case of the Fixed Deposit Receipt for any reasons.

**2.14 SECURITY DEPOSIT:**

The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained/encashed by the Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security, to the Contractor.

Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the Railway may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through Performance Guarantee) may not exceed 10% of the total value of the contract.

The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.

**Note:** Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value

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 less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times  
 50 Crore or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

- i. **Refund of Security Deposit:** Security Deposit mentioned above shall be returned to the Contractor along with or after, the following:
  - (a) Final Payment of the Contract as per clause 51.(1) of GCC and
  - (b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor and
  - (c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50.(1) of GCC, in case applicable.
- ii. **Forfeiture of Security Deposit:** Whenever the contract is rescinded as a whole under clause 62 (1) of GCC of these conditions, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC of these conditions, the Security Deposit shall not be forfeited.
- iii. No interest shall be payable upon the Bid Security and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16.(4)(b) of this clause will be payable with interest accrued thereon.

**Note:-** Security Deposit rules are governed as per GCC.

## 2.14 PERFORMANCE GUARANTEE: ( As per Advance Correction Slip No.9 & 11, IR GCC April-2022)

### A. Para 16.(4), Part II of GCC-2022 shall be read as under:-

The procedure for obtaining Performance Guarantee is outlined below:

- (a) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twenty one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty one) days and upto 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21 (Twenty one) days, i.e. from 22<sup>nd</sup> day after the date of issue of LOA. Further, if the 60<sup>th</sup> day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day.

In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Bid Security and other dues payable to the contractor against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security on the strength of their registration as a Startup recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect.

The failed Contractor shall be debarred from participating in re-tender for that work.

- (b) **The successful bidder shall submit the Performance Guarantee (PG) amounting to 5% of the original contract value and Additional Performance Guarantee as per clause 16(4)(h) in any of the following forms :**

- (i) A deposit of Cash;
- (ii) Irrevocable Bank Guarantee; As per the format given in Annexure-VIA (As per Railway Board letter No. 2020/ACII/9/6/e New Delhi, dtd. 07.04.2022)
- (iii) Insurance Surety Bond as per Annexure-XVII.

**Note:** In case of extension of Date of Completion selected bidder needs to submit extended insurance Surety Bond/Fresh Insurance surety Bond/fresh Performance Security, in any form as given above, before expiry of existing Insurance Surety Bond.

- (iv) Government Securities including State Loan Bonds at 5% below the market value;
- (v) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;
- (vi) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;
- (vii) Deposit in the Post Office Saving Bank;
- (viii) Deposit in the National Savings Certificates;

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(ix) Twelve years National Defence Certificates;

(x) Ten years National Defence Deposits;

(xi) National Defence Bonds and

(xii) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&CAO (free from any encumbrance) may be accepted.

(c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.

(d) The value of PG to be submitted by the Contractor is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.

(e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.

(f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed.

(g) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

(i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.

(ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.

(iii) The Contract being determined or rescinded under clause 62 of these conditions.

**New Para 16 (4)(h) of Part-II of GCC'22:- (h) If a tender is accepted on the quoted rates of bidder which is below the advertised tender value, an additional Performance security shall be submitted by the bidder as below:-**

Bid quoted in % of advertised cost	Additional Performance Guarantee (%)
Below 0-5% (Inclusive)	Nil
Below 5%	5%

**B. New Annexure - XVII, Part-II of GCC-2022 shall be read as under:-**

**ANNEXURE-XVII  
Reference Para 16.(4)**

#### **Insurance Surety Bond for Performance Security**

Name of the issuer of surety bond:

President of India,

Acting

Through.....,

.....

Railway.

Date:-.....

Surety Bond No:.....

Issue Date:.....

Amount of Bond:.....

Expiry Date:.....

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WHEREAS, In consideration of the President of India acting through.....(Designation & address of contract signing authority),.....Railway,..... (hereinafter called "The Railway") having accepted the bid of M/S **XXXX** hereinafter called the contractor, for the work of **XXX**, under invitation for bids No **XXXX**, Dated **XXXXXX**, Vide Letter of Acceptance No.....

AND

WHEREAS, the contractor is required to furnish Performance Security for the sum of Rs.**XXXX** (Rupees **XXXX** Only), in the form of Surety Bond, being a condition precedent to the signing of the contract agreement.

SB No:            Date:

WHEREAS, we,----- (Name of insurance company) hereinafter called the Surety, acting through (Designation(s) of the authorised person of the Surety), have, at the request of the M/s.**XXXX** contractor, agreed to give Bond for performance security/ additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that We, the undersigned (Insert names(s) of authorized representatives of the Surety), being fully authorized to sign and incur obligations for and on behalf of the Surety, confirm that the Surety, hereby, unconditionally and irrevocably Bond to pay the Railway the full amount in the sum of **XXXX** ( Rupees **XXXX** Only) as above stated.

2. The Surety undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Surety shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/pending before any Court tribunal, arbitration or any authority or any threatened litigation by the Bidder or Bank.

3. On payment of any amount less than aforementioned full amount, as per demand of the Railway, the Bond shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Railway.

4. The Surety shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the contractor and without the Railway being required to show grounds or give reasons for its demand or the amount demanded.

5. The Surety Bond shall be unconditional and irrevocable.

6. The Bond hereinbefore shall not be affected by any change in the constitution of the Surety or in the constitution of the Contractor.

7. The Surety agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Railway and the Contractor, will in any way release us from the liability under this Bond; and the Surety, hereby, waives any requirement for notice of any such change, addition or modification to the Surety.

8. This Bond is valid and effective from the date of its issue, which is [insert date of issue].

The Bond and our obligations under it will expire on **XXXX** (Expiry Date). All demands for payment under the Bond must be received by us on or before that date.

9. The Surety agrees that the Railways right to demand payment of aforementioned full amount in one instance or demand payments in parts totalling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Railway or the Bond is released by Railway before the Expiry date.

10. The Surety agrees that its obligation to pay any amount demanded by the Railway before the expiry of this Bond will continue until the amount demanded has been paid in full.

11. The expressions Surety and Railway hereinbefore used shall include their respective successors, administrators and assigns.

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The Surety hereby undertakes not to revoke the Bond during its currency, except with the previous consent in writing of the Railway. This Bond is subject to the Uniform Rules for Demand Bonds, ICC Publication No. 758.

13. We, the Surety Insurer, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Bidding Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Documents, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, tribunal, arbitrator or any other authority.

14. The Bond shall be in addition to and without prejudice to any other security Bond (s) of the contractor in favour of the Railway available with the Railway. The Surety, under this Bond, shall be deemed as Principal Debtor of the Railway.

**Notwithstanding anything to the contrary contained in these presents,**

- Our liability under this Surety Bond shall not exceed **XXXX** (Rupees **XXXX** Only).
- This Surety Bond shall be valid up to XXXX (being the date of expiry);
- Unless the bank is served a written claim or demand on or before **XXXX** ( date of expiry) all rights under this Bond shall be forfeited and the Surety shall be relieved and discharged from all liabilities under this Bond irrespective of whether or not the original Surety bond is returned to the Surety.

Dated the day of 2024

15. The Insurance Surety Bond shall be verified by sending mail to (customer.care@sbgeneral. in].

Place.....

Bank's Seal and authorized signature(s)

(Name in Block letters).....

(Designation with Code No.).....

(P/Attorney) No.

Witness

1

2

\*\*\*\*\*

Note: All italicized texts are for guidance on how to prepare this Insurance Surety Bond and shall be deleted from the final document.

## 2.15 PVC CLAUSE:

Applicable for subject work as per GCC (along with correction slip, if any).

## 2.16 FORCEMAJEURECLAUSE:

Force major clause is applicable as per clause (17) of GCC (along with correction slip, if any).

## 2.17 EXTENSIONOFTIMEINCONTRACTS:

Applicable as per clause (17-A/B) of latest GCC (along with correction slip, if any).

## 2.18 QUOTING OF RATES:

The Tenderer shall quote his rates in percentage above / below / at par with respect to estimated cost given in the tender.

## 2.19 ERASURE AND ALTERATIONS:

Tenders containing erasure and alterations of the tender documents are liable to be rejected.

## 2.20 OBLIGATION TO ACCEPT / REJECT:

It shall not be obligatory on the Railway authority to accept the lowest tender and no tenderer shall demand any explanation for the cause of rejection of his tender.

## 2.21 DELIBERATION: 3729476/2026/Q/O SR DEE/PA/CR

If a tenderer fraudulently gives wrong information in his tender or creates circumstance for the acceptance of his tender, the Railway reserves the right to reject such tender at any stage.

## 2.22 RETAINING OF CHARACTER OF FIRM:

If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the Railway shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the Railway shall deem such tender as cancelled / contract as terminated under clause 61 of the Standard General Conditions of Contract.

## 2.23 NON COMPLIANCE:

Non compliance with any of the conditions set forth herein above is liable to result in the tender being rejected.

## 2.24 EXECUTION OF CONTRACT AGREEMENT:

- (a) The Tenderer whose tender is accepted shall be required to appear in person at the office of Senior Divisional Electrical Engineer, Pune, or concerned Engineer, as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear (there would be no need for appear in person if agreement is signed digitally) and execute the contract agreement within seven days of notice from Railways that the Contract Agreement is ready. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. The Contract Agreement shall be entered into by Railway only after submission of valid Performance Guarantee by the Contractor. In such cases the Railway may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and the Railway shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the re tender for that work.
- (b) Form of Contract Document: Every contract shall be complete in respect of the document it shall so constitute. Not less than 2 copies of the contract document shall be signed by the competent authority and the Contractor and one copy given to the Contractor (there would be no need of signing two copies if agreement is signed digitally).
- (i) For Zone Contracts, awarded on the basis of the percentage above or below the applicable chapter(s) of Standard Schedule of Rates (SSOR) for the whole or part of financial year, the contract agreement required to be executed by the tenderer whose tender is accepted shall be as per specimen form, Annexure-II of GCC. During the currency of the Zone Contract, work orders as per specimen form Annexures-III of GCC, for works not exceeding ₹ 5,00,000 each, shall be issued by the Divisional Railway Manager / Executive Engineer under the agreement for Zone Contract.
- (ii) For contracts for specific works, the contract document required to be executed by the tenderer whose tender is accepted shall be an agreement as per specimen form Annexure IV of GCC.

## 2.25 COMPLETION / CONTRACT PERIOD:

The works are required to be carried out within a period of **12 (Twelve) Months** as mentioned in tender notice from the date of issue of acceptance letter.

## 2.26 EMPLOYMENT/PARTNERSHIP ETC. OF RETIRED RAILWAY EMPLOYEES:

(a) Should a tenderer

- (i) be a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, OR
- (ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners/members a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR
- (iii) being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors

AND

in case where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the tender

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the tenderer will give full information as to the date of retirement of such Engineer or gazetted officer from the said for the said and also whether permission for taking such contract, or if the Contractor be a partnership firm or an incorporated company, to become a partner or director as the case may be, has been obtained by the tenderer or the Engineer or officer, as the case may be from the President of India or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.

(b) In case, upon successful award of contract, should a tenderer depute for execution of the work under or to deal matters related with this contract, any retired Engineer of gazetted rank or retired gazetted officer working before his retirement in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, and now in his employment, then the tenderer will ensure that retired Engineer or retired gazetted officer had retired from government service at least 1 year prior to the date of his employment with tenderer and in case he had retired from service within a year then he possesses the requisite permission from the President of India or any officer, duly authorized by him in this behalf, to get associated with the tenderer.

(c) Should a tenderer or Contractor being an individual, have member(s) of his family or in the case of partnership firm/ company / joint venture (JV) / registered society / registered trust etc. one or more of his partner(s)/shareholder(s) or member(s) of the family of partner(s)/shareholder(s) having share of more than 1% in the tendering entity employed in gazetted capacity in the Engineering or any other department of the railway, then the tenderer at the time of submission of tender, will inform the authority inviting tenders the details of such persons.

**Note:-** If information as required as per a), b), c) above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of GCC.

## 2.27 PARTNERSHIP DEEDS, POWER OF ATTORNEYS ETC.:

Applicable as per GCC.

## 2.28 VARIATIONS IN EXTENT OF CONTRACT

Applicable as per GCC.

## 2.29 VARIATION IN CONTRACT QUANTITIES (Applicable as per latest GCC):

The procedure as detailed below shall be adopted for dealing with variation in quantities during execution of works contracts:-

- 1)(i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work (in which no variation limit shall apply). However, the rates for the increased quantities shall be as per sub- para (iii) below.
- (ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.
- (iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
  - (a) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
  - (b) Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
  - (c) Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (d) Variation to quantities of Minor Value Item:
 

The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value.

  - d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
  - d.(ii) Quantities operated in excess of 100% but upto 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;
  - d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.



3729476/2026/O/O SR DEE/PA/CR (iv) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earthwork items and variations in the quantities of individual classifications of soil shall not be subject to this limit.

(v) In case of foundation work, no variation limit shall apply and the work shall be carried out by the Contractor on agreed rates irrespective of any variation.

(vi) As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule as a whole and not on individual SSOR items. However, in case of Non Standard Schedule of Rates (SSOR) items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

2. In cases where decrease is involved during execution of contract:-

a) The contract signing authority can decrease the items up to 25% of individual item without finance concurrence.

b) For decrease beyond 25% for individual items or 25% of contract agreement value, the approval of an officer not less than rank of S.A. Grade may be taken, after obtaining 'No Claim Certificate' from the contractor and with finance concurrence, giving detailed reasons for each such decrease in the quantities.

c) It should be certified that the work proposed to be reduced will not be required in the same work. The aspect of vitiation of tender with respect to variation in quantities should be checked and avoided. In case of vitiation of the tender (both for increase as well as decrease of value of contract agreement), sanction of the competent authority as per single tender should be obtained.

**(Note:- Variation in Sch Qty or Additional NS qty is governed by Indian Railway Model SOP 2018 and may be change accordingly from time to time if the Model SOP is modified/corrected/changes.)**

## 2.30 BINDING OF ORIGINAL OFFER IN CASE OF NEGOTIATIONS:

Should the Railway decide to negotiate with a view to bring down the rates, the original offer will still be binding in case nothing materializes out of the negotiations.

## 2.31 SUBMISSION OF TENDER:

Tenderer may participate in above E-tender electronically through website [www.ireps.gov.in](http://www.ireps.gov.in) only & submission of manual offers against E-tender are not allowed. Manual offers, if submitted shall neither be opened nor considered.

## 2.32 CARE IN SUBMISSION OF TENDERS:

(a) (i) **Before submitting a tender offer, the tenderer must have to satisfied himself by actual inspection of the site and locality of the works**, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.

(a)(ii) Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt. & as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.

(a)(iii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority.

(a)(iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/ SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.

(a)(v) Contractor shall be liable to pay/refund the amount collected as GST to the Indian Railways along with interest and penalties, if any imposed by the authorities, in case GST input tax credit of Indian Railways is denied/rejected by the tax authorities due to reasons mentioned below but not limited to:

Wrong/incorrect invoices issued by Contractor ;

No-filing of GST returns;

Non-payment of GST collected from Indian Railways to the authorities;

Any other non-compliance done by Contractor;

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**General Indemnity:** Contractor hereby agrees to indemnify and hold harmless the Indian Railways from and against any and all losses, including loss on account of Input Tax Credit and all losses incurred by the Indian Railways relating to or arising out of or in connection with any actual or threatened claim, legal action, proceedings, prosecution or inquiry by or against the Indian Railways arising out, directly or indirectly, offailure by the contractor to comply with the provisions of GST and related laws, or based upon or arising from any failure by the Contractor.

**Retention Money:** Any payment liable to be paid by Indian Railways to contractor against the goods or services or both supplied by such contractor to Indian Railways shall be kept on hold in case supplier makes any non-compliance of any of the GST law provisions including non-reporting of invoices in GST returns.

Such payment shall be released after proper verification of records and availability of ITC to Indian Railways as per provisions of GST Law.

- (b) When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- (c) The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.

### 2.33 ARBITRATION :

The Contract Agreement should be governed by clause nos. 63 & 64 of GCC pertaining to settlement of Disputes/Arbitration.

### 2.34 GENERAL CONDITION OF CONTRACT:

Unless otherwise stated in the tender document, all other terms/ rule and regulations/ guidelines contract shall be governed by latest "General Condition of Contract 2022 updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents" applicable for Central Railway, copy of which is available, for reference in the office of the Senior Divisional Electrical Engineer, Pune and on official site of Indian Railways.

### 2.35 ADDRESSES:

Relevant addresses for specified purposes in connection with the tender are given below:

#### 1 For Contract execution/tender opening :-

**Senior Divisional Electrical Engineer, (Gen) Pune,**  
New DRM office Bldg., Raja Bahadur Mill Road,  
Central Railway, Pune 411 001.

#### 2 For Security Deposit / Bid Security/PG in favour of :-

**Senior Divisional Finance Manager, Pune,**  
New DRM office Bldg., Raja Bahadur Mill Road,  
Central Railway,  
Pune 411 001.

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3.0  
SPECIAL CONDITIONS  
OF CONTRACT

### 3.1 SCOPE:

This chapter deals with the conditions of Contract under which the various works coming under the purview of this contract are to be executed by the Contractor.

### 3.2 LAWS OF INDIA:

This contract shall be governed by the laws for the time being in force in the Republic of India.

### 3.3 ISSUE OF IDENTITY CARDS TO CONTRACTOR'S LABOURS :

Following certificates/documents should be issued to each contract labourers nominated to work in the railway premises by the contractor, indicating Contract No, Name of the person, place of work etc.

1.Certificate Of Fitness, 2.Police Verification,3.Identity Card,4. Bio-Data Of Staff (Contractual)as per attached annexure.If these are not issued to contract labourers, he / they will not be permitted to work in the Railway premises. The list of the labour should be submitted to this office for records.

### 3.4 INSPECTION :

All the material, erection and installation work shall be subject to inspection to ensure that the work is done in accordance with specification, drawings and is of the best quality suitable for the purpose. Following inspection schedule shall be followed.

#### (a) Inspection of material:-

i) **At Firm's premises:** - All the materials required for this work shall be inspected by RITES (If material accepted supply cost is more than 5 lakhs)/Railways authorized Engineer representative / authority nominated by Sr.DEE/Pune. Firm will submit manufactures original test certificate also.Inspection charges for RITES inspection will be borne by Railway's.

ii) **After Receipt of material:** - Inspection of items shall be done at depot / site by Railway Engineer's representative. Contractor shall produce all the test reports, material documents in original etc. during inspection.

iii) All the defects / discrepancies, if any, pointed out during inspection should be attended by the contractor immediately.

**(b) Stage Inspections:** - Stage inspections (if required) shall be carried out by Railway Engineer's representative from time to time during execution of the work at site. All the shortcomings noticed during stage inspection shall be attended by the contractor.

**(c) Final Inspections:** - After completion of work, contractor shall offer it for final inspection and testing. All the shortcomings noticed during final inspection shall be attended by the contractor, immediately and a joint inspection shall be carried out by Railway Engineer's Representative and by Contractor Representative after completion of the entire work and a joint inspection report shall be made. The joint inspection report shall be signed by the contractor's representative, Railway's authorized Engineer for that work and shall be enclosed along with the final bill. Any defect / shortcomings noticed shall be attended by the contractor immediately.

### 3.5 MATERIALS/EQUIPMENTS:

All materials used in the work shall be of the best quality and of the class most suited for the purpose specified. All the standard fittings, equipments, control panel, cables and other accessories required for this work shall made of as per list enclosed and as specified in explanatory note. If any material does not appear in the list then material should be of reputed make as per approval of Sr.DEE/G/Pune or as appearing in the approved sources of RDSO / ICF / RCF / CLW. Performance of items, which are not on approved list of RDSO / ICF / RCF / CLW, can be judged based on their past performance. If not available it shall be conforming to relevant latest IS-Specification against each schedule item.

All the equipments, materials, fittings and components will be subject to quality control programme of being part of the quality assurance programme of the contractor. All the major equipments / material shall be inspected as per Inspection clause.

### 3.6 WARRANTY:

a) All LED Light fittings and its driver should be warranted for a period of 60 months from its commissioning or 72 months from the date of supply, whichever is earlier and shall submitguarantee certificate from manufacturer.

3729476/2026/OJO-SR-DEE/PA/CR b) The contractor shall guarantee satisfactory working of the installations (other than LED light fittings) erected by him to be in good order [TWELVE] months from the date of completion of work.

- c) During the period of guarantee, the contractor shall be liable for the replacement at site of any parts which may be found defective, whether arising from faulty design, materials, workmanship or negligence in any manner on the part of the contractor provided always that such defective parts as are not repairable at site are promptly returned to the contractor if so required by him at this (contractor's) own expenses. The repaired or renewed parts shall be delivered and erected on site free of charge to the purchaser.
- d) The successful tenderer will have to attend the failed equipment/part of work, as soon as they are informed by the Railway's representative, without waiting for availability of stores or labours and without any reservations and disputes. The decision of the Senior Divisional Electrical Engineer Pune, with respect to liability for such rectification and replacement shall be final and binding on the tenderer.

### 3.7 RELEASED MATERIAL:

The released materials should be returned by the contractor to Railways concerned depot and acknowledged. The released materials should be transported to respective depot with the tenderers men and vehicle as per instruction of Railway's Engineer.

### 3.8 DISASTER MANAGEMENT:

Vehicles and equipments of contractors working with railways can be provided/ asked to be deployed by Railway administration at its discretion in case of accidents/natural calamities involving human lives. In case it is seen that the contractors have shunned their responsibilities in case of disaster involving human lives, they may be levied penalties as decided by Railway administration or their contract can be rescinded as the requirement of Railway administration in such cases are for larger public interest.

### 3.9 SPECIAL CONDITIONS FOR LETTER OF CREDIT (LC):

- (i) For all the tenders having advertised cost of Rs 10 lakh or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement.
- (ii) This option of taking payment through LC arrangement has to be exercised in IREPS (Indian Railway Electronic Procurement System - the e-application on which tenders are called by Railways) by the tenderer at the time of bidding itself, and the tenderer shall affirm having read over and agreed to the terms and conditions of the LC option.
- (iii) The option so exercised, shall be an integral part of the bidder's offer.
- (iv) The above option of taking payment through LC arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract.
- (v) In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC:
  - a. The LC shall be a sight LC.
  - b. The contractor shall select his Advising/Negotiating bank for LC. The incidental cost towards issue of LC and its operation thereof shall be borne by the contractor.
  - c. SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from Railway Accounts Units for tenders opened in financial year 2018-19. SBI branches where the respective Railway Accounts Office has its Account (local SBI branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @0.15% per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills.
  - d. The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalised by the engineer in consultation with the contractor on the basis of expected progress of work.
  - e. The LC terms and conditions shall inter-alia indemnify and save harmless the Railway from and against all losses, claims and demands of every nature and description brought or recovered against the Railways by reason of any act or omission of the contractor, his agents or employees, in relation to the Letter of Credit (LC). All sums payable/borne by Railways on this account shall be considered as reasonable compensation and paid by contractor.

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- f. The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorisation (Form No. R-100 as Annexure 2) after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank.
- g. The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorisation.
- h. The Document of Authorisation shall be issued by Railway Accounts Office against each bill passed by Railways.
- i. On issuance of Document of Authorisation, a copy of Document of Authorisation shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorisation shall also be sent by Railway Accounts Office to Railway's bank (Local SBI Branch).
- j. The contractor shall take print out of the Document of Authorisation available on IREPS and present his claim to his bank (advising Bank) for necessary payments as per LC terms and conditions. The claim shall comprise of copy of Document of Authorisation, Bill of Exchange and Bill.
- k. The payment against LC shall be subject to verification from Railway's Bank (Local SBI Branch).
- l. The contractor's bank (advising bank) shall submit the documents to the Railway's Bank (Local SBI Branch).
- m. The railway's bank (issuing bank) shall, after verifying the claim so received w.r.t. the digitally signed Document of Authorisation received from Railway Accounts Office, release the payment to contractor's bank (advising bank) for crediting the same to contractor's account.
- n. Any number of bills can be dealt within one LC, provided the sum total of payments to contractor is within the amount for which LC has been opened.
- o. The LC shall be closed after the release of final payment including PVC amount, if any, to the contractor.
- p. The release of Performance Guarantee or Security Deposit shall be dealt directly by railway with the contractor i.e., not through LC.

### 3.10 SPECIAL CONDITIONS OF CONTRACT FOR MANDATORY UPDATION OF LABOUR DATA ON RAILWAY'S SHRAMIKKALYAN PORTAL BY CONTRACTOR:

- A. Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website '[www.shramikkalyan.indianrailways.gov.in](http://www.shramikkalyan.indianrailways.gov.in)'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation of Portal shall be done as under
  - a) Contractor shall apply for one time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
  - b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
  - c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoA) /Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
  - d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
  - e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour and payment made thereof after each wage period.
- B. While processing payment of any 'On account Bill' or 'Final Bill' or release of 'Advance' or 'Performance Guarantee /Security deposit', contractor shall submit a certificate to the 'Engineer' or 'Engineer's representative' that "I have uploaded the correct details of contract labour engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at '[www.shramikkalyan.indianrailways.gov.in](http://www.shramikkalyan.indianrailways.gov.in)' till \_\_\_\_Month\_\_\_\_Year".

### 3.11 OTHER CONDITIONS:

1. Before quoting the tenderer should read carefully all the specifications and conditions mentioned in all Annexures of tender booklet and also in complete tender booklet and certify that he has gone through the tender details and abide by the rules and regulations mentioned in the tender. Tenderer should sign each and every page of the 'Tender' as a token of 'acceptance'. No deviation for the same will be accepted by

Railway. Also contractor should visit the site and check the scope of work physically before quoting for this

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2. Contractors found using sub-standard un-approved materials shall be, on the spot, stopped from executing further work and suitable action taken to terminate the contract. Particular note of this should be taken and it shall be strictly ensured that only quality work is done.
3. All completed work shall be jointly recorded by contractors with Railways in 'Measurement Books' which will be available with Rly's supervisor. No work, other than those recorded in M.B, will be recognized.
4. Bills shall be submitted in Rly's bill form only. Contractors should keep a proper account of the released materials handed over, with proper acknowledgement from Railway's supervisor and submit the same along with the bills. Design and Drawings :- All design shall be approved by Sr. DEE/Pune or his authorized representative. All drawings/specifications shall be of RDSO/CORE/ICF/RCF/CEE or approved by Sr. DEE/Pune. For any approval of drawing/specification, Sr. DEE/Pune to be approached. All equipments, material, LED, Induction lights and other lights etc. should be purchased from the RDSO/CORE/RCF/ICF/CEE approved sources or the sources approved by Sr. DEE/Pune .
5. **Error omission and discrepancies-** The tenderer shall not take advantage of any error due to typing or otherwise, if there is any doubt, that shall be brought to notice of Sr. DEE/Pune without delay and same shall be dealt as per Railway's requirement only and to Railway's advantage only.

### 3.12 SPECIAL CONDITION OF THE WORK:

1. The correspondence related to this work is to be made with Sr. Divisional Electrical Engineer, Central Railway, Pune and a copy to consignee/Engineer's representative of this contract.
2. The agency should provide the number of personnel stipulated by the railways and shall arrange replacement as necessary at its own expense. At any time no post will left un-manned and agency will keep provision of leave reserve to overcome the problem of weekly rest/ absenteeism due to sickness and leave to the employee at its own expenses.
3. Agency shall maintain proper records of all details, registers and such other requirements as contemplated by the provisions of all relevant status which inter alias includes and contract labour, (Regulation & Abolition) act and rules, payment of Wages Act etc. and further shall comply with the statutory provisions thereof in filling returns, submitting forms etc. No liability of whatsoever type will be on the Railways. The agency will be fully responsible to obey all laws prevailing in the Maharashtra, India.
4. The agency will observe all provisions of Employees State Insurance Act 1948 and the Employees Provident Fund Act, 1952 duly amended from time to time and shall pay the contribution/ subscription in accordance with the said acts in respect of the employees with the said company engaged by it or care taking personnel.
5. Railways reserve right to add more terms and conditions during contract period if found necessary.
7. General conditions of the contract of Railway, as amended from time to time are applicable for this contract. In the event of any contradiction being noticed between general conditions of the contract (GCC) and the special conditions of the contract (SCC), the later (i.e SCC ) shall prevail.
8. Contractor has to arrange his own material, tools and staff. The Expenses will be borne by Contractor only.
9. All material supplied by the Purchaser shall be correctly accounted for and quantities reconciled on completion of the work by the contractor. On completion of work, surplus materials supplied by the purchaser together with the ones found or that have become defective or broken on account of defective materials and /or workmanship shall be returned to him by the contractor.
10. All released material should be handed over to Railway's store with proper account and acknowledgement.
11. All materials should be supplied as per specifications. Inspection of material shall be done by the RITEs/ Purchaser's representative at Manufacturer's Place or as deemed to be fit by the purchaser. The acceptabel make of material has been attached. However in other case, The make of the material should be got approved from Railway's competent authority before purchase, by contractor.
12. All the material to be supplied by the contractor to purchaser and shall be kept in Purchaser's custody at the Railways premises or in the Contractor's Depot.
13. Successful tenderer must appoint trained staff. They should have proper knowledge to keep the equipment properly intact and well adjusted. All Electrical work shall be carried out as per IE rules & regulations.
14. Contractor and his service personal should make their own arrangement for travel on Indian Railway, Railway will not provide free traveling facilities to them.
15. All safety measures shall be taken by the contractor to prevent accident while executing the work. No compensation towards any accident will be paid by Railway.

16. The firm should provide the identity card to their employees which should be signed by Railway Representative and should remain available whenever the employee is sent to attend any break down calls. In the case of disputed matters all the decisions taken by Sr. Divisional Electrical Engineer, Pune Central Railway will be final and binding to both the parties in respect of any dispute arising out in the tenure of the work.
17. Contractor shall take care to the installation so as not to cause any damage to Railway property. Any damage to the installation as well as to the Railway property would be recovered from the contractor.
18. **Restrictions on the Employment of Retired Engineers of Railway Services Within One Year of their Retirement:** The Contractor shall not, if he is a retired Government Engineer of Gazetted rank, himself engage in or employ or associate a retired Government Engineer of Gazetted rank, who has not completed one year from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the President and if the Contractor is found to have contravened this provision it will constitute a breach of contract and administration will be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.
19. The contractor shall employ the following technical staff during the execution of the work-
  - (i) At least one Graduate Electrical / Electronic Engineer when the cost of the work to be executed is Rs. 50 Lakh and above.
  - (ii) At least one qualified Electrical / Electronic diploma holder when the cost of the work to be executed is less than Rs. 50 Lakh.
20. Contractor has to deput his every worker/ staff after proper police verification. Contractor has to be submit police verification report details of every staff/worker to Engineers representative and Sr.DEE/ Pune office .
21. In case of Contract management is being done through IRWCMS Portal of Indian railway, Contractor must follow all the procedure laid on IRWCMS for contract work i.e contract agreement, bill, variation, etc.
22. **TIME OF COMPLETION :** Time is the essence of the contract. All works included in the contract shall be completed within the period of **12 (Twelve) Months** from the date of issue of acceptance letter, including intervening monsoon period if any.
23. Regarding quality of work, it shall be the full responsibility of contractor to ensure specifications of materials and drawing.
24. If required, or as per instruction of competent authority i.e Sr.DEE/G/Pune, contractor must be ready to operate any sch item(s)/ quantity(s) at any location of Pune division.
25. All the decision taken by Sr. Divisional Electrical Engineer should be binding to both parties in respect of any dispute arising during the tenure of this work.

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## 4.0 PRICES AND PAYMENTS

**4.0 PRICES AND PAYMENT****4.1 SCOPE:**

This chapter deals with prices to be paid for the various items of work and other amount payable in accordance with accepted schedule of prices and rates and conditions of payment herein mentioned.

**4.2 SCHEDULE OF PRICES:**

The Tenderer shall quote his rates in percentage above / below / at par with respect to cost given in the tender and fill up the form given in the tender's schedule of quantities and rates.

**4.3 INCIDENTAL CHARGES:**

The unit prices are including of loss, wastage, incidental charges for transportation, loading, unloading and handling of materials. It also include commissioning for arranging dispatch by rail, completing all necessary formalities in this respect, arranging payment of wages collection of railway receipt all insurance premier banker's charges etc.

**4.4 OTHER PRICE PAYMENT :**

No adjustment in unit price on account of price fluctuation will be permitted on any account.

**4.5 PAYMENT TERMS:**

1. On account payment, progress payment and final payment shall be done as below :-

SN	Schedule item no.	On Account payment	Final payment	
		On Supply+ Erection of material	Supply	Erection
1	For Schedule item No.	95%	5%	5%

2. **Final payment** :On successful completion of the entire work in all respect, the contractor will receive the balance payment as per payment schedule above. Final 5% for supply and 5% for erection payment shall be made after issuing of final completion certificate.
3. All the above payments will be subject to completion of all formalities such as submission of performance guarantee, power of attorney, signing the contract agreement, MB entries by Engineer's representative with certification of "Minimum wages ACT followed" and "Measurements checked and found correct" and submission of other required documents i.e. WCT, original challans –2 sets (one for Engineer's representative and one for bill passing authority) with remark of Engineer's representative "Material received in good condition" and its accounted in ledger, Warranty/guarantee certificate, No claim certificate, Certificate of labour appointed for a work, certificate of released material, certificate of water/electricity usage if any, completion certificate, Inspection report, extension if any – if delay from contractor, reason should be given, Letter of material approval and footnote certificate of schedule etc.
4. The contractor shall submit along with the Bill Measurement Book duly filled in by all Railway authorities and contractor, Joint inspection report, certified records of the work carried out, Copy of proof of payment of wages to the labour appointed by contractor and any other documentary proof required by Railway authorities.
5. On the basis of the records, the Measurements shall be signed by the engineer representative or any other supervisor nominated for this work by Sr. DEE/Pune after verifying the quantum of work executed.
6. The Payment shall be made by Sr. DFM CR Pune through EFT only.
7. The statutory deductions shall be made from the Bill. **Security Deposit shall be recovered @ 6% of the gross bill amount till full SD is recovered.**
8. If any penalty is applicable the same shall be recovered from the running bills or from the Security Deposit.
9. If the Performance Guarantee is submitted in the form of BOND legal charges shall be applicable and shall be recovered from the monthly bills.

**4.6 PAYING AUTHORITY:**

1. Work carried out in Pune Division shall be verified by the respective electrical maintenance section incharge and certified by Railways authorized Representative and such certification of work shall be forwarded to Senior Divisional Electrical Engineer,Pune. Measurements shall be recorded by the nominated supervisor of Pune

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 Division. Test checks are to be exercise by ADEE (G), Pune division. Bills shall be submitted to Senior Divisional Electrical Engineer, Pune.

2. The Senior Divisional Finance Manager, Central Railway, Pune shall make the payment against the bills duly verified and passed by the Senior Divisional Electrical Engineer , Central Railway, Pune.

#### 4.7 REFUND OF SECURITY DEPOSIT :

Security deposit shall be returned to the contractor after expiry of maintenance period of the work as certified by the competent Authority and on submission of Final Completion Certificate and submission of No Claim Certificate from the Railways authorized representative after the execution period of one years is over.

The Competent Authority shall normally be the authority who is competent to sign the contract. If this Competent Authority is the rank lower than JA Grade, Then a JA Grade Officer (concerned with the work) should issue the certificate. The certificate, inter alias, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the contractors and that there is no due from the contractor to Railways against the contract concerned. Before releasing the SD, an unconditional and unequivocal no claim certificate from the contractor concerned should be obtained.

#### 4.8 TAXES :

(a)(i) **Before submitting the tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works,** that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.

(ii) Tenderer will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt& as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.

(iii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority.

(iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.

(b)When work is tendered for by a firm or company of contractors, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.

(c)The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor. Rates to be quoted by the contractor shall be inclusive of excise duty, sales tax and all other duties and levies, however present rates applicable shall be advised to Railway. In case of octroi the Railway can issue necessary certificate for octroi exemption but it will not be binding on Railway if same is not accepted by octroi authorities and in case of sales tax Railway can issue confessional tax AF/D form.

All rates quoted in the tender shall be deemed to be inclusive of all taxes, royalties payable by the contractors to the Government or public body or local authority and no additional amount will be paid or claim entertained on this account by the Railway. Contractor shall not have any claim whatsoever, as a result of the increase in the rates for such royalties, taxes, duties or any other forms of levies etc.

(d)Contractor shall be liable to pay/refund the amount collected as GST to the Indian Railways along with interest and penalties, if any imposed by the authorities, in case GST input tax credit of Indian Railways is denied/rejected by the tax authorities due to reasons mentioned below but not limited to:

Wrong/incorrect invoices issued by Contractor ;

No-filing of GST returns;

Non-payment of GST collected from Indian Railways to the authorities;

Any other non-compliance done by Contractor;

**General Indemnity:** Contractor hereby agrees to indemnify and hold harmless the Indian Railways from and against any and all losses, including loss on account of Input Tax Credit and all losses incurred by the Indian Railways relating to or arising out of or in connection with any actual or threatened claim, legal action, proceedings, prosecution or inquiry by or against the Indian Railways arising out, directly or indirectly, offailure by the contractor to comply with the provisions of GST and reloted fows, or based upon or arisingfrom anyfailure by the Contractor.

**Retention Money:** Any payment liable to be paid by Indian Railways to contractor against the goods or services or both supplied by such contractor to Indian Railways shall be kept on hold in case supplier makes any non-compliance of any of the GST law provisions including non-reporting of invoices in GST returns.

Such payment shall be released after proper verification of records and availablty of ITC to Indian Railways as per provisions of GST Law.

**4.9** The Conservancy cess charges have been revised w.e.f. 01.06.2006, vide Railway board's letter No. F(X) I/95/1/1 dtd. 31.05.2006 or latest. The same will be recovered from the contractor's bill payment.

**4.10** The payment to the contractor will be made through EFT only. Contractor will have to submit the required details of bank account for the same to Sr. Divisional Finance Manager, C.R. Pune.

**4.11 MEASUREMENTS :**

- a) Payments for field work shall be made in accordance with approved designs and drawings and measured in relevant units, except where provided or otherwise. In case the dimensions of the work are more than those shown in approved designs land drawings, the contractor will not be entitled to any extra payment unless the dimensions are increased on account of physical impossibility of carrying out the work in accordance with approved drawings and designs, subject to approval by the purchaser before execution. In case the dimensions of work are less than those shown in the approved designs and drawings and the work is accepted without being rejected, payment will be made as per work actually done.
- b) The measurement will be made generally in accordance with standard engineering practice land in conformity with the explanatory notes for schedule of tender.

**4.12 PENALTY:**

1. As per GCC April 2022 (with latest correction slips) clause no. 17.

**4.13 ENGINEER'S REPRESENTATIVE:**

For this work **railways authorized representative nominated by Sr.DEE/G/Pune** is Engineer's representative i.e. SSE/EM/Pune.

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5.0  
EXPLANATORY NOTES OF  
TENDER SCHEDULE

## 5.0 EXPLANATORY NOTES OF TENDER SCHEDULE

**Tender No:** PUNE\_ELECT\_G\_26\_13.

**Name of work:** Provision of standard signages at Pune Railway Station.

### 5.1 SCOPE OF WORK:

The above work is related to **provision of standard signages at Pune Railway Station** in pune division as per explanatory notes given below for each schedule items and guidelines standard signage (attached with tender), scope of work and conditions and as per IE rules with required accessories and direction of engineer incharge.

### 5.2 GENERAL

1. The tenderer has to carry out the work with his own labour, tools, tackles and materials.
2. Tenderer has to follow the minimum wages act and other labouract are in force time to time. He should be responsible for paying the wages to labour as per Government's minimum wages rates issued time to time.
3. Tenderer have to ensure "Life Insurance" to his labour/employee under Prime Minister's scheme.
4. Tenderer has to issue the identity card to each and every employee deputed by him indicating the name address and photograph and the details of it to be submitted to Railway administration on the prescribed performat.
5. All material supplied by the Purchaser shall be correctly accounted for and quantities reconciled on completion of the work by the contractor. On completion of work, surplus materials supplied by the purchaser together with the ones found or that have become defective or broken on account of defective materials and /or workmanship shall be returned to him by the contractor.
6. All released material should be handed over to Railway's store with proper account.
7. All materials should be supplied as per specifications of RDSO's/RCF/ICF/Purchaser. Inspection of material shall be done by the RITEs/ Purchaser's representative at Manufacturer's Place or as deemed to be fit by the purchaser or Railway representative. The make of the material should be got approved from Railway's competent authority before purchase, by contractor.
8. All the material to be supplied by the contractor to purchaser and shall be kept in Purchaser's custody at the Railways premises or in the Contractor's Depot.
9. Wherever not specified, Tenderer should note that they must supply the fasteners, clips, nuts and bolts, etc. required to erect the equipment, wires, machines and other related Electrical items
10. Subject work is to be carried out in Pune Division. Unless and otherwise specified all the material/equipments transportation, loading, unloading, etc charges at Railways sites/store/depot are to be borne by tenderer.

### THE ITEM WISE DETAIL EXPLANATION NOTES ALONG WITH TECHNICAL SPECIFICATION ARE AS GIVEN BELOW

Work:- Provision of standard signages at Pune Railway Station.

1. **Design, manufacture, display, erection and installation of wall / hanging / floor mounting type LED illuminated sign / direction boards etc. in flat/half elliptical/Parabolic/Triangular shape. The display sheet shall be of unbreakable 040 translucent polycarbonate sheet of 2 mm thickness. The text / graphics matter visibility shall not be less than 160 deg. The approved colour text and graphics shall be printed / router cut on monomeric calendered vinyl of 70 um thickness and shall be firmly pasted on display sheets. The mounting arrangement shall be hanging, wall mounting, ceiling mounting, pole mounting or floor mounting and as per site requirement. The signage shall have the integral mounting arrangements with sturdy structural frame and ACP cladding on the back side of the signage to avoid rusting and entry of dust. The LED board shall have uniform illumination with 4-8 W / sq. ft and with brightness more than ambient light. Suitable size end cap of 1.5 mm thick SS 304 should be provided as per requirements.**

The price shall cover cost of survey the stations / sites and design, manufacture, supply, loading, transportation and unloading to site, display, installation / erection, testing and commissioning of wall / hanging / floor mounting type LED illuminated sign / direction boards in Full Elliptical (FE), Half Elliptical (HE), Semi Elliptical (SE), parabolic / Triangular shape as per site requirements. The display sheet shall be of unbreakable 040

translucent polycarbonate sheet of 2 mm thickness. The text / graphics matter visibility shall not be less than 100%. The sign board colour text and graphics shall be printed /router cut on monomeric calendared vinyl of 70-80 µM thickness and shall be firmly pasted on display sheets. The mounting arrangement shall be hanging, wall mounting, ceiling mounting, pole mounting or floor mounting and as per site requirement. The signage shall have the integral mounting arrangements with sturdy structural frame and ACP cladding on the back side of the signage to avoid rusting and entry of dust. The LED board shall have uniform illumination with 4-8 W / sq. ft and with brightness more than ambient light. Suitable size end cap of 1.5 mm thick SS 304 / die moulded polycarbonate should be provided. The signage boards shall be confirming to as per technical specification enclosed and shall be confirming to attached "Guidelines on Standard Signages at Stations on Indian Railways, 2023"

**Survey and design of schemes for Signages Boards:**

1. The contractor or his authorized agency should have experience in carried out such type of work i.e. survey and design, manufacture, installation of LED illuminated sign / direction boards in elliptical / parabolic shape and having required infrastructure to carry out the work and testing facilities with documentary proof.
2. (a) The tenderer shall survey in all station, platform, site, etc. and sizes & location of signages shall be got approved by Sr. DEE(G) for particular station, platform, site etc.  
  
(b) After approval of Sr. DEE(G), the firm shall survey the sites and design the schemes for wall / hanging / floor mounting type LED illuminated sign / direction boards / Signage for Services, Utilities, Caution, Direction and other importance, in half elliptical shape for the station buildings, as per proposed items/ accessories mentioned in the schedule. The firm shall submit Design, drawing, model, graphics and colour scheme reports for each station / location /site in soft copy presentation hard copy and shall be got approved by Sr. DEE (G) Pune before supply. Any modification, suggestion for improvement in the scheme shall be done by the firm and shall be submitted for approval by the Railway's Competent Authority.
3. The price shall cover cost of design, manufacture, supply, loading, transportation and unloading to site, display, installation / erection, testing and commissioning of wall / hanging / floor mounting type LED illuminated sign / direction boards in Full Elliptical (FE), Half Elliptical (HE), Semi Elliptical (SE), parabolic shape as per site requirements.
4. The work which is not included in the schedule but required to complete the installation work shall be considered as the part of work and carried out by the contractor accordingly and no extra payment will be paid for that.
5. Agency shall submit the design report through professional design expert for appreciation.
6. It is recommended that the manufacturer of glow sign boards/ signage should have his own resources, including but not limited to skilled manpower, machinery (Thermoforming, Die Molding, Injection molding, extrusion capability) and materials to carry out the work in a timely and efficient manner. Failure to meet the specified timelines may result in penalties.
7. The bidder firm must mandatorily involve the design manufacturer of glow sign boards/ signage in the entire process of design and development of glow sign boards/ signage, site survey, signage customization, maintaining installation standards and procedures, and quality control.
8. LED Elliptical Glow Sign Boards are to be provided dust environment and open space and should have proper louvers or ventilation for dissipation of heat generated by drivers / LED's.
9. The quality of the Vinyl / Polycarbonate sheet / anodized coating should be covered under three years warranty from the manufacturer. LED's/LED drivers shall be covered for free replacement five years warranty from the manufacturer.

**3729476/2026/Q/Q SR DEE/PA/CR** 10. Guarantee certificates & Test Certificate of LED/LED drivers / Vinyl sheet / Polycarbonate sheet from reputed approved brand shall be required to be submitted along with supply of materials.

11. The bidder must provide a detailed design / pattern, drawings and schemes for the glow sign boards/ signage, which shall be similar to signage work done at Chhatrapati Shivaji Maharaj Terminus (CSMT) Mumbai of Central Railway or as desired by the Railway Authority.

### Technical Details:

**\*Please refer to this attached document (Guidelines on Standard Signages at Stations on Indian Railways, 2023) for specifications of glow sign boards and signages.**

**The Design alongwith material specification should be got approved from Sr.DEE/Pune before design.**

**2. Supply, Erection, Designing, providing & fixing vinyl both way LED illuminated Signage for display of passengers utility items at Stations complete with Allu. Sheet metal powder coated sign case of size 16x72 inches & 3 inch in width. The matter of display shall be as per Railways requirement.**

The price shall cover for Designing, providing & fixing vinyl both way LED illuminated Signage for display of passenger's utility items at Stations complete with Allu. Sheet metal powder coated sign case of size 16X72 inches & 3-4 inch in width. The matter of display shall be as per Railways requirement. The board shall be designed as per the Railways specifications mentioned in the tender document to meet the requirement & considering aesthetic view in co-ordination with railways. Also the signage is to be fixed with Railways structure robustly using the necessary & adequate hardware's & fixing arrangement etc. to ensure safety for passengers on platform.

1	Type of Display	Both Side
2	Size of Signage Box	16 x 72 x 3-4 inches
3	Aluminium frame	1 x 3 inches square pipe powder coated
4	Case material	Aluminium sheet 1.5 mm thick
5	Mounting Provision	Wall mounting / hanging with clamps / vertical support made of Aluminum 1 x 3-inch square pipe of suitable length as per site condition.
6	Front Acrylic sheet thickness	3mm imported milky transparent acrylic sheet with dual cut vinyl display of reputed make i.e. LG or similar.
7	Type of LED	Modular LED with viewing angle of 70° with CCT 5600/6500 Lux with adequate quantity as per text matter. Make – Reputed make similar to Samsung.
8	Operating voltage range	AC input -190 to 260 Volts, SMPS based control power supply.
9	Capacity of Controller	As per requirement approx. 300 Watts with warrantee of 1 year
10	No. of lines per board	As per requirement
11	Protection	IP 65
12	Details of display items	Will be provided by Railway.
13	Colors of signages	As per Railway requirement
14	Guarantee period	5 years.

**3. Design, supply and erection of LED type glow sign board with "INDIAN RAILWAYS LOGO" (size 4 feet Dia. using acrylic sheet of red colour 3mm thick ) with combination of colour LED's with lamp, drive unit ,angle iron supporting structure with foundation and including all auxiliary accessories as per specification.**

#### **LED TYPE GLOW SIGN NAME BOARD AND INDIAN RAILWAY LOGO:-**

The LEDs should be provided for fixed type name and not for scrolling type. Acrylic letters along with LED to be fixed on 3mm thick aluminium composite panel sheet of 3 feet height for Name Boards and entire sheet shall be supported on suitable size of MS angle frame from the back side to withstand wind pressure. MS angle shall run



over the full rectangular box and cross members shall be provided throughout the lengths not less than 75 cm between each.

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- a) High Glow LED Letters: letter height: 18 inch, & thickness: 3" for "STATION NAME" made with acrylic sheet of thickness 3mm.
- b) High Glow LED Letters: letter height: 30 inch, & thickness: 4" for CENTRAL RAILWAY made with acrylic sheet of thickness 3mm.
- c) SMPS based power supply of capacity 12V/ 20A to work directly on 180 to 270 V, 50 Hz, single phase AC Supply.
- d) LED: Water proof LED module with 3 Nos. of SMD LED of type 5050 of reputed make in (Red, Green, Blue) Colour
- e) "STATION NAME" and "CENTRAL RAILWAY" shall be provided in trilingual as follows.
- f) English letter (Green colour).
- g) Hindi letters (Red colour).
- h) Vernacular letter (Blue colour).
- i) LED colours- Red and White for Indian Railway LOGO.
- j) Foundation shall be minimum 1 ft\*1ft\*1ft with RCC.
- k) Required Angle Iron supporting shall be provided such that the name boards/ LOGO is at adequate height from the parapet wall for ensuring proper visibility.

Sl. No.	Parameter	Description
1	No. of LEDs	As per requirements
2	Physical dimensions for Acrylic sheet	As per the letter requirement
3	Thickness of acrylic sheet	3.00 mm
4	Language	Vernacular, Hindi, English
5	Wattage per letter	6 Watts to 22 watts (approx.), LED Wattage = 0.2 Watt/ LED, Spacing between adjacent LED modules must not be more than 40 mm.
6	LED Control	Current Regulator
7	Luminosity	5000 mcd
8	Viewing Angle	120 Deg
9	Nominal Voltage	230 V AC
10	Operating Voltage	180 V to 270 V AC, 50 Hz
11	Maximum viewing Distance	Not less than 200m
12	Protection	IP 65
13	Approved source of LED	<b>MAKE: As per the attached list of Acceptable make at the end of this tender document.</b>



#### Operating Conditions:

The equipment shall be sturdy and suitable for the following service conditions to be normally met in service:  
**3729476/2026/O/O SR DEE/PA/CR**

Atmosphere: Extremely dusty and desert weather and desert terrain in certain areas. The dust content in air may be as high as 1.6mg/m<sup>3</sup>. During dry weather, the atmosphere is likely to be full of dirt and dust. The equipment shall be designed to work in corrosive atmosphere. In industrial areas, there may be airborne contaminants like smoke and chemical vapors and conducting particles.

❖ **Specification of LED:**

All system units should be modular, such that any module (i.e., LED modules, connector, cable, power supply unit, etc.) can be easily removed when defective and a fresh module can be fixed to make the system functional again.

❖ **Power Supply Unit:**

All power supply units supplied shall be switch mode power supply (SMPS) type operated from AC source in the voltage range 180-270 V AC, 50 HZ AC and single phase.

Over voltage and short circuit protection should be incorporated within the power supply itself.

Power Factor > 0.95

❖ **General Requirements:**

The unit shall be suitable for mounting/hanging and shall be specially designed for protection against dust specification.

The unit should be compact and robust.

The unit should have protected against open circuit & short circuit for the cables and circuits used. The design shall be modular, so that only the defective part need be replaced.

❖ **Warranty:**

The contractor has to submit certificate of warranty for replacement of components/sub components or complete Unit if it fails during warranty period of 12 months from the date of commissioning except for LEDs. For **LEDs Five years (5 years) warranty** to be ensured from the date of commissioning.

**4. Design, supply, erection, fixing, testing and commissioning of platform station name sign boards**  
**Back Lit diamond shape with high Bright Flexi LED2835, 10K Ten IP67, 180 degree viewing necessary fixing arrangements such as clamps nuts bolts washers all as per detailed specifications and as directed.**

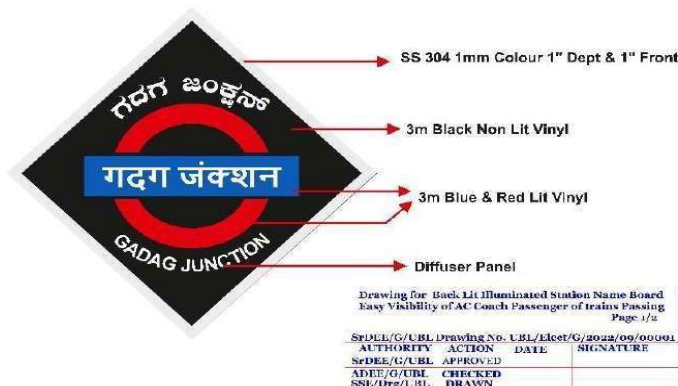
**PLATFORM STATION NAME SIGN BOARD BACK LIT- DIAMOND SHAPE:**

- Diagrams of diamond shaped platform station name sign board back lit provided at pune station is given **(for example)** at **Annexure - C** for guidance to tenderers. Successful tenderer shall adapt the Diagram under Annexure-C as per the site condition and instructions of Engineer in-charge.
- Labour charges for fixing, installation and commissioning shall include transportation at site location also.

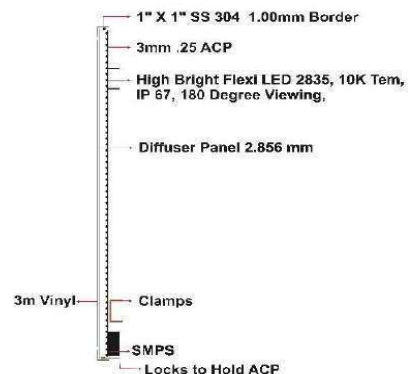
**Annexure - C**

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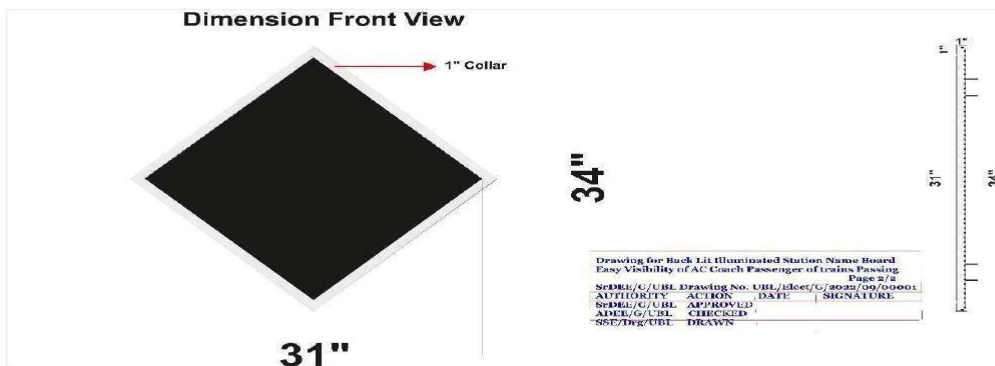
Specification Front View



Specification Side View



Dimension Front View



Successful tenderer shall obtain approval from Sr.DEE/G/Pune for drawings of different signage/station name boards (wall / hanging / floor mounting type led illuminated sign / direction boards in half elliptical shape, led type glow sign name board and Indian railway logo and platform station name sign board back lit- diamond shape) before procuring the items.

➤ The signage/name boards as per the schedule, technical specifications and as per the directions of Engineer in charge are to be provided at Pune station.

➤ DISPLAY OF WALL / HANGING / FLOOR MOUNTING TYPE LED ILLUMINATED SIGN/ DIRECTION BOARDS IN HALF ELLIPTICAL SHAPE:

•Detailed technical specification of the Elliptical / Parabolic Signage Boards, Please refer to attached document (Guidelines on Standard Signages at Stations on Indian Railways, 2023).

## TECHNICAL SPECIFICATION FOR ELLIPTICAL / PARABOLIC SIGNAGE BOARDS

Model /Type	Full Elliptical (FE) / Half Elliptical (HE) / Semi Elliptical (SE) / Parabolic
Mounting	<p>Mounting arrangement shall be hanging, Wall mounting, Ceiling Mounting, Pole Mounting, Floor Mounting or as per site requirement. Sign Boards shall be with integrated mounting arrangement powder coated pipes to FOB/PF Structure / walls with tension rope made of SS 304 and supplied with minimum 5 meter 2.5 sq.mm FRLS multi stranded copper flexible cable as per IS: 694 with latest amendment and socket pin for connecting to power supply system. The cost of fixing of sign board with suitable clamping arrangement with SS nut, bolts, washers, square shear nut, nut-bolts, screw, T bolt, Chuck nut, shear nut or welding etc. is also included. The clamps shall be powder coated and enamel paint of approved colour.</p> <p><b>CABLES, WIRES AND SWITCH SOCKET MAKE:</b> As per the <b>attached list of Acceptable make at the end of this tender document.</b></p>
Elliptical Glow Board Frame	<p>Shall be made of Extruded Anodised hollow aluminium profile of size not less than 1.2 mm thickness and anodized to minimum 15µm thickness (Grade AC-15) in bronze &amp; silver or any other approved colour. Anodizing coating shall be as per IS: 1868 or latest amendment.</p> <p>Provide Full length square SS powder coated pipe attached to bottom cap square bracket with level adjustment provision ribbiting without welding, pass thorough top cap interlock with clamp SS pipe sliding and level adjustment provision without compromising structural strength of Elliptical Glow Board.</p> <p>Provide nylon die molded &amp; MS machine formed powder coated horizontal or vertical as per requirement heat sink bracket to hold top and bottom aluminium profile with press fit and bolting provision. Top bottom and/or side Cap as per requirement flush fixed at Profile to outer side holding all structural element together.</p>
Bracket / clamp	<p>"I" beams of size 3" - 27" / "T" beams of size 6-8" x 5", "C" beam of size 3" x 5" and round pipes 2" - 6" holding machine bended seven tank processed powder coated clamp with SS 304 nut bolts &amp; spring washers with provision of level, size and alignment adjustment. 'T', 'S' or round shaped clamp from center slot will interlock with top beam/ girder, pipe at various size with horizontal or perpendicular or tapper or slanted form with provision of beam to beam connected bracket to hold sign perpendicular or horizontal. &amp; bottom side of clamp will interlock with pipe of Elliptical Glow Board with SS nut-bolt and spring washer.</p> <p>High strength Round Mounting Clamp set of inner &amp; outer clamp at R 2"/3" &amp; for installation on round pipe of dia 2/3" shall be press-formed in SS 304 grade sheet of 2mm thickness, 2mm rib deep shall be formed along the periphery for additional strength, only the inner clamp shall be used with two holes shall be used for anchoring on wall. Universal mounting clamp approx. 70mm x 31mm x 22mm set consisting of sliding clamp, holding clamp, crimping lock and flexible strip shall be press-formed in SS 304 grade sheet of 1.2mm thickness this clamp shall be slid inside the mounting channels fixed to substrates. 0.8mm strip shall be passed through this clamp and around the structure on which the sign is to be installed and crimped firmly by crimping clamp. It should fix at any structure.</p> <p>M10 Square Head Bolts SS 304 grade, 4 side chamfered shall be used for installation. M10</p> <p>Hexa Head shear nuts, which are high security, anti-theft, permanent fasteners, shall be used and shall be made of SS 304.</p>

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Top profile	<p>Top Profile of Elliptical Glow Board shall be made up of Aluminium Alloy (6063-T6) Extruded profile anodised to 15 <math>\mu\text{m}</math> +/- 3 <math>\mu\text{m}</math>. The profile nominal wall thickness shall be 2 mm and width approx 170 mm, 137 mm and 268 mm. The reflective metallic silver PU particle coated granules shall be provided on the internal face of the profile. The edges of the profile shall be rounded.</p> <p>The profile shall have a slot of approx 4.8 mm &amp; 7mm width on both sides to hold 2/3/4 mm thick polycarbonate sheet. The slot shall be at an angle of 80-84 degree to face firmly hold the polycarbonate sheet in elliptical and parabolic curvature. The Elliptical / Parabolic curvature of the polycarbonate sheet shall be maintained by its inherent flexural tension property. It should have circular slots for M6 self-tapping cheese head screws to fix the end caps. Along the centre line of the top of this profile there shall be a 10mm x 3mm slot for press fitting the heat sink holding brackets in place with circular slot for M6 self tapping screw should be made available. There shall also be a flat extension of 12mm to rectangular slot for additional support / fixing screws to firmly hold the heat sink holding bracket. The Total height of the central Projection should be maintained to minimize obstruction to light illumination.</p>
Bottom, top & side Profile	<p>Bottom, top and side Profile full / half of the Elliptical Glow Board shall be made of extruded anodized Aluminium Alloy hollow profile (6063-T6) having 2mm to 5mm wall thickness. It should have internal ribs with approx 1.5mm, 2.5mm thickness and 4.5mm, 4.2mm wide slot to firmly hold the polycarbonate sheet in elliptical and parabolic curvature using its flexural tension. A circular slot of dia approx. 4.5 mm at the center of profile shall be provided to fix self tapping cheese head screw for end cap.</p> <p>An extruded extension diametrically opposite to this circular slot should have approx. 10mm x 3mm slot for press fitting the heat sink holding brackets. Further flat extension of 12 mm shall be provided for screwing the bracket for additional strength &amp; fixed location.</p> <p>Total external width &amp; Height of the bottom, top &amp; side profile should be full of approx. 34mm x 48mm R 11.7mm / 42mm x 50mm, R 24.3mm / 42mm x 80mm, R16mm / 84mm x 80 mm, R16mm without compromising the strength and causing any obstruction to the light while giving maximum viewing area. The bottom corner shall have a curvature of approx. R11.7mm, 24.3mm and 16mm to appear in continuous flow of elliptical Curvature of polycarbonate sheet. This also shall add to aesthetic beauty of the whole Elliptical Glow Board.</p>

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Heat Sink Holding bracket (HSH)	<p>Heat Sink Holding Bracket shall be of approx. length 184mm, 252mm, 260mm, 324mm, 397mm, 537mm, 551mm injection moulded in Nylon 6 material &amp; 1130mm, 1156mm, 861mm in MS machine formed powder coated for its strength &amp; flexibility. The bracket shall be of 'I' cross section of sizes approx. 102mm x 15mm x 10mm, 1080mm x 25mm x 5mm, 1156mm x 50mm x 5mm, 861mm x 50mm x 5mm at mid portion and it should reduce proportionately in slant at both the ends for nylon 6mm, MS 5mm. Thickness without obstructing the light and without compromising on strength.</p> <p>The 'I' cross section nylon shall have ribs for maintaining stiffness. Both the ends of HSH brackets shall have locking clasp to press fit in 10 mm x 3mm slot of top and bottom profile. The mid portion shall have offset of 14mm for nylon and 12 mm for MS.</p> <p>Central clasp shall be moulded in the Heat Sink Holding bracket to firmly hold the Heat Sink along the longitudinal axis of Elliptical Glow Board. The central clasp shall have two prong sets to hold the heat sink across its diagonal or along its sides as required. Two holes as per requirement shall be provided near the end clasps firmly.</p> <p>Two holes for nylon &amp; MS shall be provided on both sides of central clasp to fix at both profiles</p> <p>Two holes shall be provided on both sides of central clasp to fix the mid portion of bracket to strip in the event longer bracket if required</p> <p>The mid portion of HSH bracket approx. 3 mm thick x 10 mm wide aluminium strip in the event longer bracket is required or more than one Heat Sink is required for bigger size of Elliptical Glow Board.</p>
Heat Sink	<p>Heat Sink shall be 25-26 mm hollow anodized Aluminium Alloy (6063-T6) profile of 2mm thickness. Corners shall be flattened to form a square across flat to hold the heat sink diagonally. Heat sink must be press fit horizontally and diagonally from all 8 sides. All the four sides shall have dovetail of slots. Circular slots of dia 2 mm shall be provided at all four internal corners to tight fit the pins of Heat Sink connector.</p> <p>There shall be a set of three of approx 1.5mm thick ribs central of approx. 5mm height and two sides of approx. 2mm height. Provision for maximize the surface area to aid in faster cooling as well as for additional strength to hollow square profile.</p>
Heat sink connector	<p>Heat Sink connector shall be a moulded from polycarbonate profile of same cross sectional dimensions as that of Heat Sink. The thickness of the connector shall be approx. 5 mm.</p> <p>Two semi circular slots shall be provided on each face. Provision to pass out hot air from heat sink should be made. Four pins shall be moulded on four corners on both the faces of Heat Sink connectors to be press fitted in Heat Sink profile.</p>
Elliptical Glow Board end cap	<p>End caps full / half with elliptical and parabolic shape shall be made from injection moulded polycarbonate granules 2 mm thick / SS 304 1.2 mm thick / aluminium die casted 8 mm thick having curve on top side and internal hollow and elliptical base at bottom side with reflective internal surface. The End caps shall be perfectly opaque.</p> <p>The standard sizes are:  170mm x 304mm x 21mm, R 511mm corner R 11.7mm  / 210mm x 100mm x 20mm, R 150mm corner R  39mm / 278mm x 130mm x 20mm, R 193mm corner  R39mm / 350mm x 152mm x 20mm, R 257mm corner  R 39mm / 425mm x 175mm x 20mm, R 316mm corner  R 39mm /</p>

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563mm x 215mm x 20mm, R 449mm corner 39mm /  
 210mm x 69.2mm x 20mm, R 150mm corner R 39mm  
 / 278mm x 84.2mm x 20mm, R 193.48mm corner R  
 39mm / 350mm x 95.2mm x 20mm, R 257mm corner  
 R 39mm / 425mm x 106.7mm x 20mm, R 318mm  
 corner R 39mm / 563mm x 126.7mm x 20mm, R  
 449mm corner R 39mm / 425mm x 150mm x 50mm,  
 R 305mm corner 39mm / 600mm x 110mm x 50mm, R  
 445mm corner R 39mm / 862mm x 167mm x 60mm,  
 R 707mm corner R 39mm / 425mm x 190mm x 50mm,  
 R 315mm corner R 30mm / 573mm x 230mm x 57mm,  
 R 450mm corner R 30mm / 859mm x 308mm x 67mm,  
 R 734mm corner R 30mm / 529mm x 308mm x 99mm,  
 R 371mm Corner 40 /  
 692mm x 308mm x 85mm, R 528mm corner R 53mm /  
 1063mm x 415mm x 126mm, R 943mm corner R 80mm /  
 1167mm x 353mm x 20mm, R 1062mm corner R  
 11.75mm / 169mm x 915mm x 30mm, R 1246mm corner  
 R 17mm / 342mm x 2092mm x 30mm, R 2451mm corner  
 R 17.2mm / 1488mm x 472mm x 30mm, R 1575mm  
 corner R 16.3mm / 889mm x 263mm x 25mm, R 775mm  
 corner R 17.5mm.

**Note: Above sizes may vary as per the site requirement.**

The boards shall be such that the text & Graphics displayed on the Polycarbonate sheet held in these end caps should be completely visible even if it is viewed directly from the bottom or any direction; the text is very much legible.

Polycarbonate cap Internal face shall be cross ribbed 2mm x 3mm to increase the strength of the end cap. Eight nos. locating pins tapering towards collar of the end cap shall be provided near the internal periphery of the end cap. These pins shall firmly hold the 3mm translucent polycarbonate sheet in elliptical / parabolic curvature.

Circular cutout of dia approx. 80mm shall be provided for illuminated branding or opaque cap shall be provided in case of none branding. For branding translucent material fitting provision should provide without shadow on branding. Oblong cutout with collar shall be provided for projecting image of desired text & graphics on the floor below or opaque cap shall be provided in case of non-projecting. 2mm x 5mm Ribs approx. 20mm inside and parallel to the external periphery shall be provided for additional strength. Riser buttons shall be provided along the internal ribs to block the cutouts using opaque sheet screwed through these buttons.

These buttons may also be used to mount the LED projector when required. Projector fitting bracket shall be fix to end cap to align with oval slot.

Three nos. cap holding sockets shall be moulded at three corners of the End Cap. Two nos. locating pins shall be provided on each cap holding sockets and shall be provided at the bottom of these pins for additional strength. This pin shall locate in the top and bottom Aluminum profile.

Two tapering ribs shall be provided to cap holding brackets for additional strength. Three through slots of approx. 17 mm x 1.5 mm shall be provided near the top of end cap for heat ventilation. Moulded Screw caps shall be provided to externally press fit in the cap holding sockets. The end cap Shall be Moulded Shatter proof opaque polycarbonate as per IS 14443 or latest amended with thickness not less than 1mm and of reputed Indian make using Bayer granules.

SS 304 elliptical or parabolic cap should have approx. 20 mm vertical collar at corners of suitable dia hole to interlock with profile and structure, square bracket at bottom cap should provide to interlock vertical square structure pipe and top cap

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	<p>should have cut out to thorough pass the structure pipe with the provision of ventilation.</p> <p>Aluminium die Casted cap top should have curvature of R 1123-1125 mm and internal hollow with wall thickness of 6-8mm with polished and premiered with metallic PU gloss lacquer coated. internal 2 nos. cap holding socket shall be casted at both corners of cap to interlock with side profile,</p> <p>Bottom casted cap should have side curvature of - R78-79 / 112-113 mm and hollow of approx. 100 mm with internal 2 nos. cap holding socket shall be casted at both the corners of cap to interlock with side profile. Vertical rib should provide to interlock polycarbonate sheet with inner pins support should flushed with side aluminium profile. Cap should have a hole with die moulded dia approx. 12 mm grommet to pass main supply wire.</p>
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Cue Beam	<p>Cue beam holding bracket die-moulded with triangular parabolic base of approx. 77mm x 68mm, 2 mm thick. Hollow cylindrical die-moulded cover of dia approx. 29mm and height 43mm attached to side legs with provision of hinge for 360 degree rotation and angle adjustment with oblong cut out of bottom cap. It should fix with bottom cap with 3 nos. holes of dia approx 3 mm.</p> <p>The Elliptical Glow Board shall have the slot for provision of Cue Beam projector wherever required with provision of cue beam holding bracket. Cue beam projector should project the given sign image and text on floor or wall from max distance with maximum brightness than ambient light.</p> <p>2 nos. Plano convex of approx. R 9.22mm, R 7.31mm and 1no. Biconvex lenses of approx. R 19.8mm, R 34.1mm, should fix at given slots.</p> <p>Projector lens with engraved image should create maximum projection on surface The CUE BEAM should incorporate in Elliptical Glow Board.</p> <p>Technical specification of CUE          BEAM Voltage - AC 110V~220V          Built in LED Driver - 12 V          Power - 5W          Luminosity - 150~ 200LM          Image Projected distance -1~ 3 meters          External Dimensions approx. - Ø26mm X 76 mm</p>
Podium	<p>Elliptical shape one piece cut, top &amp; bottom 3mm thick with size approx. 1170 mm x 512 mm x 508 mm at R914mm at corner R 117mm / 1643 mm x 575 mm x 508 mm at R 1652mm at corner R 92.5mm of SS 304 with parabolic shape cut at center having dia approx 8 mm, 2 hole on top for matching with bottom cap of Elliptical Glow Board for fixing and interlocking without welding and bottom approx. 12 mm 4 hole for foundation fitting should be provided. Provide approx. 4 mm 9 holes for ventilation at top and Backside open able door system with lock &amp; key.</p> <p>SS 304 grade frame structure of size approx. 25mm x 50mm x 1.2mm square with vertical and horizontal supports covered with SS 304 sheet of 1.2mm thick with powder coated in elliptical shape machine formed matching with top of podium should provide</p> <p>Anchor fastener fitting provision has to be made for ground fixing.</p>



ACP Cladding	Design, fabrication & installation of 3mm thick exterior grade PVDF coated Aluminium composite panels (Timex, Alucobond) of having 0.5 mm thick aluminium PVDF coated sheet with specific standard colour + 3 mm core material + 0.5 mm aluminium sheet chemically treated (back sheet) bent with 5mm uniform machine grooved as per requirement, fitted on anodised aluminium/ anodized aluminium angle Primer with PU coated MS rectangular grid work. Grid for supporting ACP shall be of size approx. 38mm x 38mm x 1.5mm at a distance of Heat sink fixed in Elliptical Glow Board should accurately match Horizontally & Vertically along with existing structure on site. Hardware, fixtures, brackets, anchor, fasteners of SS 304 grade etc. complete duly sealed with weathering silicon (DOW / GE) for circular columns and curved beams etc. Provision of MS clamp/ bracket for fixing with existing structure vertically, horizontally or slanted without welding and with level size alignment adjustment and interlocking provision without compromising strength and structural stability of frame should provide.
Text /Graphics	Shall be computer cut/printed on 80-100 µm Monomeric calendared Vinyl matt sheet of reputed make (Metamark / 3M) of Pantone shade 227C/165C/260C/Cool grey 8C/Black/7408C Note: Pantone provides a universal language of color that enables color-critical decisions through every stage of the workflow for brands and manufacturers.
Led ribbon light Illumination	Ribbon light shall be of waterproof SMD 2835. The width of Ribbon light shall be 12 +/- 1mm. This shall be slide into the dovetail grooves of the heat sink & firmly pasted on all four sides of the heat sink. The light emitted from LED ribbon light should be partially reflected from the elliptical and parabolic curvature of white glossy polycarbonate sheet multiple times. Any obstruction or low brightness at the edges of the beam should be taken care of. Uniform illumination Average 4W-8W/ Sq. ft.

LED	Linear LED of density 120 LEDs per meter of quality of proven make such as Nichia, Osram, Seoul, Philips Lumileds, Cree and Lednium. OEM certificate of LED should be provided.	
	LED Wattage	0.08 W to 0.1W per LED
	LED Driver	Constant current waterproof LED driver of approved brand make Mean Well / Philips / OSRAM with separate surge protection
	LED Colour	Cool White Nichia, Osram, Seoul, Philips Lumileds, Cree and Lednium
	Colour temperature	5500 K/6500 K
	Viewing angle	Text/Graphics/matter visibility shall not be less than 160°
	Nominal Voltage	230V, AC, 50 Hz
	Operating Voltage Range	150V-260V AC With SMPS power supply.
	Index of protection	IP 54
Sizes of Boards	The size of board shall of different sizes, as per the site requirement.	
Sign substrate	Shall be of Eco Friendly, High impact strength, shatter proof, UV resistant, Translucent, non- flammable White polycarbonate solid sheet as per IS 14448 of not less than 3mm of reputed make Bayer / Lexan / Polymac. Light transmission shall be in the range of 60% - 90%. Provide U shaped 7mm x 1mm / 4mm x 1mm / 8 mm x 2mm gasket for tight holding and interlocking polycarbonate sheet in aluminum profile.	

Note: The successful contractor shall arrange of all equipment, tools, consumables, testing meters, Hydra scaffolding, crane, forklift etc. and other required materials for successful completion of the work. Any work not specifically mentioned, but required for successful completion of work is deemed to be included in the work. If any activity required to be included later on due to reliability and safety shall be carried out by contractor without any extra cost.

### **Specifications General Requirements**

- Any deviation from the specifications shall be clearly brought out in the offer along with the reasons for such deviations. If, no such deviations are brought out in the offer, it will be deemed that the tenderer has fully understood the requirements of the tender and no extra cost will be paid under any circumstances for carrying out the works under this tender in accordance with the interpretations of the Engineer-in-charge.
- The work to be governed by this contract shall cover designing, manufacturing, transporting till site, safe custody at site, insurance, erection, testing and commissioning of electrical items/fittings as detailed in the scope of Work of tender documents. All the materials and workmanship shall strictly conform to the provision of this specification primarily and to the related Indian Standard Specification and code of practice mentioned in the specifications.
- All the materials brought to site for use on this work shall be new of the best quality of approved makes/manufacture as per list of approved makes of equipments/materials and conforming to the relevant BIS specifications.
- The rates quoted for the relevant items of work shall include the cost of materials and equipments, their accessories, fixing labour, together with the cost of providing the necessary tools and tackles etc., so as to ensure that the work carried out forms a complete installation to the satisfaction of the Engineer-in-charge.
- The rates quoted shall also include the cost of any civil works with the relevant items of works.
- The rates quoted shall also provide for handing over the necessary completion drawings together with the test results of commissioning tests carried out by the contractor, in accordance with BIS before the installation is handed over to the Railways.
- The contractor is bound by the opinion of the Engineer-in-charge in accepting whether the work is carried out in accordance with the provisions of these specifications or not and shall take steps to rectify or replace such parts of the materials and installations as in the opinion of the Engineer-in-charge which are unsatisfactory

**STANDARDS FOR EQUIPMENTS AND WORKMANSHIP:**

- The materials and equipments to be supplied and installed under this contract shall conform to the requirements of these specifications.
- In further support of what is contained in this specifications, the materials and equipments as well as workmanship shall satisfy the requirements.
- All the materials and equipments shall conform to the Standards not less than those stipulated under the current Indian Standard Specifications.
- For such of the materials and methods of construction for which BIS have not been published, British Standards shall be followed subject to the approval of the Engineer-in-charge.
- In addition to the above, the equipment and workmanship shall satisfy all the statutory requirements concerned and the requirements of the Railway standards as per the Instructions of the Engineer-in-charge based on the site conditions and revised requirements, if any.
- Method of construction approved by the Electrical Inspectorate.
- Indian Electricity Acts and Rules.
- Fire Insurance Regulations.
- I.E.E. wiring regulations.
- Instructions of the Engineer-in-charge based on the site conditions and revised requirements, if any.

**5. Supply and erection of modular type switch board box(per Module).**

The price shall cover supply and erection of Poly Carbonate Modular type surface mounting switch board box 1 module conforming IS: 14772-2000 or latest . The combination for Nos. of modules will be advised by Railway/consignee as per actual site requirement.

**6. Supply and erection of Frame plates with matching cover plates(per Module).**

The price shall cover supply and Erection of Poly Carbonate modular type Frame plates with matching cover plates conforming IS: 14772-2000 or latest. The combination for Nos. of modules will be advised by Railway/consignee as per actual site requirement.

**7. Supply and erection of Modular one way 6amp switch.**

The price shall cover supply, erection, testing and commissioning of 1 No. 5/6 A modular switch one way size 1M, Current Rating 6 Amp, conforming IS 3854 :1997 or latest with required hardware for fixing on surface mounting modular box, with required internal wiring, connections to be made with provided wires. This unit is to be fixed in consultation with Engineer's representative. The material is to be supplied as per list of acceptable make or any other make approved by Sr.DEE/G/Pune through consignee before supply.

**8. Supply and erection of 2.5A & 6 A, 250v, 5 pin modular socket, 2 module.**

3729476/2026/Q/O SR DEE/PA/CR The price shall cover supply and erection of 2.5A & 6 A, 250v, 5 pin modular socket, 2 module, conforming IS 1299:2005 or latest with required hardware for fixing on surface mounting modular box, with required internal wiring, connections to be made with provided wires. This unit is to be fixed in consultation with Engineer's representative. The material is to be supplied as per list of acceptable make or any other make approved by Sr.DEE/G/Pune through consignee before supply.

**9. Supply and erection of 1.5 sqmm single-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge.**

The price shall include supply and laying of 1.5 sq mm single core, multi stranded, 1100 V grade, FRLS-grade, PVC insulated, minimum FR grade insulation, ISI marked, copper wire conforming to IS 694 – 1990 or latest through provided PVC casing capping or PVC conduit or PVC flexible conduit along with accessories etc

**10. Supply and erection of 2.5 sqmm single-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge.**

The price shall cover supply and laying of 2.5 sq mm single core, multi stranded, 1100 V grade, FRLS-grade PVC insulated, minimum FR grade insulation, ISI marked, copper wire conforming to IS 694 – 1990 or latest through provided PVC casing capping / PVC conduit / PVC flexible conduit along with accessories etc.

**11. Supply and erection of 0.5 sqmm 3-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge.**

The price shall include supply and laying of 0.5 sq mm 3 core, multi stranded, 1100 V grade, PVC insulated, FRLS-grade, copper wire conforming to IS 694 – 1990 or latest through provided PVC casing capping or PVC conduit or PVC flexible conduit along with accessories etc. The material is to be supplied as per list of acceptable make or any other make approved by Sr.DEE/G/Pune through consignee before supply.

**12. Supply and erection of 4 sqmm, 4-core, multi-stranded, flexible copper cable, 1100 V grade, FRLS PVC insulated, circular sheathed, ISI marked, conforming to IS:694–1990 or latest, suitable for use as multi-core flexible cable, including laying in existing conduit or casing-capping, as directed by the Engineer-in-Charge.**

The price shall include Supply and erection of 4 sqmm, 4-core, multi-stranded, flexible copper cable, 1100 V grade, FRLS-grade, PVC insulated, circular sheathed, ISI marked, conforming to IS:694–1990 or latest, suitable for use as multi-core flexible cable, including laying in existing conduit or casing-capping, as directed by the Engineer-in-Charge.

**13. Supply and laying of 25 mm dia. heavy-duty PVC conduit/pipe, ISI-marked and conforming to IS:9537 or latest, including all required accessories such as rawl plugs, saddles, screws, tees, junction boxes, etc., complete as directed by the Engineer-in-Charge.**

The price shall include supply and laying of 25 mm dia heavy duty PVC conduit conforming to IS 9537, with wherever required rawal plugs, saddles, screws, tees, junction boxes etc. Separate casing-capping to be used for sub-main/main/power point wiring.

**14. Supply and erection (including cleating on walls/trusses/pole or laid in provided trench/pipe) of 4 core 10 sqmm, AL conductor, XLPE insulated PVC sheathed armoured 1.1 KV grade cable.**

**15. Supply and erection (including cleating on walls/trusses/pole or laid in provided trench /pipe) of 4 core 35 sqmm, AL conductor, XLPE insulated PVC sheathed armoured 1.1 KV grade cable.**

(Item No.14 to 15)

The price shall cover providing 1100 V grade, multistranded LT armoured cable of specified size conforming to IS 7098 (Part-1)– 1985/1995 or latest , conducting material (Aluminum) including required material, galvanised steel strip armoured, hardware's for erection and erecting on wall, ceiling, RCC slab or drawing the same through pole, pipe, laying in provided conduit, trench, ducts, trays as approved by engineer in charge including glands, lugs, etc. Cables shall be XLPE and of required construction, colour, shall carry ISI mark, IS No, manufacturer's name, size, duly embossed / screen printed at every meter and having the total count of progressive length in meter at each mark.

3729476/2026/Q/Q-SR-DEE/PA/CR The cable ends shall be terminated with appropriate size & type of glands with lugs duly crimped, as directed by the Engineer-in-Charge. The spacing of cables shall be done with adequate distance between cables as mentioned in IS so as to minimize de-rating. Cables shall be tagged/ferruled with identification name / mark at the point from where distribution starts and at ends.

**16. Supply and laying of 50 mm (OD) DWC pipe with ISI mark, conforming to IS:14930 or latest, along with necessary connecting sockets, couplings, tees of the same material, required for underground/track crossing/road crossing portion of cable laying as directed by the Engineer-in-Charge.**

The price shall cover supply & laying of 50 mm (OD) DWC pipe with ISI mark, conforming to IS:14930 or latest, along with necessary connecting sockets, couplings, tees of the same material, required for underground/track crossing/road crossing portion of cable laying as directed by the Engineer-in-Charge.

**17. Supplying, fixing and commissioning 2 pole RCBO up to 25 A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity, short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.**

The price cover supplying, fixing and commissioning 2 pole, RCBO up to 25 A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity, short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.

#### **RCBO-Residual Current Circuit Breakers with Over Current Protection: -**

RCBO shall have conformance to IS 12640-2 / IEC 61009-1

- RCBO shall be of breaking capacity of 10kA.
- RCBO shall not be line load biased and minimum electric life of 10,000 electric operations
- Single Phase RCBO of 6A-40A to be in 2 Modules size with a breaking capacity of 10kA
- The RCBO shall have separate indications for short circuit fault and earth leakage fault
- The RCBO shall trip on leakage fault of AC waveform consisting of pulsating DC along with transients and harmonics.
- The RCBO shall have pollution degree 3, rated impulse withstand of 6 kV, IP20
- The RCBO shall have a test button to check health of RCBO by creating artificial fault
- The RCBO shall have bi-connect terminals for both bus bar and cable termination
- The RCBO, up to 63A, shall have cable termination capacity of 35 sq mm for rigid cable & 25 sq mm for flexible
- The RCBO shall have safety shutter to avoid any wrong insertion of cable, operating temperature -5 °C to +60 °C

The RCBO shall have a provision for padlock to prevent unauthorized access

- The RCBO shall have provision for mounting of accessories, Auxiliary Contact, Trip Alarm Contact, UV, OV, Shunt Release
- The RCBO shall have DIN clip on both the sides for easy removal of an RCBO from the DIN rail.

**Note:- For detailed specification of Switchgear please refer to attached Annexure A.**

**18. Supplying, fixing and commissioning 2 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity, short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.**

The price cover supplying, fixing and commissioning 4 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity, short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.

#### **RCBO-Residual Current Circuit Breakers with Over Current Protection: -**

RCBO shall have conformance to IS 12640-2 / IEC 61009-1

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- RCBO shall be of breaking capacity of 10kA.

- RCBO shall not be line load biased and minimum electric life of 10,000 electric operations

- Single Phase RCBO of 6A-40A to be in 2 Modules size with a breaking capacity of 10kA

- The RCBO shall have separate indications for short circuit fault and earth leakage fault

- The RCBO shall trip on leakage fault of AC waveform consisting of pulsating DC along with transients and harmonics.

- The RCBO shall have pollution degree 3, rated impulse withstand of 6 kV, IP20

- The RCBO shall have a test button to check health of RCBO by creating artificial fault

- The RCBO shall have bi-connect terminals for both bus bar and cable termination

- The RCBO, up to 63A, shall have cable termination capacity of 35 sq mm for rigid cable & 25 sq mm for flexible

- The RCBO shall have safety shutter to avoid any wrong insertion of cable, operating temperature -5 °C to +60 °C

The RCBO shall have a provision for padlock to prevent unauthorized access

- The RCBO shall have provision for mounting of accessories, Auxiliary Contact, Trip Alarm Contact, UV, OV, Shunt Release

- The RCBO shall have DIN clip on both the sides for easy removal of an RCBO from the DIN rail.

**Note:- For detailed specification of Switchgear please refer to attached Annexure A.**

**19. Supplying, fixing and commissioning 4 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity , short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.**

The price cover Supplying, fixing and commissioning 4 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity , short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.

**RCBO-Residual Current Circuit Breakers with Over Current Protection: -**

RCBO shall have conformance to IS 12640-2 / IEC 61009-1

- RCBO shall be of breaking capacity of 10kA.

- RCBO shall not be line load biased and minimum electric life of 10,000 electric operations

- Single Phase RCBO of 6A-40A to be in 2 Modules size with a breaking capacity of 10kA

- The RCBO shall have separate indications for short circuit fault and earth leakage fault

- The RCBO shall trip on leakage fault of AC waveform consisting of pulsating DC along with transients and harmonics.

- The RCBO shall have pollution degree 3, rated impulse withstand of 6 kV, IP20

- The RCBO shall have a test button to check health of RCBO by creating artificial fault

- The RCBO shall have bi-connect terminals for both bus bar and cable termination

- The RCBO, up to 63A, shall have cable termination capacity of 35 sq mm for rigid cable & 25 sq mm for flexible

- The RCBO shall have safety shutter to avoid any wrong insertion of cable, operating temperature -5 °C to +60 °C

The RCBO shall have a provision for padlock to prevent unauthorized access

- The RCBO shall have provision for mounting of accessories, Auxiliary Contact, Trip Alarm Contact, UV, OV, Shunt Release

- The RCBO shall have DIN clip on both the sides for easy removal of an RCBO from the DIN rail.

**Note:- For detailed specification of Switchgear please refer to attached Annexure A.**

**20. SETC of outdoor type LT Panel, Aluminium Bus Bar consisting of-**

**1. Incoming - 2 x 800 Amps ACB 4 pole, Microprocessor based, EDO type.**

**2. Bus Coupler - 800 A ACB 4 pole, Microprocessor based, EDO type.**

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 3. Outgoing -  
 (i) 2 Nos of 630A, Microprocessor based, MCCB 4 Pole.

(ii) 2 Nos of 400A, Microprocessor based, MCCB 4 Pole.

(iii) 3 Nos of 250A, Microprocessor based, MCCB 4 Pole.

(iv) 2 Nos of 32A, MCB 2 Pole.

1) For detailed specification of Switchgear please refer to Annexure A.

2) For detailed specification fabrication of Panel please refer to Annexure B.

The Price shall cover SETC of outdoor type LT Panel, Aluminium Bus Bar consisting of-

1. Incoming - 2 x 800 Amps ACB 4 pole, Microprocessor based, EDO type.

2. Bus Coupler - 800 A ACB 4 pole, Microprocessor based, EDO type.

3. Outgoing -

(i) 2 Nos of 630A, Microprocessor based, MCCB 4 Pole.

(ii) 2 Nos of 400A, Microprocessor based, MCCB 4 Pole.

(iii) 3 Nos of 250A, Microprocessor based, MCCB 4 Pole.

(iv) 2 Nos of 32A, MCB 2 Pole.

1) For detailed specification of Switchgear please refer to Annexure A.

2) For detailed specification fabrication of Panel please refer to Annexure B.

Attached **Annexure A- Switchgear and Protection system and Annexure B- Panel construction**

**21. Fabrication, supply, and erection of GI items (GI pole, Channel, angle, flat, clamps nutbols, fan hook, fastener, street light bracket, GI wire Etc.), complete as directed by the Engineer-in-Charge.**

The Price shall cover fabrication,galvanization, supply and erection of GI items ( GI pole, channel, angle, flat,clamp, nutbols, fan hooks,fastner, street light bracket, GI wire etc.) of different sizes and shape as per requirement at site and instruction of site engineer/engineer representative.

**22. Design, fabrication, supply, and erection of stainless steel structures as per site requirements, complete as directed by the Engineer-in-Charge.**

The material included Design, fabrication, supply, and erection of stainless steel structures (SPS) as per site requirements, complete as directed by the Engineer-in-Charge, etc.including all types of hot dip galvanized nut bolts/washers etc.

**23. Supply & erection of 6 mm thick chequered plates per IS: 3502.**

The price shall cover the cost of supply, erection, loading, transportation, unloading to site erection testing and commissioning of 6 mm thick MS chequered plates as per IS 3502 or latest as per site requirement.

**24. Making of cable trench of suitable width and required depth with excavation and back filling of excavated earth in hard soil or soil with concrete/tar layer or track crossing or road crossing portion.**

The price shall cover making of cable trench of suitable width and required depth with excavation and Back filling of excavated earth in hard soil or soil with concrete/tar layer or track crossing or road crossing portion.The excavated earth is to be back filled into the cable trench in an approved manner after cable laying. The Detail specification of making cable trench for cable laying as per IS 1255- 1983.

**25. Provision of CC 1:2:4 in foundation with 25 mm graded stone along with excavation in hard soil or soil with concrete or tar layer etc.**

The price covers excavation to Railways in hard soil or soil with concrete or tar layer etc.for casting of foundation of required size and Provision of CC 1:2:4 in foundation with 25 mm graded stone aggregate with shuttering as required. The quantity of cement bag required per cubic meter of foundation is 6.5 nos. The cement concrete is required both for foundation & muffing as per the requirement. This item also includes the leveling of nearby area to the original condition and disposing of excavated earth to nearby site to be decided by engineers representative. For measurement purpose cement concrete used (in cubic meter), the volume of pole /pipe etc in foundation/muffing casted will be considered as nil.

### 3729476/2026/Q/O SR-DEE/PA/CR Provision of reinforced concrete for foundation, cable trench and baffle wall.

The price shall cover excavation and construction of reinforced cement concrete in 1:2:4 mix for the cable trench, foundation and baffle wall. The price shall include supply of steel for reinforcement and other materials. The price shall also include bending/binding and laying of reinforcement, shoring, shuttering and scaffolding arrangements, required for the construction of baffle wall and its curing. The price shall also include dismantling of all connected temporary arrangements, back filling required and removal of Earth spoil. The price shall also include breaking / modification and then finishing of existing trench at the point of joining. The price shall include the cost of cement and steel also. The Railways shall not supply cement. The water used for concreting, curing etc. shall be potable and same has to arranged by the contractor.

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#### **TECHNICAL SPECIFICATION FOR WIRING**

##### **I. GENERAL SPECIFICATIONS OF WIRING:**

1. The conduit pipe and accessories should be "ISI marked" medium class of white/cream in colour and conforming to IS: 9537 Part –III of 1983.
2. PVC numbering sleeves to be provided to all the wires both ends for identification purpose.
3. There shall be no joints in wires in boards. However if required same should be through connectors of suitable capacity.
4. The copper wires, which will be used in wiring should be of FRLS PVC insulated, multi-strand, single core 1.1 KV grade and conforming to IS: 694. Specifications and construction details of copper wires are as under:

Area of conductor sq. mm	Nos. & Dia. Of wire in mm	Nominal Thickness of insulation in mm
1.5 sq. mm	22/0.30	0.7
2.5 sq. mm	36/0.30	0.8
4 sq. mm	56/0.30	0.8
6 sq. mm	84/0.30	0.8
10 sq. mm	80/0.40	1.0

All wiring material such as 6 Amp. Modular type switch, flush mounted cover plate, 3 points ceiling rose, angular base lamp holder, electronic fan regulator, 6 & 16 Amp. Plug sockets, adopter etc.

##### **II. LIGHT, FAN AND BELL POINTS:**

The contractor shall have to supply the material and carry out the wiring of light and fan points from switch board to load/ ceiling rose point in PVC conduit pipe of minimum 20 mm size or more wherever required by using three number copper wires of 1.5 sq. mm. Multi-strand, single core, FRLS PVC insulated, 1.1 KV grade for phase, neutral and earth continuity in the same conduit. The earth wire is used as internal earthing of points for light, fan and 6 A sockets etc.

The point wiring shall include supply, erection, testing & commissioning of Modular type switch board box along with mounting plate and cover plate with required hardware for fixing. The required modules shall be worked out on the basis of points, plug socket/sockets, switches, fan regulator, etc are to be fixed. For every blank module, 1 way blank plate shall be fixed. All the above accessories shall be of same make, as that of switch. The combination for Nos. of modules will be advised by Railway/consignee as per actual site requirement with modular switches. The point wiring shall also include angular holder/batten holder/ceiling rose, PVC Jn. Boxes, adopter etc. as per site requirement there shall be sufficient space on switchboard to provide switch socket regulator etc.

All wiring material such as Modular switch, Modular type switch board box along with mounting plate and cover plate, angular holder/batten holder/ceiling rose, PVC Jn. Boxes, adopter etc, electronic fan regulator, 6 & 16 Amp. Plug sockets, etc.

##### **III. MAIN / SUB MAIN WITH PVC CONDUIT:**

The wiring for the mains & sub- mains circuit From MDB/SDB to switch board shall be carried out with 2.5/4/6 sq mm., multi-strand, FR/FRLS PVC insulated 1.1 KV grade single core copper wire for phase and neutral and 1.5/2.5/4



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sq mm., copper wire for earth accordingly in medium class PVC conduit pipe of 20 mm or more size wherever required.

The rates are covered for supply of materials (copper wires and PVC conduit pipes) and drawing of mains/ sub mains by three number copper wires as mentioned in schedule of rates with PVC conduit pipe and required hardware. For further clarification regarding wiring, please refer detail specification of wiring.

**Note:**

1. One switch board shall be provided in each room however it may increase considering the construction of quarter and each board of above 200mmx 250mmx50mm size should be provided with fuse unit of suitable size & rating.
2. All 16 Amp power plugs should be provided with proper fuse unit.
3. Distribution board should be properly connected with earth wire.

**IV. DETAILED SPECIFICATION FOR WIRING WORKS**

- a. All the materials used should be of good quality and of approved makes. The completed installation, shall be tested in accordance with the provision of I.E. Rules and code of practice.
- b. The Contractor may use electrical power supply for the purpose of drilling & welding during the execution of wiring works after paying the necessary charges.
- c. All the cables [main/sub main, circuit wires] are to be terminated on 30/5 Amp bakelite/PVC connector of required ways as per site condition.

**Mains** : The connection from one main board to another main board.

**Sub Main** : Connection from main board to sub main board.

**Point wiring** : All wiring in a building except that covered by the terms "Mains"/"Sub mains" and also part of the wiring required for the light, fan or plug circuit as case may be will be considered as "point wiring".

**16 Amp separate board** : This board to be wired with 2x4 Sq. mm. as phase and neutral and 1x2.5 sq.mm. as earthing from main board to separate board with in 25 sq. mm. dia. PVC pipe/Heavy duty casing capping.

**1. System of internal wiring:**

The wiring shall be done in accordance with the Indian Electricity act 1910 and Rules 1956 as amended up to date and Rules made there under and IS 732 (Pt.-I) and 732 (Pt.-II) (looping back system of wiring design and constructions).

The wiring should be carried out by single core multi stranded FRLS PVC insulated copper wires of size 1.5 Sq. mm, 2.5 sq mm, 4 sq. mm. and 6 sq. mm. as mentioned in schedule of rates which shall be laid in ISI marked PVC Conduit pipe clipped suitably on rawl plug at a minimum distance of 18" apart on the wall/Ceiling. The PVC Conduit pipe shall be fixed to walls by using Rawl plugs not more than 450mm (18") apart. Suitable clamps shall be provided where Conduit pipe runs on rail/angle/pipe structure.

- 1.1. Switches for domestic and similar purpose should be of 6/16 Amps. Capacity suitable for 230 V .A.C. supply.
- 1.2. FRLS PVC insulated wires for voltage up to 1100 volts. A.C. with copper multi stranded conductors to be used.
- 1.3. The contractor shall have to maintain the standard colour code for circuit such as phase- red, neutral- Black, earth- green.
- 1.4. Connection to tube light fitting & ceiling fans shall be done with 3- core flexible copper cable of proper size.
- 1.5. All boards should be fixed with drill, insertion of rawl plug etc, then board shall be fixed with specified required MS screw
- 1.6. Passing through floors and walls: Conductors passing through the walls are to be carried in PVC pipe of the suitable size for wiring. Care should be taken that the cables pass through in straight line without twist or cross in wires, on either end of such holes in the walls.
- 1.7. All bare conductor, cable entries into switches, sockets, holders etc. should be used with terminal lug properly crimped and used with application of corrosion inhibitive conducting grease of make of I.C.C. or Dowells. No twisting of cable conductors will be permitted.
- 1.8. There shall be no joint in wires in box type boards. However if required same should be through connectors of suitable capacity.

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2. **Switches:** All the switches shall be placed in the live or phase conductors of the circuit. All the switch shall be single pole with on/off type with cover plate and shall be "ON" when the knob is down and of type quick make and break. Marking for lights, fans should be done on switches.
3. **Cables:** All cables of not less than 1100 volts grade shall be used for wiring. All conductor shall be of stranded copper and no conductor (except where flexible is used) shall have a cross section area of less than 1.5 mm Sq. all stranded conductor should be provided with cable socket and lug for connections, joints and termination.
4. Earth continuity shall be provided with FRLS PVC insulated, multi strand, copper wire of 1.5 sq. mm. for wiring of light/fan points and 2.5 sq. mm. for main/ sub-main or as per mentioned in item wise specifications, and it shall run along with wiring in PVC Conduit pipe and no tapping in between or twisting will be permitted. All metallic parts shall be suitably earthed. All plug sockets, regulators and fans should be connected with earth continuity wire such that the resistance at the remotest point do not exceed 1 ohm. The earth resistance value of all earthings will be displayed along with the date on which earth resistance tested. Earth resistance should be measured and tested jointly.
5. **General:**  
Special care shall be taken to give superlative look/get up and the quality of work by adopting standard wiring practice, layout etc., installations shall be carried out in conformity with the requirement of I.E. Act 1910, I.E. Rules 1956, as amended up to date.
  - 5.1. All wiring shall be as near the ceiling as possible and due consideration shall be given for neatness and good appearance.
  - 5.2. No bare or twisted joint shall be made at intermediate points in the through run of cables unless the length of a final sub-circuit, sub-main is more than the length of the standard coil as given by manufacturer of the cable. If any jointing becomes unavoidable, such joints shall be made through proper junction boxes open to easy inspection. No joints of wires inside T. W. Board shall be allowed, if necessary, wires should be connected through connectors.
  - 5.3. Looping in system of wiring shall be adopted.
  - 5.4. The wiring though out the circuit should be such that there is no break in the neutral wire in the form of switch. The neutral should be distinctly marked.
  - 5.5. In every case when switches and fuses are fitted on the same poles these fuse should be so arranged that fuses are not alive when their respective switches are in the off position.
  - 5.6. The wiring of all fans should terminate into three point ceiling rose.
  - 5.7. Switches controlling the sockets should be on the live side of the line. All sockets outlet should be of 3 pin type with third terminal/pin connected to earth and following E.L.N. in clock wise as per ISS.
  - 5.8. The wiring shall be carried out strictly as per code of practice for electrical wiring installations for system voltage of 650 V, (Revised) as per IS 732 (Pt. II) 1983 as amend latest.
6. **Measurements:** Where wiring between two points is payable in terms of lengths involved, the length will be measured from center of the switch, meter, socket or other equipment's at one end to the center of the switch, meter socket or other equipment at the other end and payment will be made treating this length as the length of wiring. The measurement will be made along the run of the wiring and rounded to nearest meter.  
In case of point in which a single controlling switch is mounted separately from a main or sub-main board the wiring between the feeding board and the controlling switch also should be included while determining the category of the point.
7. **Testing:** All tests such as Earth resistance test, earth continuity test, insulation resistance test will be carried out as per IS 732 (Pt. III) 1983 as amended latest and I.E. Act and Rules in presence of Railway's representative.
12. **Special Clause :**
  - i. Wiring shall include "Main" and "sub-main" to be drawn from the respective main and sub distribution boards located at convenient centre duly approved.
  - ii. All phase and neutral wires shall be looped back only at switches and ceiling roses, where ever necessary and the looping shall be limited to only two wires at each terminal. If more than two wires are required to be looped the same shall be done by suitable mechanical connectors in recessed block/boards duly clamped and secured.
  - iii. Any masonry work involved will be done by the contractor i.e. fixing of plugs, filling up of holes, etc. and all surface properly done after the work and given white washing.

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(a) Laying direct in ground :- This method involves digging of suitable width trench in the ground and laying cable(s) on a bedding of minimum 75 mm riddled soil or sand at the bottom of the trench and covering it with additional riddled soil or sand of minimum 75 mm and protecting it by means of provided slabs.

Depth –

The desired minimum depth of laying from ground surface to top of cable is as follows :-

- (i) High voltage cables, 3.3 KV to 11 KV rating : 0.9 m
- (ii) High voltage cables, 22 KV, 33 KV rating : 1.05 m
- (iii) Low voltage and control cables : 0.75 m

(b) Cables laid across roads, Railway tracks and water pipe lines :- This method involves digging of suitable width trench in the ground and laying cable(s) on a bedding of minimum 75 mm riddled soil or sand at the bottom of the trench.

The provided plastic/DWC/Cement/GI pipe should be used for laying cables.

Depth –

The desired minimum depth of laying from ground surface to top of cable is as follows :-

- (i) Cables at road crossings : 1.0 m
- (ii) Cables at railway level crossings : 1.0 m

(measured from bottom of sleepers to top of pipe)

After cable laying excavated earth to be back filled without stones or hard material and making the surface proper with 15 cm crown at the top.

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### **Standard Technical Requirements of LED Luminaries**

S.No.	Description	Specification
1	LED Make	Nichia, Osram, Seoul, Lumileds, Cree and Lednium with LM 80 Certification from NABL accredited.
2	LED Type	High Power, SMD (Surface Mounting Device) LED
3	Lumen Out Put / Efficacy at luminaries Level	I. >110 lumen/Watt for Indoor Light fittings. II. >100 Lumen/Watt for Street Light up to 45 watt & >120 lumen/Watt above 45 Watt. III. >110 Lumen/Watt for Flood Light up to 100 Watt & >120 lumen/Watt above 100 Watt. IV. >120 lumen/Watt for Highbay Fittings up to 100 Watt & > 150 Lumen/Watt above 100 Watt.
4	LED Life	≥ 50,000 Burning Hours.
5	Depreciation	30% max. after 50,000 Burning Hours.
6	Nominal Voltage	240 V, 50 Hz AC
7	Input Operation Voltage	140-270 volts
8	Control of Distribution	Fully cut Off
9	Driver Type	Constant Current Driver with Short circuit & open load protection.
10	Driver Component	Industrial Grade only
11	THD	< 10 %
12	Efficiency of Driver	> 85% up to 20 watt & > 88 % above 20 Watt.
13	Driver Surge Protection	Min. 4kV for indoor fitting and 10kV with SPD for outdoor fitting
14	Color Temperature	5665 ± 355 K
15	Color Rendering Index	≥ 80 (for indoor fitting) & ≥ 70 (for outdoor fitting)
16	Power Factor	> 0.95
17	Construction of Housing	Extruded Aluminum /CRCA/ Die Cast Aluminum
18	Finishing	Powder coated / anodized
19	Lamp cover	Polystyrene/Polycarbonate / Toughened glass
20	Secondary Optics	Polycarbonate reflector / Polycarbonate lens
21	Mounting	Suitable for surface /recessed /Pole (as per requirement)

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22	Ingress Protection	For Indoor :- IP20 & for Out Door:- Minimum IP 66
	Temperature Rise	Soldering point temperature of the LEDs must be equal to or less than 85° C. Temperature rise (above ambient) of heat sink should generally remain within 20° C.
24	Report to be submitted	LM 79, duly certified by NABL accredited Lab- for LED Luminaire Performance. LM 80, duly certified by accredited Lab of the host country for LED Chip Performance.
25	Warranty	Five years from the date of commissioning or 72 months from the date of supply, whichever is earlier.
26	The bidder shall submit test certificates from an <b>NABL accredited laboratory</b> in support of the following: <ol style="list-style-type: none"> <li><b>LED Luminaire Safety Compliance</b> as per <b>IEC: 60598-1 / IS: 10322 (Part 1)</b> and <b>IEC: 60598-2-3 / IS: 10322 (Part 5 / Sec 3)</b>.</li> <li><b>Photometric Performance Test (LM-79 / IS: 16106)</b> report for the offered luminaire.</li> <li><b>LED Package Test (LM-80 / IS: 16105)</b> report along with <b>TM-21 extrapolation</b>, supporting the life of the LED as reported in the LM-79 test.</li> </ol> <p>The <b>test certificates shall be issued by an NABL accredited laboratory and shall cover the rating and specifications of the luminaires offered.</b></p>	
27	LED Fixture & LED Driver should be same make and BIS Certified .(Except LED Batten)	
28	Operating temp.: -10 to +35 Deg C for Indoor products .: -10 to +50 Deg C for Outdoor products	

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### Annexure A- Switchgear and Protection system:-

#### A) ACB- Rating 630 Amp. - 6300 Amp.

- 1) All ACB's shall be 4 pole MDO/EDO type, minimum 50 KA breaking capacity, with Microprocessor Release.
- 2) ACB shall conform to IEC 60947-1 & IEC 60947-2
- 3) Neutral in case of 4 Pole ACB should be 100% Rated
- 4) ACB should be suitable for pollution Degree 4. (Circuit breakers in industrial settings, where conductive dust and moisture are common, would typically be designed for Pollution Degree 3 & 4.).
- 5) The protection release shall be Microprocessor based having inbuilt adjustable protection against Overload, Short circuit, Instantaneous and Earth faults. Microprocessor based release shall be EMI / EMC compatible. (Electromagnetic interference).
- 6) ACB Release should be equipped with switchable thermal memory for cable protection on reparative Overload faults
- 7) The release shall draw power from main breaker CTs and shall require no external power supply for its operation
- 8) Multistate LED to indicate Power ON and micro-processor unhealthy condition. The release shall also provide separate fault indications by LEDs for each type of fault without using an external power supply.
- 9) Release shall have LCD/OLED Bar graph display with Current metering with % loading, Max & Min Current
- 10) The ACBs shall be fully rated at a free air ambient temperature of 50°C.
- 11) A necessary set of auxiliary contacts/switches shall be provided (Min 4NO+4NC).
- 12) ACB shall have  $I_{cs}=I_{cu}=I_{cw}$  for 1 second short circuit breaking capacity of a minimum of 50KA. (The specification ensures that the ACB can handle and break a fault current of at least 50kA for 1 second, providing a high level of protection against short-circuit faults.)
- 13) ACB shall be air brake, horizontal draw out type.
- 14) Breaker shall have Arc Chutes Interlock means in case Arc chutes are not properly inserted breaker shall not be switch On. Breaker shall have inbuilt Electrical & Mechanical Anti-pumping feature.
- 15) Accessories like Shunt release, under voltage release and Closing Coil shall be provided as needed and shall be front mounted. It shall be possible to view the accessories mounted with the inscribed voltages on the ACB through transparent windows. This shall be possible without removing front facia.
- 16) ACBs shall be provided with IP54 protection cover.

- 17) ACB should not be racked out unless in OFF position. A suitable interlock can be provided for the same.
- 18) A suitable interlock should be available on release for customer reference for system diagnosis.
- 19) On site testing facility should be available thru front mounting test port to check satisfactory working of ACB release. Contractor to ensure free testing of release after during inspection before commissioning & before lapse of warranty period thru approved service personnel OR approved service centre of original equipment manufacturer at site.
- 20) ACB release upgradation should be possible without changing internal CTs.

#### **B) MCCB (Microprocessor based) - Capacity 63 Amp – 630 Amp.**

Moulded Case Circuit breakers should be equipped with Quick make, Quick break & trip free mechanism. The MCCB should be of current limiting design. It should conform to IEC 60947-2. The breaking capacity of MCCB shall be a minimum of 25 KA for ratings up to 160 A and 36 KA for rating more than 160 A – 250A and 50 KA for rating for 400 A - 630 A. The rated service breaking capacity should be equal to rated ultimate breaking capacities ( $I_{cs}=I_{cu}=100\%$ ). Where  $I_{cs}$  is service breaking capacity and  $I_{cu}$  is ultimate breaking capacity. All MCCBs should be 4 pole with 100% Neutral. All MCCBs should be equipped with both side spreader link, Phase Barrier and Extended type Rotary operated handle with door defeat facility & padlocking facility. The MCCBs should be equipped with accessories Trip, Auxiliary contact along with UV/shunt release as specified. MCCBs should not have load line bias. All MCCB protection release should be Microprocessor based having inbuilt adjustable protection against Overload and Short Circuit (S). If used as incomer, then it should have earth fault protection and time delay in addition to the above protection. It should be possible to use Earth leakage Relay with MCCBs.

#### **C) MCB - Miniature Circuit Breakers: -**

- 1) The MCB shall comply to IS/IEC 60898.
- 2) The MCB shall comply to IEC 60947-2.
- 3) The MCB housing shall have unique property of di-electric strength, arc resistance,
- 4) insulation, flame retardancy and temperature resistance.
- 5) The MCB shall have minimum breaking capacity of 10kA as per IS/IEC 60898.
- 6) The MCB shall have minimum breaking capacity of 10 - 15 kA (up to 63A) as per IEC 60947-2.
- 7) The MCB shall be suitable for isolation.
- 8) The MCB shall be of Minimum Energy Limiting of Class 3, line load biased, shall have Trip free mechanism, True contact position indicator
- 9) The MCB shall have BI connect terminals for both busbar and cable termination on both sides.
- 10) The MCB shall have Label holder to make circuit identification easy.
- 11) The MCB shall have rated impulse voltage of minimum 4kV and operating temperature -25 °C to +70 °C.
- 12) The MCB shall have the termination capacity of 35 Sq mm for rigid and 25 sq. mm for flexible.
- 13) The MCB shall have electrical life of 20,000 electrical operating cycles ( up to 32A) and 10,000 operating cycles (40A-63A) and mechanical life minimum 1, 00,000 operating cycles.
- 14) The MCB shall be suitable for Accessories fitment (Auxiliary contact, Shunt Release & Trip Alarm Contact)

#### **D) RCBO-Residual Current Circuit Breakers with Over Current Protection: -**

RCBO shall have conformance to IS 12640-2 / IEC 61009-1

- RCBO shall be of breaking capacity of 10kA.
- RCBO shall not be line load biased and minimum electric life of 10,000 electric operations
- Single Phase RCBO of 6A-40A to be in 2 Modules size with a breaking capacity of 10kA
- The RCBO shall have separate indications for short circuit fault and earth leakage fault
- The RCBO shall trip on leakage fault of AC waveform consisting of pulsating DC along with transients and harmonics.
- The RCBO shall have pollution degree 3, rated impulse withstand of 6 kV, IP20
- The RCBO shall have a test button to check health of RCBO by creating artificial fault
- The RCBO shall have bi-connect terminals for both bus bar and cable termination
- The RCBO, up to 63A, shall have cable termination capacity of 35 sq mm for rigid cable & 25 sq mm for flexible
- The RCBO shall have safety shutter to avoid any wrong insertion of cable, operating temperature -5 °C to +60

°C  
The RCBO shall have a provision for padlock to prevent unauthorized access

- The RCBO shall have provision for mounting of accessories, Auxiliary Contact, Trip Alarm Contact, UV, OV, Shunt Release
- The RCBO shall have DIN clip on both the sides for easy removal of an RCBO from the DIN rail.

#### E) RCCB- Residual Current Circuit Breaker (RCCB)

- RCCBs shall be ISI marked as per IS 12640 (part 1) – 2000 and confirming to IEC 61008-1.
- It shall work on residual current energy, having 30/100/300 milliamp sensitivity and shall protect against earth leakage.
- Tripping time shall be maximum 30 milliseconds.
- Breaking capacity shall be 20 kA.
- RCCB may have 2/4 pole as per DB specification.
- RCCB shall operate for rated leakage at nominal Ten volts AC, and also in both, Neutral Open & Snapping condition.
- RCCBs shall have trip free mechanism with quick make & break non-welding self-wiping silver alloy contacts for 20 KA short circuit current both on the manual & automatic operation. Test knob facility shall be provided.
- All the active, live parts of RCCBs should be out of human reach, ensuring safety & confirms to IP20 degree of protection.
- The RCCBs must house transparent label holder to ensure circuit identification.
- The RCCBs must have fully insulated safety shutters.
- The Minimum electrical endurance shall be 20,000 operations.

### **Annexure B- Panel construction:-**

#### **Panel fabrication: -**

LT panels and cubicles shall be fabricated with load bearing members with not less than 2 mm (14 SWG) and shall be folded and braced as necessary to provide a rigid support for all components. The doors and covers shall be fabricated from CRCA sheet steel of thickness not less than 1.6 mm (16 SWG). All doors and covers shall also be fully gasketed with EPDM/Neoprene gaskets to prevent any ingress of dust and vermin. IP rating should be 54. For compartmentalized panel, separate totally enclosed compartments shall be provided for horizontal bus bars, vertical bus bars, ACBs, MCCBs and cable alleys. Cable compartments shall be of adequate size for easy termination of all incoming and outgoing cables entering from bottom or top. CRCA Sheet steel used in the fabrication of switchboards shall undergo a rigorous cleaning and surface treatment seven tank process comprising of alkaline degreasing, descaling in dilute sulphuric acid and a recognised phosphating process after which a coat of primer paint with the final paint shall be applied over the treated surface. Final paint coat of oven baked powder coating, of minimum 70-micron thickness shall then be provided. Suitable engraved black letters on white nameplates and identification labels of metal for all Switchboards and Circuits shall be provided. These shall indicate the feeder number and feeder designation. The form of separation should be min form 3B. Mounting structure and height of panel should be as per approved GAD.

#### **Bus - Bar**

The bus bars shall be made of ETP (Electrolytic Tough Pitch) grade Aluminium or Copper. The bus bars shall be extensible on either side of the switchboard. The bus bars shall be supported on non-breakable, non-hygroscopic SMC insulated supports at regular intervals, to withstand the forces arising from a fault level. They should have minimum Comparative Tracking Index (CTI) of 600V (as per IS 2824). All bus bars shall be color-coded. Minimum clearances between phases / live parts shall be 25 mm and phases/ live parts/ neutral to ground shall be 19 mm except on the equipment terminals. All bus bars should be verified for its conductivity using conductivity meter. Recommended conductivity for Aluminium is min 55% and for copper it is 97%. The certification from original Bus Bar manufacturer specifying conductivity may also be submitted. The current carrying capacity will be assumed 1.25 Amp / 1 sq.mm. for copper Busbar & 0.8 Amp /1 sq. mm. of aluminium busbar.

**3729476/2026/O/O SR DEE/PA/CR** All Multifunction Energy meter should be min Class 1.0 Accuracy & should be with RS485 Modbus protocol. Min Meter Requirement for MFM should be V, A, F, PF, kW, kVA, kVAR, kWh, kVAh, kVARh, Runhours, On hours, Phase angle, Interrupts, THD, Events (High-Low), Neutral Current.

**All wiring for relays and meters** shall be with PVC insulated copper conductor wires. The wiring shall be coded and labelled with approved ferrules for identification. Runs of wires shall be neatly bunched and suitably supported and clamped. Means shall be provided for easy identification of wires. Identification ferrules shall use at both end of wires. All control wires meant for external connections are to be brought out on a terminal board.

**Separate Communication wiring** should be laid through all feeders for switchgear & meters. The communication wiring should be sufficient for conveying ON-OFF-Trip feedback. The communication wiring should be terminated on to separate marshalling box in the panel. The communication cable should be low impedance , twin pair twisted & shielded (Belden /Lapp or equivalent)

**Earthing** - One earthing terminal shall be provided on each side of switchboard. An earth bar size must be at least 6 x 50 sq mm Aluminium (same can be provided with GI or Cu also, if required). The earth bar shall be electrically continuous and shall run the full extent of each board. Door earthing shall be provided for all doors.

**Indicating lamp** :- LED type for outgoing and incoming supply.

**Approval**- The successful tenderer shall submit the General Arrangement Drawing of the panel board and get it approved by Sr. DEE(G) before fabrication of panel.

**NOTE :-**

Before the actual digging / laying at site necessary approval of concerned department and Engineer's representative /consignee should be taken.

Once approval is given to contractor then only he can start the digging work. Under the supervision of concerned supervisors.

Contractor shall ensure all precautions during digging work close to Rly signaling, telecom electrical cables etc. Penalties to be imposed for damages to any cable as per Railway board letter no. 2021/Tele/5(2)/3-Part(1)/(3425647) dtd 12.06.2023 or latest .

**NOTE : 1.**The specifications describes certain broad requirement to which the contractor shall work, but the fact remains that everything can not be fully specified and omissions are likely to remain in the specification as regards final finishing of the item. The contractor has to incorporate all such items/specifications to complete the work.

**2.** All released material (If any ) shall be handed over to concerned depot incharge/ Consignee of subject work.

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6.0  
SCHEDULE OF QUANTITY  
AND  
RATES



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**6.0 SCHEDULE OF QUANTITY AND RATES****Name of Work:** Provision of standard signages at Pune Railway Station.**Tender No.** PUNE\_ELECT\_G\_26\_13.

SN	Item Description	Unit	Qty	Unit Rate in Rs.			Grand Total Cost (Rs)
				Supply	Erection	Total	
1	Design, manufacture, display, erection and installation of wall / hanging / floor mounting type LED illuminated sign / direction boards etc. in flat/half elliptical/Parabolic/Triangular shape. The display sheet shall be of unbreakable 040 translucent polycarbonate sheet of 2 mm thickness. The text / graphics matter visibility shall not be less than 160 deg. The approved colour text and graphics shall be printed / router cut on monomeric calendered vinyl of 70 um thickness and shall be firmly pasted on display sheets. The mounting arrangement shall be hanging, wall mounting, ceiling mounting, pole mounting or floor mounting and as per site requirement. The signage shall have the integral mounting arrangements with sturdy structural frame and ACP cladding on the back side of the signage to avoid rusting and entry of dust. The LED board shall have uniform illumination with 4-8 W / sq. ft and with brightness more than ambient light. Suitable size end cap of 1.5 mm thick SS 304 should be provided as per requirements	Sq.ft	8689.00	2180.26	223.86	2404.12	20889398.68
2	Supply, Erection, Designing, providing & fixing vinyl both way LED illuminated Signage for display of passengers utility items at Stations complete with Allu. Sheet metal powder coated sign case of size 16x72 inches & 3 inch in width. The matter of display shall be as per Railways requirement.	No	15.00	8944.00	993.78	9937.78	149066.70
3	Design, supply and erection of LED type glow sign board with "INDIAN RAILWAYS LOGO" (size 4 feet Dia. using acrylic sheet of red colour 3mm thick ) with combination of colour LED's with lamp, drive unit ,angle iron supporting structure with foundation and including all auxiliary accessories as per specification	No	2.00	25004.74	2778.30	27783.04	55566.08
4	Design, supply,erection, fixing,testing and commissioning of platform station name sign boards Back Lit diamond shape with high Bright Flexi LED2835, 10K Ten IP67, 180 degree viewing necessary fixing arrangements such as clamps nuts bolts washers all asper detailed specifications and as directed	Each	10.00	10035.90	1115.10	11151.00	111510.00
5	Supply and erection of modular type switch board box(per Module)	Each	100.00	35.01	3.28	38.29	3829.00

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6	Supply and erection of Frame plates with matching cover plates(per Module)	Each	100.00	56.89	5.47	62.36	6236.00
7	Supply and erection of Modular one way 6amp switch	No	100.00	17.51	2.19	19.70	1970.00
8	Supply and erection of 2.5A & 6 A, 250v, 5pin modular socket, 2module	No	100.00	25.17	2.19	27.36	2736.00
9	Supply and erection of 1.5 sqmm single-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge	Mtr	2000.00	16.44	1.49	17.93	35860.00
10	Supply and erection of 2.5 sqmm single-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge	Mtr	2000.00	22.06	2.59	24.65	49300.00
11	Supply and erection of 0.5 sqmm 3-core, multi-stranded, flexible, 1100 V grade, FRLS-grade PVC insulated copper wire, ISI marked and conforming to IS:694–1990 or latest, including laying in existing conduit or casing-capping as directed by the Engineer-in-charge	Mtr	300.00	13.16	1.09	14.25	4275.00
12	Supply and erection of 4 sqmm, 4-core, multi-stranded, flexible copper cable, 1100 V grade, FRLS PVC insulated, circular sheathed, ISI marked, conforming to IS:694–1990 or latest, suitable for use as multi-core flexible cable, including laying in existing conduit or casing-capping, as directed by the Engineer-in-Charge	Mtr	1000.00	195.88	9.79	205.67	205670.00
13	Supply and laying of 25 mm dia. heavy-duty PVC conduit/pipe, ISI-marked and conforming to IS:9537 or latest, including all required accessories such as rawl plugs, saddles, screws, tees, junction boxes, etc., complete as directed by the Engineer-in-Charge	Mtr	1000.00	26.59	3.32	29.91	29910.00
14	Supply and erection (including cleating on walls/trusses/pole or laid in provided trench/pipe) of 4 core 10 sqmm, AL conductor, XLPE insulated PVC sheathed armoured 1.1 KV grade cable.	Mtr	500.00	139.89	13.99	153.88	76940.00
15	Supply and erection (including cleating on walls/trusses/pole or laid in provided trench /pipe) of 4 core 35 sqmm, AL conductor, XLPE insulated PVC sheathed armoured 1.1 KV grade cable.	Mtr	500.00	214.98	21.50	236.48	118240.00
16	Supply and laying of 50 mm (OD) DWC pipe with ISI mark, conforming to IS:14930 or latest, along with necessary connecting sockets, couplings, tees of the same material, required for underground/track crossing/road crossing portion of cable laying as directed by the Engineer-in-Charge	Mtr	200.00	125.54	13.45	138.99	27798.00

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17	Supplying, fixing and commissioning 2 pole RCBO up to 25 A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity , short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.	No	50.00	3550.62	186.87	3737.49	186874.50
18	Supplying, fixing and commissioning 2 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity , short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.	No	20.00	3765.50	198.18	3963.68	79273.60
19	Supplying, fixing and commissioning 4 pole RCBO 32/40A, with overcurrent, rated short-circuit breaking capacity (10 kA) and earth leakage protection, with 30 mA sensitivity , short circuit and earth leakage trip indication, conforming IS 12640 (Part 2) :2008 or latest / IEC61009-1 :1996 or latest and with powder coated sheet steel fitted with din rail suitable enclosure complete.	No	10.00	4704.50	247.61	4952.11	49521.10
20	SETC of outdoor type LT Panel, Aluminium Bus Bar consisting of- 1. Incoming - 2 x 800 Amps ACB 4 pole, Microprocessor based, EDO type. 2. Bus Coupler - 800 A ACB 4 pole, Microprocessor based, EDO type. 3. Outgoing - (i) 2 Nos of 630A, Microprocessor based, MCCB 4 Pole. (ii) 2 Nos of 400A, Microprocessor based, MCCB 4 Pole. (iii) 3 Nos of 250A, Microprocessor based, MCCB 4 Pole. (iv) 2 Nos of 32A, MCB 2 Pole. 1) For detailed specification of Switchgear please refer to Annexure A. 2) For detailed specification fabrication of Panel please refer to Annexure B.	No	1.00	1109490.58	11846.87	1121337.45	1121337.45
21	Fabrication, supply, and erection of GI items (GI pole, Channel, angle, flat, clamps nutbolts, fan hook, fastener, street light bracket, GI wire Etc.), complete as directed by the Engineer-in-Charge	Kg	1000.00	0.00	138.45	138.45	138450.00
22	Design, fabrication, supply, and erection of stainless steel structures as per site requirements, complete as directed by the Engineer-in-Charge	MT	0.50	90227.86	13067.84	103295.70	51647.85
23	Supply & erection of 6 mm thick chequered plates per IS: 3502	Kg	6000.00	34.29	11.09	45.38	272280.00
24	Making of cable trench of suitable width and required depth with excavation and back filling of excavated earth in hard soil	Mtr	600.00	0.00	102.99	102.99	61794.00

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	or soil with concrete/tar layer or track crossing or road crossing portion						
25	Provision of CC 1:2:4 in foundation with 25 mm graded stone along with excavation in hard soil or soil with concrete or tar layer etc.	Cum	15.00	0.00	4349.46	4349.46	65241.90
26	Provision reinforced concrete for foundation, cable trench and baffle wall.	Cum	12.00	0.00	8809.68	8809.68	105716.16
	<b>Total cost Part A in Rs.</b>						<b>23900442.02</b>

**Notes:**

1. The above rates are inclusive all taxes and duties including GST.
2. The rates are to be quoted inclusive of all types of taxes (GST), duties (octroi etc) etc. and not liable for any fluctuation on any account.
3. The work is to be strictly carried out as per the specifications, scope of work, explanatory note, terms and special conditions given in the complete tender document for this work.
4. All rates shall be in Rupees and must be firm during the tenure of the Contract.
5. Any increase in the existing taxation/ duty or levy of any new tax/ duty due to Govt. policies, after the submission of tender/ during the finalization and till the completion of the contract will be borne by the tenderer.

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**ANNEXURE-V**

"On IREPS Module, a facility has already been created for online submission of Annexure-V. Same must be filled and submitted online on IREPS by firm at the time of submission of offer/Bid.

(As per Railway Board letter No. 2022/CE-I/CT/GCC Correspondence New Delhi, dated 14.05.2024).

**ANNEXURE-V(A)**

***(This certificate is to be given by attorney/authorized signatory/each member of Partnership firm/Joint Venture (JV)/Hindu Undivided Family (HUF)/Limited Liability Partnership (LLP) etc.)***

I/We ..... (Name), attorney/authorized signatory of the  
 ..... (constituent firm/constituent partner) and member/partner of the  
 .....(tendering firm) hereby solemnly affirm and state as under:

1. I/we certify that ..... (constituent firm/constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

SEAL AND SIGNATURE  
 OF THE CONSTITUENT FIRM/CONSTITUENT PARTNER

Place:

Dated:

**ANNEXURE-VIA****(Bid Security/ Performance Guarantee (PG))**

Bank Guarantee Bond from any scheduled commercial bank of India  
*(On non-judicial stamp paper, which should be in the name of the Executing Bank).*

**Name of the Bank: -----**

President of India,  
 Acting through .....,  
 ..... Railway,

Beneficiary: ..... Railway  
 Date:.....

**Bank Guarantee Bond No.:**

**Date:-----**

In consideration of the President of India acting through---- (***Designation & address of Contract Signing Authority***),  
 .....Railway, ..... (hereinafter called "The Railway") having invited the bid for \_\_\_\_\_ through  
 Notice inviting tender (NIT) No..\_\_\_\_\_, We have been informed that . . . . ***[Insert name of the Bidder]***..... (hereinafter called "the Bidder") intends to submit its bid (hereinafter called "the Bid") .

WHEREAS, the Bidder is required to furnish Bid Security for the sum of***[Insert required Value of Bid Security]***,in the form of Bank Guarantee, according to conditions of Bid.

**AND**

WHEREAS, .....***[Insert Name of the Bank]***, with its Branch .....***[Insert Address]*** having its Headquarters office at.....***[Insert Address]***, hereinafter called theBank, acting through .....***[Insert Name and Designation of the authorised persons of the Bank]***, have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the Railway:

1. KNOW ALL MEN that by these present that I/We the undersigned***[Insert name(s) of authorized representatives of the Bank]***,being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the Railway full amount in the sum of***[Insert required Value of Bid Security]***as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.
3. The Bank shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the Bidder and without the Railway being required to show grounds or give reasons for its demand of the amount so demanded.
4. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Bidder.
5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the Railway and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification made by Railway at any time.
6. This guarantee will remain valid and effective from.....***[insert date of issue]***till .....***[insert date, which should be minimum 90 days beyond the expiry of validity of Bid]***. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.
7. The Bank Guarantee is unconditional and irrevocable.
8. The expressions Bank and Railway herein before used shall include their respective successors and assigns.
9. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the Railway. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.

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10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details –

IFSC CODE	SBIN000RAIL
IFSC TYPE	BRANCH
BANK NAME	STATE BANK OF INDIA
BRANCH NAME	RAIL
CITY NAME	NAVI MUMBAI
ADDRESS	SECTOR-11, CBD BELAPUR, NAVI MUMBAI
DISTRICT	NAVI MUMBAI
STATE	MAHARASHTRA
BG ENABLED	YES

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the Railway. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Railway.

Date .....  
Place.....

.....  
**Bank's Seal and authorized signature(s)**  
[Name in Block letters] .....  
[Designation with Code No.].....  
[P/Attorney] No.

**Witness:**

- 1 Signature, Name & Address & Seal
- 2 Signature, Name& address & Seal

**Bank's Seal**  
[P/Attorney]No.

**Note:** All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.



**Annexure-VIB (Applicable for works costing more than Rs. 50 Lakh)**

Each Bidder or each member of a JV must fill in this form separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years (Contractual Payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent
Average Annual Contractual Turnover for last 3 years			

1. The average annual contractual turnover shall be calculated as an average of “total contractual payments” in the previous three financial years. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

**SEAL AND SIGNATURE OF THE BIDDER**

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor's reports. \_\_\_\_\_

**(Signature of Chartered Accountant)**

Name of CA: \_\_\_\_\_

Registration No: \_\_\_\_\_

**(Seal)**

**CERTIFICATE OF FITNESS**

1. (a) Certificate Serial No.....(b) Date.....
2. Name of Person Examined.....
3. Father's Name:Son/Daughter of.....  
Residing at .....
4. Sex.....
5. Residence.....  
.....
6. Physical Fitness:
7. Identification Marks.....
8. Date of birth, if available..... And/or certified/age.....

I certify that I have personally examined (name) .....who is desirous of being employed in a factory or on ..... a work requiring manual labour and that his/her age as nearly as can be ascertained from my examination is ..... years.

I certify that he/she is fit for employment in a factory or on a work requiring manual labour as an adult/child.

9. Reason for  
(a)Refusal of grant certificate or -----  
(b) Revoking of certificate-----

**Signature or left hand Thumb  
impression of the person examined/Worker**

**Signature of Certifying Surgeon**

Note- In case of physical disability, the exact details and cause of the physical disability should be clearly stated.

Reference: (i) RB letter No. 2023/Sec(CCB)/Contractual Labour dated 10/09/2024  
(ii) RB letter No. 2020/Sec(CCB)/45/50/Misc. dated 29/01/2020

## POLICE VERIFICATION

PHOTO  
(of applicant  
signed by  
contractor)

Sr. No.	Particulars	
1	Full Name with Aliases	
2	Parent's Name	
3	Nationality	
4	Present Address in full with Police Station and District	
5	Period of Residence	
6	Home/ Permanent Address in full with Police Station and District	
7	Addresses with police stations and districts where the applicant has resided continuously for more than 6 months in the past 5 years.	
8	Aadhaar Number*	
9	The applicant has been involved in a criminal case as accused (Yes/No). If Yes, then details.	
10	The applicant has been arrested in connection with a criminal case (Yes/No). If yes, then details.	
11	The applicant has been convicted for a criminal offence (Yes/No). If yes, then details.	

Declaration (by applicant):

\_\_\_\_\_, I certify that the above information is correct and complete to the best of my knowledge and belief.

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Countersigned by:	Signature of Applicant	
Contracting Railway Supervisor	Date	Place
Date	Place	

**Police Certification:**

The details as stated above are correct and the above person does not have any criminal registered or pending against him in any court of law as per official records available.

Counter signature of  
Authorized signatory with stamp

Identity Card

Identity Card No-----

Date of Issue----- validity date-----

Contract Agreement No-----

Name of the Firm -----

-----



1) Name of the Employee:-----

2) Date of Birth:-----

3) Aadhar No.-----

4) Permanent Address:-----

-----

5) Cell no. Personal/Emergency:-----

(Signature and seal of Contractor)

(Signature/Thumb  
Impression of Employee)

(The person who signed the original  
Tender documents or the contract agreements)

BIO-DATA OF STAFF (CONTRACTUAL)

Name of work: -.

LOA No.: -

Name of Firm:-

Name: -



\_\_\_\_\_

Fathers Name: -

\_\_\_\_\_

Date of Birth: -

\_\_\_\_\_

Sex: -

\_\_\_\_\_

Educational Qualification: -

\_\_\_\_\_

Aadhar Card No.: -

\_\_\_\_\_

Address: -

\_\_\_\_\_

\_\_\_\_\_

Mobile No.: -

\_\_\_\_\_

Signature of Employee  
Contractor's

Signature and Seal of  
Supervisor

## DECLARATIONFORMAT

As per GCC April 2022, Clause No.16 Employment / Partnership etc. of Retired Railway Employees.

Clause	CONDITIONS	WRITE YES/NO WHICH IS APPLICABLE
16 (a)	(i) Should a tenderer be a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, OR	<b>YES / NO</b>  In case where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the Tender.  <b>THEN</b>  The tenderer will give full information as to the date of retirement of such Engineer or gazetted officer from the said service and as to whether permission for taking such contract, or if the Contractor be a partnership firm or an incorporated company, to become a partner or director as the case may be, has been obtained by the tenderer or the Engineer or officer, as the case may be from the President of India or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.
	(ii) Should a tenderer being partnership firm / joint venture (JV) / registered society / registered trust etc. have as one of its partners a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR	
	(iii) Should a tenderer being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors	
16 (b)	In case, upon successful award of contract, should a tenderer depute for execution of the works under or to deal matters related with this contract, any retired Engineer of gazetted rank or retired gazetted officer working before his retirement in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, and now in his employment.	<b>YES/NO</b>  If yes then the tenderer will ensure that retired Engineer or retired gazetted officer had retired from government service at least 1 year prior to the date of his employment with tenderer and in case he had retired from service within a year then he possesses the requisite permission from the President of India or any officer, duly authorized by him in this behalf, to get associated with the tenderer.
16 (c)	Should a tenderer or Contractor being an individual, have member(s) of his family or in the case of partnership firm/ company / joint venture (JV) / registered society / registered trust etc. one or more of his partner(s) / shareholder(s) or member(s) of the family of partner(s)/shareholder(s) having share of more than 1% in the tendering entity employed in gazetted capacity in the Engineering or any other department of the railway	<b>YES/NO</b>  If yes then the tenderer at the time of submission of tender, will inform the Authority inviting tenders the details of such persons.
<b>Note:</b> - If information as required as per 16. a), b), c) above has not been furnished; contract is liable to be dealt in accordance with provision of clause 62 of Standard General Condition of contract.		

Date:

Signature

Place:

(Name of contractor/firm)

**STANDING INDEMNITY BOND FOR 'ON ACCOUNT' PAYMENTS**  
**(On non-judicial stamp paper of requisite value)**

We, M/s \_\_\_\_\_, hereby undertake that we hold at our stores/depot(s) at \_\_\_\_\_, for and on behalf of the President of India acting through the General Manager, Central Railway (hereinafter referred to as "the Purchaser"), all materials for which 'On Account' payments have been made to us against the Contract for supply and erection of \_\_\_\_\_ (Name of Work) on the section(s) of Central Railway, also referred to as Group(s) \_\_\_\_\_, vide Letter of Acceptance No. \_\_\_\_\_ dated \_\_\_\_\_, including materials handed over to us by the Purchaser for the execution of the said Contract, until such time the materials are duly erected or otherwise handed over to the Purchaser.

We shall be entirely responsible for the safe custody and protection of the said materials against all risks until they are duly delivered as erected equipment to the Purchaser or otherwise disposed of as directed. We shall indemnify the Purchaser against any loss, damage, or deterioration whatsoever in respect of the said materials while in our possession, including improper disposal of surplus materials. The said materials shall at all times be open to inspection by any officer authorized by the General Manager in charge of Railway Electrification.

In the event of any loss, damage, deterioration, or disposal of surplus materials, and where any refund becomes due, the Purchaser shall be entitled to recover from us the full cost as per prices included in Schedule of the Contract (as applicable), and in respect of other materials along with compensation for such loss or damage, without prejudice to any other remedies available. Such recovery may be affected by deduction from any sum due or which may become due to us under this or any other contract.

Dated this \_\_\_\_ day of \_\_\_\_\_, 20

For and on behalf of

M/s \_\_\_\_\_ (Contractor)

Signature: \_\_\_\_\_

Witness Signature: \_\_\_\_\_

Name (in Block Letters): \_\_\_\_\_

Address: \_\_\_\_\_

**NOTE: - This indemnity bond shall be submitted along with the supply of materials and shall cover 100% of the supply cost of the respective materials.**

**List of Acceptable make**



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Sr. No	Item	Make
1	Cables - LT PVC/XLPE armored	CCI, Indian Cable, R.R. Kabel, Universal, Bharat Cab brand of Vardhaman Cables, Finolex, Polycab, RPG Cable(KEC), Vishal Brand of Dashmesh Cables, HPL, Kei-Ind, Nicco, Ashoka Cable, Havells, Kenter
2	Cables - HT PVC/XLPE armored cables	Asian (RPG), Gloster, CCI, Indian Cable, R.R. Kabel, Universal, Bharat Cab brand of Vardhaman Cables, Finolex, Polycab, RPG Cable(KEC), Vishal Brand of Dashmesh Cables, HPL, Kei-Ind, Nicco, Havells
3	Cables and wires - LT PVC insulated single and multi-core unarmored cables & wires	CCI, Indian Cable, R.R. Kabel, Universal, Bharat Cab brand of Vardhaman Cables, Finolex, Polycab, RPG Cable(KEC), Vishal Brand of Dashmesh Cables, HPL, Anchor, Kolors, Havells, Kenter, Bentec (Benlo), Greatwhite
4	HT/LT PVC/XLPE Cables accessories ie. joints, terminations, Lugs etc	M-SEAL, Raychem, Dowell's, Kaycee, Jainson, Cabseal, Kamlesh Ind, Xicon Brand of CCI
5	Modular Switch sockets, regulator & wiring accessories ceiling rose etc.	Anchor, Cona, Polycab, Indo asian, Elleys (Hi-Fi), Standard, Simon, Bentec (Benlo), Kalki, Vinay, Havells, Kolors, HPL, L&T, Legrand, Siemens, Schneider, Greatwhite
6	PVC casing capping, PVC switch board and PVC pipes	Precision, Prestoplast, Press Fit, Modi, Diamond, Greatwhite
7	GI Pipes and accessories (ISI marked)	Jindal, Zenith, Tata, Balaji, Bajaj, JK, Apollo
8	DWC pipe	Rex, Shree Dharsan, Aspra, Jey Tee, Aadarsh, Supreme, Gemini
9	HDPE pipe	CRI, Hindpipe, J K, Phonix, SHREE, TEXMO, TSL-TIRUPATI, VPL, Gemini, Apollo
10	Ceiling Fans, Exhaust fan, Air Circulators, wall bracket fan, pedestal fan etc	Bajaj, CGL, Khaitan, Orient, Usha, Havells, Standard, Polycab, Atomberg, Crompton, Almonard, Surya
11	Circuit Breaker – MCB/MCCB/RCCB/ELCB/ for Elect. Genl. Services	GE, Havells, L&T, MDS, Siemens, ABB, C&S, Indo asian, Schneider, HPL, Standard, Polycab, Bentec (Benlo), Anchor, Greatwhite
12	Changeover switch	GE, Havells, L&T, MDS, Siemens, ABB, C&S, Indo asian, Schneider, HPL, Standard, Havells
13	ACB/VCB/SF6 Circuit Breaker	HPL, C&S, Standard, ABB, CGL, Siemens, L&T, Schneider, Indo asian, CG, Alind, Jyoti, BHEL or MSEDCL Approved
14	LT Switchgear & control gears - Contactors and motor starters	ABB, CGL, L&T, Siemens, HPL, C&S, Bentec, Standard, Havells, Indo asian.
15	Electromagnetic Relay for Electrical General Service	ABB, Alind, BHEL, Easun Reyrolle, GE, Jyoti, L&T, Siemens, Schneider.
16	GOD or DO fuse	Kiran, Pactil, Atlas, Damsa or MSEDCL Approved
17	Lightning Arrestor	ABB, Elpro, Camax India, Atlas
18	Capacitors - PF correction for Elect. Genl. Services	ABB, BHEL, Shreem, Unistar, WS Insulator, L&T, Epcos, Asian Power, Neptune.
19	Timers Astronomical & Solid state	ABB, BHEL, GE, L&T, Siemens, Havells, L&T, Indo asian, Schneider, Legrand, Selec.
20	HRC Fuses	GE, L&T, Siemens, C&S, Bentec (Benlo), Havells, Standard, Indo asian, HPL
21	Power and Distribution Transformers	Kirloskar, Vivekanand, Voltamp, Tesla, Star Delta, Alstom, Crompton greaves, Dwarka, OM Shakti, BHEL, ABB, CGL, East India, EMCO, NGEF, Voltas, Indo Tech, Bharat Bijlee, Trans Electrics or MSEDCL Approved
22	Distribution Boards	GE, Havells, L&T, MDS, Siemens, ABB, C&S, Indo asian, Schneider, HPL, Standard, Polycab, Vidyut controls & Automation Pvt. Ltd, Shree Electricals & Engineers Pvt. Ltd., Standard Control Panels, BENTEC (BENLO), GREATWHITE
23	LED Luminaries (as per RDSO specification)	Philips, GE, Crompton, Bajaj, Wipro, C&S, Surya, Polycab, Havells, Halonix, BENTEC (BENLO), ORIENT, SHAKTI, GREATWHITE, GOLDWYN.
24	Batteries	Amara raja, EXIDE, CSB, Hitachi, Panasonic, Luminous, Amaron

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25	All type of AC Units	Blue star, Voltas, Carrier, Hitachi, 'O' General, Daikin, Mitsubishi, LG, Llyod, Samsung, Godrej, Videocon, Haier
26	Portable Generator Set	Kirloskar, Mahindra Power, Honda ,Birla Power ,Yamaha, Greaves
27	Diesel Generator Set	Kirloskar,MahindraPower,KOELGreen,Cummins,Greaves,Caterpillar,Ashok Leyland
28	Solar Water Heating System	Bipsun,Electra,Greenage,Greenenergy,Haier,HimSolar,Maharishi,Racold,Rash mi,Supreme Solar
29	Pumping Set	Kirloskar, Beacon, KSB, LHP, Shakti, CG, Jasco , Crompton ,CRI
30	Sluice & Non –Return Valves (ISI marked)	Kirloskar, Zoloto, Leader,Crescent, AMCO
31	UPS Online/Offline(as per RDSO specification)	A Z Electronics, Su–Kam power, APC, Numeric, Microtek ,Amara raja, Delta Power,V-Guard ,True Power, Genus Power
32	Water Cooler	Blue Star, Voltas, Usha, Sidwal,EurekaFrobes
33	Water Purifier	Eureka Forbes, Kent, TATA swach, Blue Star,AquaFresh,AO Smith , Whirlpool
34	Air Coolers	Symphony, Bajaj, Kenstar, Crompton, Orient, Usha,Voltas
35	Electric Geyser	Bajaj, Kenstar, Crompton, AO Smith , Orient, Kent, V-Guard,Relief
36	Maintenance Free Earthing Electrodes(as per RDSO specification)	True Power, KP Trodes , SG Powers, Qube or Any other CPRI Approved make
37	SCADA System(as per RDSO specification)	Ashida , Alind, Schneider, Synergy, CMC , Schneider
38	Octagonal/ Swaged Pole	National, VPL India, Bajaj, Wipro,JD poles, CG, Indian Electric Pole,J.D.,
39	Multi-Function meter and Electrical Measuring Instruments	EMCO,ABB,L&T,C&S,HPL, Schneider , Legrand
40	Numerical Relay	ABB, CGL, Siemens, L&T, Schneider, Alind, BHEL or Any other MSEDCL Approved make
41	Outdoor CT	AE, Kappa, Jyoti, or Any other MSEDCL Approved make
42	Outdoor PT	Kappa,ECS-Vadodara,Pragati Electricals or Any other MSEDCL Approved make
43	High mast	Transrail, Bajaj, Utkars, Philips, Valmont,Crompton greaves
44	Portable Generator Set	Yamaha ,Honda , Gastech, Greaves, Kirloskar, Mahindra, Shakti, SwadeshiWhisPower
45	Diesel Generator Set	EICHER,Greaves,Kirloskar,Mahindra,SwadeshiWhisPower, Cummins
46	Digital AC/DC clamp On meter	FLUKE, Sonal, Megger, Programma

**Note:** Sr.DEE/G/Pune approval for other make of items not included in the above list should be taken separately.

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End of tender document