

SOUTH WESTERN RAILWAY

ELECTRICAL BRANCH

MYSURU DIVISION



E-TENDER FORM

FOR

Name of the work: "KBPR-Provision of Platform Shelter (IRS) to full-length at PF No. 1 at KBPR Railway station".

Sr.DEE/G/MYS

TENDER No. Y/E.29/2026-27/36 Dt: 17.06.2026

DATE OF OPENING: 08.07.2026

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LAST DATE & TIME OF SUBMISSION OF TENDER	08.07.2026 UPTO 11.00 HRS
DATE & TIME OF OPENING OF TENDER	08.07.2026 AT 11.30 HRS ONWARDS
NAME AND ADDRESS OF TENDERER TO WHOM TENDER FORM IS ISSUED	M/s
COST OF THE WORK	Rs. 31,68,783.44/-
COMPLETION PERIOD OF THE WORK	120 DAYS
EARNEST MONEY DEPOSIT	Rs.63,400/-
COST OF THE TENDER DOCUMENTS	- Nil -

दक्षिण पश्चिम रेलवे/SOUTH WESTERN RAILWAY

E- TENDER NOTICE No. Y/E.29/2026-27/36 Dt: 17.06.2026.

For and on behalf of President of India, Divisional Railway Manager (Electrical) South Western Railway, Mysore – 570 021 invites E-Tenders in prescribed tender form from reputed eligible contractors having valid Electrical license 11KV or above only.

म द सं Ite m No .	कार्य का विवरण / Description of Work	कार्य की कीमतCost of work (In Rs.)	बयाना राशि Earnest money (In Rs.)	निविदा हेतु बोली प्रस्तुत करने की अंतिम तिथि Last Date of Submission of Bid for Tender
01	02	03	04	05
1	KBPR-Provision of Platform Shelter (IRS) to full-length at PF No. 1 at KBPR Railway station.	Rs. 31,68,783.44/-	Rs.63,400/-	11.00 hrs. of Date: 08.07.2026

The Details of tender notice and tender documents, tenderer may logon to the [Website: www.ireps.gov.in](http://www.ireps.gov.in) No manual tenders will be entertained against E- Tender.

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

मंडल रेल प्रबंधक (बिजली)
DIVISIONAL RAILWAY MANAGER (Electrical)
दक्षिण पश्चिम रेलवे, मैसूर
SOUTH WESTERN RAILWAY, MYSORE.
भारत के राष्ट्रपति की ओर से
On behalf of the President of India

GENERAL CONDITIONS OF CONTRACT- 2022

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General conditions of the contract form the part of the present contract. Hence all conditions stipulated therein, shall be applicable for the present agreement, unless repugnant to the context.

I/We have gone through the General Conditions of Contract w.e.f. April- 2022 or applicable from time with all Correction slips up-to-date as Governing the performance of works covered by this Tender. I/We have kept myself/ourselves fully informed of the provision of these General Conditions, and agree to abide the same fully.

Signature of Tenderer(s)

NOTE

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The General Conditions of contract can be perused in the office of Sr.Divisional Electrical Engineer/General, South Western Railway, Mysuru during office working hours or will be downloaded from the website attached with this tender.

INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDERING

The tenderers are advised to carefully read this Tender Document in conjunction with Indian Railways Standard General Conditions of Contract- w.e.f. April - 2022 with Advance correction Slips and with latest amendments before participating in this Tender. Any changes in the GCC issued by Railway Board from time to time will be applicable during the currency of the contract. This tender shall be governed by Indian Railways Standard General Conditions of Contract April - 2022 with latest amendments and correction slips.

SCOPE OF WORK, TECHNICAL SPECIFICATION AND SPECIAL CONDITIONS OF CONTRACT

- **Scope of work:** The work basically involves:
 - Excavation of cable trench & horizontal drilling.
 - Supply & laying of LTUG cables & HDPE pipe.
 - Liaison charges for correspondence with EB.
 - Dismantling of Existing light posts and electrical fittings.
 - Provision of outdoor type LT kiosk board.
 - Design, fabrication, supply, fixing, testing and commissioning of L.T control panel.
 - Supply, fixing, testing and commissioning of various types of LED light fittings.
 - Fixing, testing and commissioning of BLDC ceiling fans.
 - Supply and provision of Switch board to control all-night and part-night light circuits in platform.
 - Wiring for circuit/sub main circuits along with earth wire & point wiring.
 - Connecting of light fittings, fans in platform to all night/part night main circuits.
 - Provision of L.T Earthing arrangements.
 - Supply, fixing and commissioning of DBs with switchgears.
 - Supply, fixing, installation testing and commissioning of three phase copper lighting Bus way, End feed units, Bracket suitable for wall/suspension mounting & 10A Tap-off unit.
 - Supply, fixing and commissioning of Potable water purification system.
 - Supplying and installing of Hot Dipped Galvanized Iron cable tray.
 - Supply of fire extinguisher, digital lux meter and ladder.

- Design, supply and installation of mobile charging unit.

➤ **Executive in charge:**

- Senior Divisional Electrical Engineer/General/Mysore (Sr.DEE/G/MYS).

➤ **Locations for Execution of work: At Kabakaputtur (KBPR) Railway station.**

- The contractor has to make his own arrangements for transportation of men & materials at site. Contractor is advised to visit the sites to have information about the scope of the work to be executed before submitting the offer.

SPECIAL CONDITION

1. GENERAL REQUIREMENTS:

- The work to be governed by this contract shall cover designing, manufacturing, transporting till site, safe custody at site, insurance, erection, and commissioning of equipment's 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 equipment's/materials enclosed as Schedule and conforming to the relevant BIS specifications.
- All the cable routes, locations of relevant items of work shall be first shown in drawing and marked at site and approval of the Engineer-in-charge obtained for the same before starting the work. Such drawings shall be based on the drawings issued and further based on the changes made at site by the Engineer-in-charge through instructions to the site representative of the contractor.
- The rates quoted for the relevant items of work shall include the cost of materials and equipment's, 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.
- 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 rates quoted shall also include the cost of any civil works connected 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 in 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 in relation to this specifications.

2. STANDARDS FOR EQUIPMENTS AND WORKMANSHIP:

- The materials and equipment's 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 equipment's as well as workmanship shall satisfy the requirements.
- All the materials and equipment's 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 the requirements of the following:-
 - 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.

3. CONTRACTOR'S ELECTRICAL LICENSE: The tenderer shall possess a **valid Electrical Contractor's license issued by any state Government for carrying out this work of the voltage classes involved **(11 KV or above in case of this work).****

And this work shall be carried out under the direct supervision of a person holding valid certificates of competency for the same voltage classes issued or recognized by the State Government.

- The Electrical license shall be mandatorily uploaded in the IREPS website while submitting the bid without which the bid will be summarily rejected.

DEPLOYMENT OF TECHNICAL STAFF FOR THE CONTRACT WORK:

In terms of provisions of new clause 26A.1 to the General conditions of contract (GCC), contractor shall also employ following Qualified Engineers during execution of the allotted work:

- (a) One Qualified Graduate Engineer when the cost of work to be executed is more than Rs. 2 crores.
- (b) One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs. 25 lakhs but less than Rs. 2 crores.
- c) Further, in case the contractor fails to employ the qualified Engineer, as aforesaid in terms of clause 26A.2 to the General conditions of contract, shall be liable to pay an amount of Rs.40,000/- and Rs.25,000/- for each month of part thereof for the default period for the provisions, as contained in para (a) and (b) above respectively.
- d) Technical staff stated above should be available at site to supervise the work and to take instruction from the Engineer-in-charge.

The period of deployment of Technical staff covers from the date issue of Letter of Acceptance till the completed works are handed over to Railways.

NOTE:

1. Contractor should submit qualification certificates of technical staff before execution of work.
2. Concerned supervisor while recording in measurement books for each CC bills should record details of Technical staff i.e., number of staff deployed with their qualification and period of deployment and same should be cross checked by test check conducting officials.

NOTE:

- All safety precautions are to be ensured by the contractor while execution of work and no work has to be carried without the permission of Engineer in charge. Also, the execution of work should not infringe the train moving dimension as per permanent way manual nor affect the train traffic in any way. Contractor shall request for line/ power block wherever required through engineer in charge for carrying out the works. The Railway will arrange for necessary Line/Power block for execution of the work at specified timings as per request of the contractor.
- **No Technical and Financial credentials are required for tenders having advertised value up to Rs. 50 lakhs.**
- Materials to be supplied by Railways if any, shall be collected by the contractor from SSE/E/W/MYS stores on free of cost & transported to site on his own cost duly giving a requisition letter to Supervisor in Charge of the work.

PRICE AND PAYMENT

The terms and conditions of payments for the various items of work to be executed under this contract shall be as follows:

➤ PRICES:

Prices shall be quoted as per details shown in Schedule of work. The prices quoted shall be firm and not subject to variations for any reasons whatsoever. The prices quoted shall be NET including all taxes and duties etc.

➤ PAYMENT

The contractor shall be entitled to be paid from time to time by way of **"On Account Payment"** for such item of work carried out at station provided such works are completed in all respects to the satisfaction of the Engineer in charge of the Work.

The bills for payment will be processed after submission of the following.

Check list for submission of document for claiming CC bills for payment: (whichever is applicable for the said work)

- a. Engineer-in-Charge of the works has to obtain Material Approval from competent authority on request of contractor duly mentioning make & model and same has to be submitted along with warranty certificate if applicable.
 - b. All electrical points to be provided during wiring as per existing guidelines of Railway board. If any additional points to be required as per site condition prior approval of competent authority is required.
 - c. CC bill shall be prepared after submission of Inspection/test certificates, warranty if any.
 - d. **Before supply of schedule item costing Rs.5 lakhs or above CONSIGNEE/RDSO/RITES inspection should be conducted as per extant rules/guidelines and as decided by Sr.DEE/G/MYS. Inspection certificate should be submitted to this office in original along with test certificates duly obtaining of approval from competent authority.**
- **As per RB Ltr No.C-22011/1/2021-DIR-TELE Dated: 24.05.2024 and HQ/SWR Letter No. SG/SWR/OFC/Cut Damage E3:4 Dated: 14.08.2024, implementation of mobile application "Call before U Dig (CBuD)" is made available for all concerned Supervisors (SSE's & JE's) over Indian Railways to co-ordinate for excavation/digging activities and for safeguarding underground cables during work.**

- **Penalty to be levied for damages to the Railway Cables during execution of the work as per the "Joint Procedure Order" of Railway Board Ltr No. 2021/Tele/5(2)/3-Part (1) (3425647) Dt: 12.06.2023 and Sr.DSTE/MYS Ltr No.Y/SG.209/JPO Dt: 30.03.2024 (Attached).**

Cable Damaged	Penalty per Location
Only Quad cable or Signaling cable	₹ 1.0 lakh
Only OFC	₹ 1.25 lakh
Both OFC & Quad	₹ 1.5 lakh
Electrical Cable	₹ 1.0 lakh

➤ **Penalty clause:**

The contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition shall not exceed 5% of the contract value or of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

Note: As per the GCC April 2022 with latest correction slips, the rate of liquidated Damages to be imposed by engineer between at 0.05% to 0.30% of the contract value of the works for each week or part of the week.

- **DEDUCTION OF INCOME TAX AT SOURCE:** In terms of new section 194-C inserted by the Finance Act, 1972 in the Income tax Act, 1961 the Railway shall at the time of arranging payments to the contractor and/or subcontractor (in the case of subcontractor only when the Railway is responsible for payment of consideration to him under the contract) for carrying out any work (including supply of labour for carrying out any work) under the contract, be entitled to deduct income tax at source on income comprised in the sum of such payments. The deductions towards Income tax to be made at source from the payments, due to non-residents shall continue to be governed by section 195 of the Income tax act 1961.
- **GST CLAUSE:** During submission of offer, the contractor has to quote the rate inclusive of GST. The contractor has to produce the invoice while submitting the running bill.
- (i) Tenders will examine the various provisions of the central goods and service 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 (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.

(ii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST And shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act 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.

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

NOTE : Materials to be supplied by Railways if any, shall be collected by the contractor from SSE/E/W/MYS stores on free of cost & transported to site on his own cost duly giving a requisition letter to Supervisor in Charge of the work.

- **Rates for Items of Works:** However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax /cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under clause 17 & 17A and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.

Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

➤ **RECOVERY OF CONSERVANCY CHARGES :**

As per the Railway Board's instruction, the conservancy charges to be recovered from the contractor bills as per the prescribed rates as mentioned below:

	DESCRIPTION	Average No. of labourer/ Work-man employed per day.	Conservancy Cess charges to be recovered (Per Month)
	Railway contractors :		
A	Engg. Works contractors (Engg. Electrical, Mechanical, Signal, etc.,)	01 to 05 06 to 10 11 to 25	Rs. 159/- Rs. 312/- Rs. 785/-
B	General Goods handling contractors including contracts awarded by Stores deptt.	26 to 50 51 to 100 101 to 200 201 to 300	Rs. 1143/- Rs. 1534/- Rs. 1926/- Rs. 2318/-
C	Coal handling ash pit cleaning contractors.	301 to 750 751 to 1500	Rs.2676/- Rs.5382/-
D	Rly. Siding used by the contractors.	1501 to 3000 3001 and above	Rs.10768/- Rs.21508/-
E	Contractor supplying water to engines.		

Check List for Uploading / Submission of Documents:

A	List of documents to be uploaded/submitted for participating in the tender (Whichever is applicable for this tender work).
	a) Up to 50 Lakhs:
1	Minimum 11KV or above Electrical license.
2	GSTIN.
3	Annexure - V as per tender document.
4	Local Content Proforma for Make in India Policy.
	b) Above 50 Lakhs:
1	Minimum 11KV or above Electrical license.
2	Annexure - V as per tender document.
3	GSTIN.
4	Annexure - VI B.
5	Local Content Proforma for Make in India Policy.
6	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-VI B, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant /Certificate from Chartered Accountant duly supported by Audited Balance Sheet".
7	Technical eligibility criteria - "The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender".

B	During work Execution and after completion of the work: The following items to be ensured and certified by concern SSE Electrical in charge as per the HQ/SWR Ltr No. SWR/EL/P-General Policy part 2 (E-file 124476) Dt: 15.04.2024. (Whichever is applicable for this tender work).
1	Every cable/Electrical wire 6 sq. mm or above is to be provided with cable Tags/identifications.
2	The cable Tags/identification at the end connection is to be provided so that they are identified easily behind the lug/terminals.
3	At the beginning and end of cable / exposed portion (BIS: 12949:1990), the cable Tagging/identification will be provided at 3 per 10 metres. The remaining portion cable marker is to be provided at 10-meter intervals.

4	Cable Tags /identification can be PVC ferrule type, printed PVC sticker type protected by transparent self-adhesive tapes, or legibly handwritten paper protected by transparent self-adhesive tapes etc.
5	The cable numbering/coding is to be indicated in the wiring diagram/cable route diagram and the same number code is to be printed on the cable Tags/identifications.
6	Wiring Diagram/cable route diagrams are an essential part and are to be approved by Sr.DEE/G/MYS before commencement of work.
7	Cable Tags / Identifiers are different than Cable Route Marker/Indicator. These markers are provided while laying/drawing cable on cable body itself.

C	Uploads/submission while processing the CC bills (Whichever is applicable for this tender work).
1	Test reports/inspection certificates.
2	Drawing approval to be obtained before installation of meter boxes & Distribution boards
3	Material approval for all used items in tender by competent authority.
4	LED light fixtures test reports & warranty certificates (for item costing Rs.5 Lakhs & above.).
5	DBR, DBI & PO copy of indented/ supplied items if any.
6	Work completion certificate from Engineer in charge of the work.
7	Consignee/RDSO/RITES inspection certificates for item costing Rs.5 Lakhs & above.
8	Technical staff details with supervisor's Degree/Diploma certificates.

SOUTH WESTERN RAILWAY**TENDER FORM (First Sheet)****Tender Notice No. Y/E.29/2026-27/36 Dt: 17.06.2026.****Name of Work: "KBPR-Provision of Platform Shelter (IRS) to full-length at PF No. 1 at KBPR Railway station".****To,****The President of India,
Acting through the Sr. Divisional Electrical
Engineer South Western Railway,
MYSURU – 570 021**

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 **60 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 South Western Railway, Mysuru Division, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within **120 Days** 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, Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.

3. A Bid Security of **Rs.63,400/-** 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 Witnesses:

(1) _____

(2) _____

Signature of Tenderer(s)

Date _____

Address of the Tenderer(s)

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

I.....(Name and designation)**appointed as the Attorney/ authorized signatory of the tenderer (including its constituents),
M/s_____ (hereinafter called the tenderer) for the
purpose of the Tender documents for the work of
_____ as per the tender
No._____ of _____(Railway)**, do hereby solemnly affirm and state on
the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in. I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the Documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/we certify that I/we the tenderer(s) 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.

8. I/we understand that if the contents of the certificate submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security **and may also lead to any other action provided in the contract including banning of business for a period of upto two years.** Further, I/we (insert name of the tenderer) **_____ and all my/our constituents understand that my/our offer shall be summarily rejected.

9. I/we also understand that if the contents of the certificate submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, along with forfeiture of Bid Security/Security Deposit and Performance guarantee **and may also lead to any other action provided in the contract including banning of business for a period of upto two years.**

10. 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 TENDERER

Place:

Dated:

**The contents in Italics are only for guidance purpose. Details as appropriate are to be filled in suitably by tenderer.

SPECIAL CONDITIONS OF CONTRACT

Conditions covering the contract:

The special conditions of contract contained herein shall supplement to the "General conditions of contract". In the event of any conflict or inconsistency between them, the special conditions of contract contained herewith shall prevail. The technical specifications of contract as incorporated in this contract document and drawings supplied with Tender will form the basis for executing the work. The standard general conditions of the contract for Civil Engineering works of South Western Railway amended up to date will form part of the contract agreement and for all purposes be treated as if the same have been incorporated herein. The contractor can obtain copy of standard General conditions of contract for Civil Engineering works from the Office of Divisional Railway Manager, South Western Railway, Mysuru –570 021 on payment of Rs.40/- plus tax as liable. If there are varying or conflicting provisions in the documents forming part of the contract, the Railway Engineer shall be the deciding authority with regard to the intentions of the provisions and his decision shall be final and binding on the contractor. If the contractor is not satisfied with the decisions of the Engineer at site in respect of the rates for the execution of items of works not included in the accepted schedule of rates of the contract, he may appeal to the Principal Chief Electrical Engineer within 30 days of getting the decision of the Engineer, supported by the analysis of the rates claimed. The Principal Chief Electrical Engineer's decision after hearing both the parties in the matter is final and binding on the contractor and the Railways.

1. Safety Provision of carrying out works:

- i) The contractor shall take all precautionary measures in order to ensure protection of his own personnel moving about or working on the Railway premises and shall have to conform to the rules and regulations of the South Western Railway.
- ii) The works must be carried out carefully in such a way that they do not hinder the railways operation except as agreed to by the Railways.
- iii) The contractors' employees and workers shall not for any reason operate any appliances of Railway installations concerning the safety of train movements, but they should notify to the appropriate railway staff whenever necessary, who will then take necessary steps.
- iv) The Contractor shall abide by the Indian Electricity Act and the Indian Electricity Rules as amended from time to time.
- v) If at any time, the Indian Railways find the safety arrangements inadequate or insufficient, the contractor shall take immediate corrective action as directed

by Railway representative at site.

vi) Necessary personal safety equipment's as considered adequate by the Engineer in charge shall be kept available for the use of the persons employed at the site and maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment's by those concerned.

vii) No Electrical apparatus which is liable to be source of danger, shall remain electrically charged.

2. Steps to be taken to avoid damages to Railway Installations:

The contractor shall see that no damages are caused to Railway installations-signaling and transmission, Electrical Cables, wires, station installations, communication lines, electric devices, trains of any kind fencing as well as any rolling stock and in general to all railway installations and equipment's. If any damage is caused to or suffer or any rolling stock and in general to all Railway installations and equipment's or any Railway property or by the consequences of the acts of unlawful omission of the contractor, its employees and workmen or other person connected with it, necessary repairs or replacements shall be effected by the Railways at the risk and cost of the contractor. The expenses shall be recovered from the money due and payable to the contractor or by other appropriate processes.

3. GUARANTEE:

The contractor shall guarantee satisfactory working of the installation erected by him for a period of 01 (one) year beginning from date of issue of completion certificates. During this period, the contractor shall keep all materials, tools and other requisite equipment readily available and shall carryout at his own expense all modification, additions or substitutions that may be considered necessary for satisfactory working of the contracted work or equipment's. Final decision in respect of unsatisfactory working of the contract work or equipment's or faulty use of designs or workmanship etc., shall rest with the Senior Divisional Electrical Engineer, South Western Railway, Mysuru and the same shall be binding on the contractor. During the aforesaid period of Guarantee, the Contractor shall be liable at his own cost for all repairs or replacements of any parts that may be found defective in the contract work or equipment's irrespective of whether any defect arising as a result of faulty design, materials, workmanship, installation or otherwise. Such defective parts if are not repairable at site are to be promptly removed by the contractor for repairs if so required by them and such defective parts should be replaced by them by new ones at their own expenses. In case minor repairs are carried out by the Railway at site, the cost of such repairs plus departmental charges shall be borne by the contractor.

4. NIGHT WORK:

The Contractor shall not carry out any work between sun-set and sun-rise without the previous permission of the Engineer. However, if the Engineer is satisfied that the work is not likely to be completed in time except by resorting to night work, he may order the same without confirming any right on the Contractor for claiming any extra payment for the same.

5. ATTENDING TO DEFECTS:

The contractor shall rectify defects that may arise in the work executed for a period of 01 (one) year after completion of the work (warranty period), such defects being due to bad workmanship on the part of the contractor. Should any dispute arise as to the correctness of the defect pointed out, the engineer's decision in this regard is final and binding.

6. INSURANCE:

The contractor shall take out and keep in force a policy or policies of insurance against all liabilities of the contractor or the railway at common law or under any statute in respect of accident to persons who shall be employed by the contractor, in or about the site or the contractor's Office for the purpose of carrying out the contract works on the site. The contractor shall take about and keep in force a policy or policies of insurance against all recognized risks to their office accommodation and storage for which he is liable. Such insurance shall be in all respects be subject to the approval of the Railway.

7. INSTRUCTIONS:

All the work should be carried out in the presence of authorized Railway representative. All leads lifts and labour charges are to be borne by the contractor. No pass facility will be made available to the contractor/his representative or for his labourers.

8. WARRANTY:

- The contractor shall warrant that everything to be executed under this contract shall be new and free from all defects and faults in materials, design, workmanship and manufacture and shall be of the highest grade and consistent with the established and accepted standards for work of the type contracted for and in full conformity with technical specifications, drawings and other contract stipulations.

- This warranty shall survive inspection of, payment for an acceptance of the work/material but shall expire **01 (One) year** from the date of acceptance of the completed work by the Railway or **a period of 01 year beginning from date of issue of completion certificates** whichever is earlier in case of the whole work of Supply and provision all schedule items/equipment's for the warranty will be 01 year in respect whole works.
- Any approval or acceptance by the Railway at any stage of the work contracted for, shall not, in any way, limit the contractor's liability under this warranty.
- The contractor's liability in respect of any complaint defect or claim shall limited to the execution, installation and erection of replacement parts free of any charges, or the repair of defective parts only to the extent that such replacement or repairs are attributable to or arise from faulty workmanship or design or material in the manufacture of the equipment/stores and/or negligence in any manner and also in the event of failure of the equipment to perform as intended.
- The contractor shall, if a required, replace, repair, execute and/or install the goods or such portion thereof as is rejected by the Railway, the contractor shall pay to the Railway the value thereof and such other expenditure and damage as may arise by reason of the breach of the conditions herein specified.
- All replacement and repairs that the Railway shall call upon the contractor to deliver or perform under this warranty shall be delivered and performed by the contractor within a period of 21 (Twenty one) days promptly from the date of receipt of advice to that effect from the Engineer. In case where such replacement, repair, execution and/or installation takes place during the warranty period, the provision of this warranty clause shall apply to that portion to replace or renew until the expiration of **01 (one) year** from the date of such replacement, repair, execution and/or installation. This extended period shall hereinafter be referred to as "EXTENDED WARRANTY PERIOD".
- If any defect were not remedied satisfactorily within the above mentioned 21 days, the Railway may proceed to do the work at the contractor's risk and cost and also without prejudice to any other rights of the Railway under this contract.
- If the contractor so desire, the replaced parts can be taken over by him or his representative for disposal as he deems fit within a period of 3 (Three) months from the date of replacement of goods/parts. At the expiry of this period, no claim, whatsoever shall lie on the Railway.
- Moreover, the Railway may, at its discretion recover the ground rent for the goods/parts which have been rejected during the warranty period for the specified period of 3 (Three) month, if the rejected materials are not taken over

within that period 3 (Three) months, by the contractor or his representative.

- The warranty herein contained shall not apply to any material which shall have been repaired or altered by the Railway or on its behalf in any way without the consent of the contractor so as to affect its strength, performance or reliability or to any defects to any part due to misuse, negligence or accident and to items of normal wear and tear to be specifically mentioned by the contractor in his offer and got accepted by the Railway. The decision of the Railway in regard to contractor's liability and the money if any payable, under this warranty shall be final and conclusive.

Name of the work: "KBPR-Provision of Platform Shelter (IRS) to full-length at PF No.-1 at KBPR Railway station".

Sub Work – I: PF No 1 shelter					
Sl. No.	Description of items	Unit	Qty	Rate (in Rs.)	Total (in Rs.)
1	Liaison charges for correspondence with EB authorities for availing new connection, EIG charges.	Job	1	10000	10000
2	Dismantling of Existing light posts and electrical fittings in platform/approach road/street light/circulating area and other locations and handing over to concerned SSE in-charge with clear acknowledgement.	Nos.	25	613.36	15334
3	Provision of outdoor type LT kiosk board made up of 16 SWG CRCA sheet, angle frame duly powder coated with dimension of suitable size, water tight weather proof double door locking arrangement to accommodate aluminum Bus bar supporting PVC bushes/ fasteners on hylam sheet with grey enamel paint, provision of GI pipe for incoming and outgoing LTUG cables bottom entry painting of names/ stickers, LT board shall be mounted on cement concrete plinth min size 1000x800 mm & above ground level 400 mm with MS "C" channel with nut bolt, FP MCCB - 160 A 25KA Breaking capacity - 1No. as incomer MCCB, 100A 25KA FP MCCB - 2 No., TPN MCB 32A-2 No, DP MCB 32A-2 No (all 'C' series).	Set	1	48645	48645
4	Design Fabrication supply, fixing testing and commissioning of L.T control panel of suitable size made up of 16 S.W.G CRCA sheet, angle frame, duly powder coated with double door and locking arrangement on suitable size plinth/ foundation (plinth should be minimum 1 feet below surface level and 1 meters above surface level) with MS "C" channel with nut bolt, 100A Aluminium bus bar with following switchgears (All C Curve)- 63A 4Pole MCB - 02 No., 32 A 4 Pole MCB-02 No.	Set	1	19532	19532

5	Supply of 22-watt 6500k batten 4 feet length LED lighting fixture as per specification SWR/LED LIGHT FITTING (Indoor/outdoor)/001-2016 effective from 18.04.2016 or latest.	Nos.	300	109	32700
6	Supply of LED batten type fittings with battery/Invertor, Power 20 Watt with minimum 2-year warranty as per complete specification.	Nos.	50	1100	55000
7	Freight, Fixing, testing and commissioning (including wiring) of LED fitting complete with suitable accessories.	Nos.	350	108.89	38111.50
8	Freight, Fixing and commissioning of BLDC ceiling fans 1200 mm size including hook and hardware items as required complete.	Nos.	50	111.71	5585.50
9	Supply and provision of Switch board to control all-night and part-night light circuits in platform comprising of 1No. of 32 Amp DP MCB and 4 Nos of 16 Amp. SPN MCBs, surface mounting type sheet steel enclosure fitted with bus bar, din channel, neutral link and incoming contact	Set	1	3887.40	3887.40
10	Excavation of horizontal drilling (Trenchless) in all types of soil for laying of LTUG/HTUG cable across the track/road.	Mtr.	70	1638	114660
11	Supply and laying of HDPE pipe of dia 110 mm grade PE-100 with pressure of PN 6 for safety of cables. Including all the ends should be sealing with bituminous compound.	Mtr.	100	286.71	28671
12	Laying of 4x16 - 35 Sq mm LTUG cable with aluminum conductor including end terminations at both ends. This work includes Extension of power supply from the nearest power supply source in the excavated cable trench/in trough/on building walls/sheds/shelters etc.	Mtr.	350	8.73	3055.50
13	Supply of LTUG Cable with Alu conductor, XLPE insulated and armoured, 4 x 50 sq mm as per IS-7098 part -1.	Mtr.	100	330	33000

14	Laying of 4 x 50-240 Sq mm LTUG cable with aluminium conductor including end terminations at both ends. This work includes Extension of power supply from the nearest power supply source in the excavated cable trench/in trough/on building walls/sheds/shelters etc	Mtr.	420	19.71	8278.20
15	Excavation of cable trench, 450 mm. wide and 1000 mm. deep in all types of soil and refilling the cable trench to original shape by excavated soil free from unwanted materials.	Mtr.	100	146.44	14644
16	Platform surface/concrete/Road cutting for excavation of cable trench 300 mm wide x 300 deep, re-fitting of soil and re-plastering of excavated trench with cement on the PF's to bring original shape.	Mtr.	10	598.89	5988.90
17	Wiring for circuit/ sub main wiring along with earth wire 2 X 4 sq. mm + 1 X 4 sq. mm earth wire sizes of FRLSH PVC insulated copper conductor, single core cable in surface /concealed medium class PVC conduit as required.	Mtr.	50	243.12	12156
18	Wiring for circuit/ sub main wiring along with earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire sizes of FRLSH PVC insulated copper conductor, single core cable in surface /concealed medium class PVC conduit as required.	Mtr.	100	199.94	19994
19	Connecting of light fittings, fans in platform to all night part night main circuits, running below PF shelter, with 3 Nos of 1.5 sq mm for phase, neutral and earth PVC insulated stranded copper wire in 20 mm dia PVC pipe and flexible PVC hose.	Pt.	400	428	171200
20	Supply and provision of XLPE Cable 10 sq. mm 4 Cores similar to Detailed Description/ Specification as per Product # 1 of GeM Contract No. GEMC-511687775801179 dt.27/10/2024.	Mtr.	60	110	6600
21	Supply, fixing, testing and commissioning of TPN-4 Way MCB distribution board Double door type with bus bar, neutral link and earth link with following No. of Switchgears (All C-Series). Incoming FP RCBO 63 A Sensitivity 100 mA - 1 No. Out-going DP MCB 6-32 A- 2 Nos, SP MCB 6- 32 A- 4 Nos. along with SPD TYPE2 AC TP+N.	Set	1	20190.85	20190.85

22	L.T. Earthing arrangements for hard soil using 50 mm C-Class GI Pipe- 2.7 Mtr length, soil treatment by spreading of 25 kgs each of salt and charcoal, duly painting earth pit with black paint and stenciling of earth resistance value with date, including supply and laying of 6 SWG G.I. wire and other hardware to connect equipment at site complete.	Set	7	5436.01	38052.07
23	Supply, fixing, installation testing and commissioning of three phase copper lighting Bus way 40 A double circuit (8 conductors), straight length with Tap-off provision, along with blanking plate.	Mtr.	450	3083.07	1387381.50
24	Supply and fixing of End feed units with cover suitable for lighting Bus bay, 40 A Double circuit (8 conductors).	Set	4	4953.23	19812.92
25	Supply and fixing of Bracket suitable for wall/suspension mounting of Lighting bus bay 40A double circuit (8 conductors).	Set	400	75.98	30392.00
26	Supply, fixing, installation testing and commissioning of 10A Tap-off unit L+N+E pre-wired with 1-meter length.	Set	400	1029.83	411932.00
27	Supplying and installing of 100 mm width X 50 mm depth X 1.6 mm thickness size of perforated Hot Dipped Galvanized Iron cable tray (Galvanization thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. (To run Power supply over FOB).	Mtr.	400	669	267600.00
28	Supplying and installing of 100 mm width X 50 mm depth X 1.6 mm thickness size of perforated Hot Dipped Galvanized Iron cable tray "bends" (galvanization not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. (To run Power supply over FOB).	Each	10	1159	11590.00
29	Supply, installation, testing and commissioning of Potable water purification system with inbuilt water cooler. RO + UV + Copper similar to Detailed Description/Specification as per GeM Contract No. GEMC511687742669377 dt.14/11/2024.	Nos.	2	109530	219060.00

30	Supply of Portable fire extinguisher DCP type with nozzle and discharge fitting for ABC class of fire having ISI mark to IS -15683/2018 Rev.1. Capacity of fire extinguisher 6 Kgs. Fire Extinguishers having composite/SS/Aluminum cylinder of same fire rating as per latest IS-15683:2018 Rev-1 (Warranty Period: Up to 30 months from the date of supply).	Nos.	2	1141.50	2283
31	Aluminium Wall Supporting Straight Ladder with Top Hook, Height : 10 feet, Step Type : Flat , Fitted : Bottom Rubber , Minimum Load Capacity : 150 kg, C-Section Details (Approx) : 66.67 mm x 31.75 mm , Colour : Silver Conforming to IS : 3696-2 or Latest, Make - Kalco, Equal, King Ladder or Similar in all Respect. (Warranty Period: Up to 30 months from the date of supply). (After receiving of the material same to be Handed over to Concern SSE/E for further maintenance of assets)	Nos.	2	3540	7080
Total value Sub Work:-I					Rs.30,62,417.34/-

Sub Work - II Construction of New switch room

Sl. No.	Description of items	Unit	Qty	Rate (in Rs.)	Total (in Rs.)
1	Wiring for circuit/ sub main wiring along with earth wire 2 X 4 sq. mm + 1 X 4 sq. mm earth wire sizes of FRLSH PVC insulated copper conductor, single core cable in surface /concealed medium class PVC conduit / casing & capping as required.	Mtr.	30	243.12	7293.60
2	Wiring for circuit/ sub main wiring along with earth wire 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire sizes of FRLSH PVC insulated copper conductor, single core cable in surface /concealed medium class PVC conduit / casing & capping as required.	Mtr.	50	199.94	9997
3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLSH PVC insulated copper conductor single core cable in surface /concealed medium class PVC conduit / casing & capping, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLSH PVC insulated copper conductor single core cable etc. as required.	Pt.	8	739.70	5917.60

4	Supply, fixing, testing and commissioning of 22-watt 6500k batten 4 feet length LED lighting fixture as per specification SWR/LED LIGHT FITTING (Indoor/outdoor) /001-2016 effective from 18.04.2016 or latest. Including all other required accessories complete.	Nos.	4	218	872
5	Supply, fixing, testing and commissioning of 10-watt 6500k batten 2 feet length LED lighting fixture as per specification SWR/LED LIGHT FITTING (Indoor/outdoor) /001-2016 effective from 18.04.2016 or latest. Including all other required accessories complete.	Nos.	2	178.24	356.48
6	Freight, Fixing and commissioning of BLDC ceiling fans 1200 mm size including hook and hardware items as required complete.	Nos.	2	111.71	223.42
7	Supply and provision of Digital Lux meter of range 0 to 2,00,000 Lux, Auto Range Measurement, Measures both Lux High Accuracy and rapid sampling time, Color LCD Display with backlight.	Nos.	1	14986	14986
8	Design, supply and installation of mobile charging unit made out of MS sheet CRCA 1.2 mm Thick, powder coated, IP 20 of dimensions 360mmx260mmx 100mm with 4 Nos of 6 A sockets and 2 Nos 1 Module USB charging units having 6 A switch for individual sockets and 6 A MCB in the incoming with mobile holding tray of size 250 mm x 150 mm and 4 Nos mobile holding pockets mounted on sides(detachable) as per drawing attached including IR logo, stickering, fixing arrangements on the wall/steel girder as per site condition. Sample to be supplied for approval.	Nos.	10	6672	66720
	Total value Sub Work: -II				Rs. 1,06,366.10/-
	Total Tender value (Sub Work:- I+II)				Rs. 31,68,783.44/-

The quantities shown in above Schedule are approximate and are as a guide to give the tenderer(s) an idea of quantum of work involved. The Railway reserves the right to increase/ decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.

I/We undertake to do the work at _____ % above/below the Schedule of Rates of the South Western Railway as applicable to Mysuru Division or at the rates quoted above for each item.

Dated _____

Signature of the Tenderer (s)

TECHNICAL SPECIFICATIONS
(Whichever is applicable for the said work)

<https://cpwd.gov.in/publication/internal2013.pdf>

➤ **Earthing Arrangements: (as per drawing No.Y/E.61/GL/MYS/11)**

The earthing arrangements shall be provided as per the enclosed drawing with the following:

- a. GI wire of size 6 SWG used from earth electrode.
- b. Earth wires shall be protected against mechanical damage.
- c. There shall be no joints in the earth wire and shall be rigidly connected to the electrode.
- d. The combined earth resistance should not exceed 2 ohms.
- e. The earthing schedule includes supply of all materials, digging of pits Providing masonry.
- f. Plinth with cement around the pit painted with black paint all round. All civil works in this connection shall be done by the contractor.
- g. Combined and individual earth values with date has to painted on earth pit.
- h. The earth electrode shall be of 50 mm "C" class GI pipe.
- i. The earth pit can be constructed either by brick masonry or RCC.

(Note: Entire earthing arrangement work including electrode and brick/RCC masonry works should be within earth/ground level only, accordingly Earthing drawing should be read).

➤ **Excavation of cable trench:**

Excavation of cable trench 450 mm wide and 1000 mm deep in all kinds of soil and refilling of the cable trench (after laying of power cable inside HDPE pipe) by excavated soil, free from unwanted materials, ramming, consolidating and bringing the surface to its original finish.

➤ **Trench for cable underneath the track/road:**

Cables shall be drawn through HDPE pipe. Trench to accommodate HDPE pipe shall be of suitable width and excavated at 1.0 M below the formation level. No sand cushioning and spreading of bricks are required. But once the HDPE pipes of suitable size are laid in the trench, it should be made to its original formation level by filling it up with excavated earth by watering and

ramming process and resetting the ballast of track to its original level. Similarly, wherever road has been dug for laying the cable the same should be filled, rammed and asphalted and brought to original condition.

The cable raising above ground shall be taken through GI pipe neatly clamped and open end of GI pipe has to be sealed with bitumen compound. The cable has to be laid along the route as per instruction of Supervisor-in-charge.

➤ **Specification For Multi Stranded PVC Insulated & Unsheathed Copper Cables:**

The Multi stranded round flexible copper cable conforming to IS: 694-1990 or its latest editions with bright annealed based copper conductor as per IS: 8130 of 1976 or its latest editions, working voltage 650/ 1100 volts with ISI marked of following size: 1.5 sq.mm, 2.5 sq.mm, 4 sq.mm, 6 sq.mm.

➤ **Specification for Multi Core PVC Insulated Flexible Copper Conductor Cables for Voltage Grade 650/ 1100 Volts:**

Multi Core PVC insulated multi stranded PVC insulated and FR PVC round sheathed flexible copper cable of industrial grade conforming to IS: 694-1990 or its latest editions with bright annealed based copper conductor as per IS: 8130 of 1976 or its latest editions, working voltage 1100 volts.

➤ **Specification for Single Core PVC Insulated Flexible Copper Conductor Cables for Voltage Grade 650/ 1100 Volts:**

Single Core PVC insulated multi stranded flexible copper cable conforming to IS: 694-1990 or its latest editions with bright annealed based copper conductor as per IS: 8130 of 1976 or its latest editions, working voltage 650/ 1100 volts with ISI marked.

➤ **Specification for Laying of LTUG Cables:**

The laying of LTUG Cable includes un-coiling of cable from cable drum, Laying the cable in the trench free from twists, bends, Peeling of Insulation, Dressing at Terminal Ends, Provision of Cable glands, crimping with suitable shoe, Connection at both ends & Earthing of Armour at both ends.

➤ **General Guidelines for PVC Conduit Wiring:**

- a) Drilling holes in the walls should be done very carefully without causing damage to supporting wall and structure of building. Minor damages caused if any to the plastering on the wall should be repaired by the contractor.
- b) Wall crossings should be through PVC pipe of 25/20 mm dia (2 mm wall thickness).
- c) Looping of neutral is not permitted; a separate neutral wire is to be drawn from the neutral strip connector in Sub circuit board to each point.
- d) The wiring shall conform to latest IS specification (IS-732) and NEC Code for internal wiring in buildings. No joint is permitted in wiring.
- e) The pipes should be fixed on to the walls in exactly horizontal or vertical fashion as required as per site condition and there should not be gap left between the consecutive lengths. The pipes should be fairly tight to facilitate easy removal and replacement of the same for maintenance wherever required.
- f) The Junction Boxes, straight through joints, bends etc should be provided where ever necessary.
- g) The wires taken inside the pipe shall not be cramped and wires should be easy to pull out at the time of maintenance/checking.
- h) Number of wires that can be drawn through a PVC conduit/ casing and capping shall be as per CPWD specifications Part I Internal 2013 or latest.

➤ **Specification for Tubular Post: (Rly. Drawing No.Y/E. GL/04/55 LC)**

Tubular Lamp Post shall be made of hot dip galvanized iron tubular pipe 100mm dia ` C ` Class, heavy duty, as per IS 1239- Pt I, 1979 or latest , with suitable Canopy type Brackets assembly with GI pipe (25-30 mm, 3.5-4.0 mm thickness)welded on the canopy at an angle of 45-60 degree for mounting 1 No. T-5, 4x40/28W, WT FL fitting as shown in the Drawing. NO. Y/E. GL/04/55 LCs. The Lamp Post, GI pipe and Canopy mounting bracket shall be with two coats of anticorrosive red oxide and one coat of cold Zinc paint or polyurethane paint from top most point to one foot below the lowest cross arm and two coats of aluminum paint up to the ground level and one coat of Anticorrosive black paint for the portion of pole buried in the earth. Black enamel paint shall be used for painting, coping and muffing.

- **Erection of Tubular post:** This work includes the following:
Excavation of pit of size 1.20 m depth x 0.5m width x 0.5m breadth and

provision of thick cement concrete mixture base at the bottom, erection of pole 6 mtrs long and filling the pit with cement concrete mixture using 1:3:6 ratio cement and 25mm hard stone metal.

Loop In Loop Out Box FRP Loop-In-Loop-Out Box outdoor type for the above Lighting poles

BOX: Made from combination of Fiber Glass and other additives ideal for outdoor application. Inclined roof for water run out. Single Door with aluminum hinges, side opening and Ball Catch locking system.

Cable Entry: This is through 3 Holes with grommets at equal distances provided below the box suitable for 16 sq mm cable, Provision should be made for Light fittings wires to run through the channel behind the box.

Fixing: 5mm Thick M.S. strip 2 Nos for pole mounting should be provided within the box with suitable holes to avoid rusting of MS strip.

Box size (Minimum): 330(H)x250(W)x130 (D) mm, Wall Thickness of box = 3mm.

Accessories: 0.5 Amp MCB - 1No,

Properties of Box Material: FRP Material used for Box should be

- Non rusting/non corrosive
- Shockproof/ nonreactive to weather changes.
- Non-sparking, /Resistant to propagation of fire.

• **Specification for GI pipe:**

- The GI pipes (GI pipe includes suitable bends/coupler) shall be of "B" class. GI pipe with nominal bore of 50 mm dia shall have wall thickness of 3.6mm and mass of 5.3 Kgs. /m with tolerance of – 10% in thickness and +/- 10% for weight (Railway will supply GI pipe).

• **Fixing of G.I. pipe for cable protection:**

- The vertical run of the LTUG cable should be raised from the ground through a G.I. Pipe of 50 mm dia, protecting the cable, pipe should be up to a height of 2 meters from ground level, 0.5-meter length of the pipe shall be buried in ground.
- 2 Nos. of M.S. clamps made of flats 50 mm width, 3 mm thick and GI nut and bolt shall be used to fasten each of the above pipes to the rail face /portal structure. The clamps should be robust and should be painted with anticorrosive paint.
- The end of the pipe should be sealed with bitumen compound.

- SPECIFICATION FOR MULTI STRANDED PVC INSULATED & UNSHEATHED COPPER CABLES.

The FRLS Multi stranded round flexible copper cable conforming to IS: 694-1990 or its latest editions with bright annealed based copper conductor as per IS: 8130 of 1976 or its latest editions, working voltage 650/ 1100 volts with ISI marked of following size:

1. 1.5 sq.mm (22/0.3mm)
2. 2.5 sq.mm (36/0.3 mm)
3. 4.0 sq. mm (56/ 0.3 mm)
4. 6.0 sq.mm (84/0.3 mm)

➤ **Specifications for Submersible/mono Submersible pump sets:**

1. Supply, installation, testing & commissioning of centrifugal type vertically multistage bore-well submersible pump as per the following technical specification. The Pump model QF duty point will be Flow 120LPM @ working Head 110 Mtrs. The Pump design will be the Flow Range starting from 15 LPM to 130 LPM & Head Range of 150 Mtrs. To 82 Mtrs. Pump material to be like, Pump impeller-SS 304, Pump casing-SS 304, Pump Shaft- SS410 steel, Pump motor body- SS 304. The pump motor should be 5 HP BEE 5 star rated with warranty which will operate through 415V-AC/50 Hz standard power supply. The motor manufacturing and testing as per IS 8034-2018 or latest similar to Make CELVIN Model STKTP620.
2. Supply erection commissioning and testing of 3 phase 5 HP Mono submersible pump working on 415 V 50 Hz AC supply BEE 5 star rating with warranty similar to Make CELVIN Model STKOMT24.
3. Supply, fixing, testing and commissioning of 3 phase Submersible Pump control panel double door outdoor type made of 20 SWG Sheet steel with locking arrangements provided with (i) DOL Starter with Auto Switch, 3 Position Selection (Manual - Manual SPP - Auto) including volt meter, ammeter, LED pilot lamps BCH make, Cat No. CPEYSAGZ, (ii) TPN MCB-32 A for short circuit protection, (iii) Time Switch Minilec Make, Model-S2 TSR 1, (iv) Water Level Controller- Minilec make, Model-WLC D1, (v) Current Sensing Phase Failure Relay with selectable Dry Run & Overload Protection Minilec Make, Model-SPG D2.

Specifications for BLDC ceiling fan: As per Dy.CEE/G/SWR letter No: SWR/EL/P/S-Description change (E.File: 150666), Dated: 09.09.2025 or latest.

- Energy Efficient Brushless DC Motor (BLDC) Ceiling fan Sweep 1200 mm, BEE Rating 5 Star,
- Rated Power: 28 Watts Maximum,
- Operating Voltage: 140 – 290 V single-phase AC,
- Frequency: 48 – 52 Hz, Minimum
- Air Delivery: 210 M3/ Min.,
- Harmonic Distortion: 5 % Max,
- Speed Control: IR Remote.
- Blade thickness: 1.1 MM, Blade material Aluminium,
- Bearing: Double Ball Bearings,
- Down Rod Size (without shackle): 300 mm or as required at site,
- Shank & Shackle Thickness: 2mm (Minimum),
- Canopy: 2 Nos,
- Colour: Standard white
- Warranty: 5 Years.
- Report: The firm has to submit type test report from Government accredited test labs like NABL/CPRI
- Performance test for Air Delivery: as per IS: 374/2019 or latest
- Conforming to: (a) IS 374/2019 or latest, (b) IS 302 (Part 2/Sec 80) for safety requirements.

➤ **Specifications for LTUG XLPE cable:**

- Conformity of the specification for XLPE cable: as per IS:7098 (Part 1): 1988 latest
- Nominal Area of Conductor (in Sq mm): all sizes as **per price schedule - A**
- Number of core (in Nos): **As per price schedule**
- Material of conductor: Aluminium
- Insulation: XLPE
- Colour of XLPE insulation: Red, Yellow, Blue, Black
- Type of cable: Armoured cable
- Material of armouring: Galvanized steel formed wire
- Type of armouring: Single strip.

➤ **Specifications for Smart Energy Meters:**

Technical specifications for smart energy meter should be as per SWR Letter: SWR/EL/T-488/Smart Energy Meters, Dated: 07.01.2019. (Enclosed).

➤ **FRP Enclosure: (if any)**

- Enclosure for Single phase energy meter with MCB
- With viewing window for MCB.
- (FRP –SMC material type enclosure)
- MCB The breaking capacity of MCB DP 32A as per schedule shall be 10 KA and MCBs shall confirm to IEC 60898.
- Static energy meter (if any) should be compile with the latest ESCOM specifications complete.

➤ **Specifications for Potable water purification system with inbuilt water cooler:**

Conformity to Standard for Ultraviolet system: IS 14724 (latest) for water purification system with Ultraviolet disinfection.

Type of water purification technology: RO +UV

Maximum Input Water TDS allow to the system: 2000

Operation mode: Fully automatic with auto cut off

Storage tank: In-built

Material of water Storage Tank: Stainless Steel SS 304

Storage tank capacity up to float valve level (in liter): 120

Stages of purification: 5

No of RO Membranes provided: 4

Body of filter: ABS Food grade

Type of compressor: Rotary

Refrigerant Used: HFC-R-134/A

Evaporator material: Cooper

➤ **Specifications for Electric Water Heater - Geyser:**

Electric Water Heater - Geyser (Stationary Storage Type Electric Water Heaters)

Tank Capacity - 25 Ltrs

Material of Inner Container: Vitreous enameled inner tank

confirming to IS : 13273
Warranty (in year): Minimum 3 years
BEE Star Rating: 5
Conformity to Indian Standards: IS 2082:2018 latest
ISI Marked: Yes

➤ **Specifications for Electric Kitchen Chimney:**

Electric Kitchen Chimney: 60cm 1500 m³/hr BLDC Filter less Auto clean
Built-In Oil Collector, LED Lighting
Chimney Type: Wall Mounted
Size: 60cm (Suitable for 2-4 Burner Stove) | Annual Energy Consumption: 130 Watts |
Power Requirement: 220 Volts
Filter Type: Filter less | Intelligent Heat Auto cleaning with Oil collection tray for easy clean
| Suction Power: 1500 m³/hr
Control Type: Touch Control with RPM Display & Motion Sensor |
Number of Speeds: 9
Noise level (dB): 48 | Motor Type: BLDC
Flexible Installation: Go ducted for maximum efficiency or ductless with a charcoal filter when ducting isn't possible.
Special Features: 1 LED Lamp.
Warranty: Lifetime (15 Years) on Motor and 5 Years Comprehensive (PCB & Glass).
Dimensions: Minimum 60 x 43 x 44 (L x H x D) in CM

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 equipment's/materials and conforming to the relevant BIS specifications.
- The rates quoted for the relevant items of work shall include the cost of materials and equipment's, 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 in relation to this specifications.

STANDARDS FOR EQUIPMENTS AND WORKMANSHIP:

- The materials and equipment's 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 equipment's as well as workmanship shall satisfy the requirements.
- All the materials and equipment's 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.

PROVISIONAL LIST OF APPROVED MAKES OF ELECTRICAL EQUIPMENTS & COMPONENTS

The following makes of materials and equipment's shall be used in the work with approval of competent authority. In the event of non-availability of certain items, the approval of the competent authority must be obtained in writing prior to using any substitute make.

S.N.	Name of the item	Makes / Brands / Suppliers
01	MCCBs, MCBs, COS, ACBs, DBs, RCCB, RCBO, SPD's, Fuse/Fuse links, timers & other switchgears.	Legrand, ABB, Indo Asian, Schneider, Havells, L & T, C & S, Siemens, HPL, Mitshubishi
02	All type of LED fittings	Philips, Crompton, Bajaj, Wipro, Havells, Polycab, GM, Halonix, Yamini, Surya, K-lite./Kesslec/Transrail/Lightman/Bega/Iguzzini
03	LED's	LUMILEDS, Samsung, NICHIA, OSRAM, CREE, Avago
04	FRLSH / E-Beam FR HR Copper wires multi stranded single/multi core PVC insulated un armoured of all sizes.	Polycab, V-Guard, Fincab, Havells, GM, KEI, HPL, SBEE, Nakoda, Torrent, Sudhakar, Finolex, Benlo
05	PVC conduit pipe / casing capping of all sizes.	Sudhakar, Godavari, Astral, GM, Polycab, Sun, National, Modi, precision, universal, VIP
06	Modular box, plate, sockets, switches, etc, GI boxes, modular holder, ceiling roses.	Indo Asian, GM, HPL, Havells, Legrand, L&T, C&S, Anchor roma, Great White, Rider, Bentec/Benlo, Kany, Kolors.
07	BLDC fans with remote/regulator of all types.	Gorilla (Atombarg), Crompton, Bajaj, Havells, Usha, Orient, Polycab, GM, Super fan, Halonix. Almonard.
08	Split AC/ Cassette AC	Blue star, O-General, Hitachi, DAIKIN, Carrier, Toshiba, Voltas, Mitsubishi, LLYOD.

09	HDPE pipes of all sizes.	Nagarjuna, Godavari, Narmada, Sudhakar, Mngalam, Ganga kaveri,
10	HTUG / LTUG XLPE power cables of all ratings.	Polycab, Havells, Toreent, Finecab, Gloster, Nakoda, KEI, SBEE.
11	Termination Kits	Recham, Densen, M-Seal
12	'B' & 'C' class GI pipes, GI plates of all sizes	Jindal, Tata, Oswal, Surya Roshni, APL Apollo, and Hi-Tech Pipes
13	Junction box / Pole mounted junction Boxes, Distribution boxes, Feeder pillar boxes.	Lagrand, Indo Asian, Havells, C&S, L&T, Cape, Sintex, kakatiya
14	Exhaust/Ventilating fan	Indo Asian, Almonard, Bajaj, Crompton, Havells, Usha, Atomberg, Halonix
15	Solar water heating system	Solar idea, Aditya solar, Aar pee technology, Honeywel, Supreme Andromeda
16	Electric Geyser	Bajaj, CGL, V-Guard, Crompton, Havells
17	Water cooler	M/s. Usha / Blue star / Voltas, Honybee
18	Energy efficient motors / Pump sets	CGL, KSB, Kirloskar, Grundfos, Havells, Shakti, Suguna, V-Guard, KMP.
19	DOL starters with protection system	Schneider Siemens, L&T, Gelco, Gokul, C&S
20	VFDs	ABB, Schneider, Siemens, Danfoss,
21	High mast/Octagonal Pole	CG, Philips, Bajaj, Valmont, Utkarsh, Transrail
22	Computers (Power analyser)	Dell, HP, Lenovo, Acer, and Apple
23	Printers	HP, Cannon, Epson
24	Bolard LED lighting	Havells, Bajaj, CG, Wipro, Philips/ Transrail.
25	Occupancy Sensors	Legrand, L&T, Schneider, Havells

26	Air Circulator	Crompton, Bajaj, Havells, Usha, Orient, Almonard
27	On-line UPS, Inverters	Power One, Delta, Fronius, Uniline, ABB, V-Guard, APC, Hitachi, I-Ball, Microtek, Misthubi
28	RMU & VCB	Lucy, ABB, Siemens, Schneider, CGL
29	Industrial plug socket	Legrand, Havells, L&T, C&S, Cyclo
30	Pit line LED/catwalk LED Lights	Yamini, S2 light, OSSE or reputed make
31	2KVA, 24V DC and 48V AC Power supply unit	Yamini, S2 light, OSSE or reputed make
32	Batteries	EXIDE, Amaron, Luminous, QUANTA
33	Refrigerators	LG, Samsung, Whirlpool, Godreg, Voltas,
34	Decorative pole/ Decorative Bollards	KLITE, KESSLEC, LIGHTMAN, BEGA, IGUZZINI, Bajaj, Philips, CG, Havells, Wipro, Transrail.
35	Façade lights	Bajaj BA WW, CW series, Phillips, Wipro, Polycab, K-lite, Transrail.
36	DMX Controller System	Nicolaudie, Pharos, Osram ECUE, Philips, Transrail.
37	DMX Splitter cum Booster	Pioneer, Briteq, Swisson or equivalent, Transrail.
38	Signage Boards	Yamini, S2 or equivalent
39	LED Name Boards	Yamini, S2 or equivalent
40	Cablofill cable Trays	Legrand, Eaton, Panduit or equivalent
41	DG Set	Kirlosker, Cummins, Honda, Bajaj, Mahindra
42	Hand dryer	Euronics, Dolphy or similar

43	Solar Panels	Sri 45avitr solar Pvt Ltd, Aksaya Solar power India pvt Ltd, Sirius Solar energy system pvt Ltd, TATA or MNRE approved makes.
44	Multi-function meters (MFM)	L&T, C&S, Schneider, Rishab, HPL, Elmeasure
45	Submersible pumps, Mono block pumps	Kirlosker, CRI,CG, Texmo, KMP DECCAN, Karvel pumpset.
46	IFDs	L&T, KL itech, Efftronics or similar
47	CTs, PTs	L&T, KL itech, Electrohms, Efftronics or similar
48	Level sensors	Pulsar, Kaifeng Instruments, Efftronics or similar
49	Meter Boxes	Sintex, Hensel
50	Ceiling Rose (Flush type, surface mounting)	Rider, Kany, Kolors, Havells, Anchor, RR Kabel
51	Selector switch	L&T, Salzer, Kaycee, C&S
52	Current transformer	Powermat, Newtek, sresta, kappa
53	Indication Lamps	Powermat, L&T, ABB, Schneider, C&S
54	Air conditioners	LLOYD, LG, Hitachi, Samsung, Blue star, Voltas
55	Voltage stabilizers	V-guard, Servomax, Microtek
56	Battery chargers	Yamini, Cyco,
57	Bus bar Trunking	C&S, Schinder, Legrnad, L&T
58	Transformers / CSS	ABB, Vision Vidhyut Engineers, Vijay Electric Co, Transgear power systems, Banavathy power systems, Arrivaa power systems and as per latest approved list of ESCOM.
59	FRP type cable Trays	Sintex or any ISI certified
60	FRP Ladders	Sintex or any ISI certified

61	SMC Chequered plates, insulation plates, Safety & Flooring plates	Sintex or any ISI certified
62	FRP fencing	Sintex or any ISI certified
63	Timelight distribution board	Indo Asian, Havells

NOTE:

1. **Contractor may not need to get the material makes approval from the Executive Engineer in charge, if they used from the above list of makes in the contract work.**
2. **But, list of materials and makes to be used in the contract work should be submitted to the Executive Engineer in charge for kind information through the concern Engineer In charge (i.e., SSE/Electrical), before processing the CC bill and the same to be uploaded in the IRWCMS / MB during the CC bill.**
3. **Further, all other materials/makes to be used for the contract work should be of reputed make, ISI certified and best available in the market. In this case contractor should get the material makes approval from the Executive Engineer in charge, before executing the same.**
4. The firm whose products have been certified by Indian Standard Institute and provided with ISI make on their product only to be used for the work ISI approved certificates should be submitted for such materials.
5. The products of some reputed firms given in the above list can be used in spite of non-awarding of ISI Certificate on them.
6. Acceptance of materials is subject to suitability at site and as approved by the Engineer-in-charge.
7. For all the above-mentioned items, one sample may be submitted to Engineer- In –Charge & One set for Approving Authority.
8. These sample should be submitted well in advance, as a whole lot, before the commencement of work.
9. Material approval should be obtained only after issue of LOA and before execution at site.
10. For all other materials covered in the tender, the contractor shall indicate the make proposed to be used and copies of certificates of

ISI approval for such materials should be submitted, if available.

11. The samples should be submitted in carton box, duly making necessary identifications on the carton box for having submitted by him.
12. Acceptance of materials is subject to the inspection of Engineer-in-charge of the work.
13. Manufacture's Test Reports/Test Certificates should be submitted to this office for all major plants, equipment and machineries as required by the Engineer in- charge along with the delivery challans before making the final measurement.

PROFORMA FOR SELF-CERTIFICATION OF LOCAL CONTENT

I/We (*Name of the bidder*) represented byon the behalf of tenderer hereby certify that the local content, as defined by Public Procurement (Preference to Make in India), Order 2017-Revision dated 19.07.2024 of Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India is (*percentage of local content*).

This qualifies me as a "Class-I local supplier"/"Class-II local supplier" (*please tick whichever is applicable*).

(Note: *For qualification as "Class-I local supplier" the minimum local content should be 50% and for "Class-II local supplier the minimum local content should be 20%*).

Details of the locations at which local value addition is made are as follows:

1. (location name)
2. (location name)
3. (location name)
4. (location name)
5. (location name)

Place:

Date:

Signature of Tenderer with seal

➤ **Materials to be supplied by railways:**

Sub Work - I PF No 1 shelter:

- BLDC Ceiling fan- 50 Nos.
- 4C x 35 Sq mm LTUG Cable- 350 m
- 4C x 95 Sq mm LTUG Cable- 320 m
- Payment to EB for Provision of new external service connections (if any)

Sub Work - II Construction of New switch room:

- BLDC Ceiling fan- 2 Nos.

➤ **Materials to be supplied by the contractor:**

Detailed item-wise schedule mentioned in Price Schedule - A.

Procurement of materials to be done as per schedule in consultation with engineer in charge of work only.

➤ **Executive in charge: Sr.DEE/G/Mysuru.**

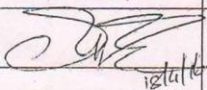

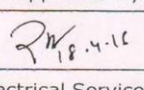
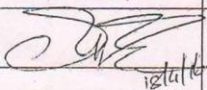

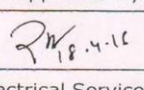
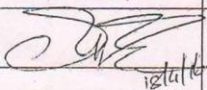

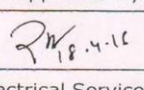
➤ **Stores depot where materials are to be collected if any: **SSE/E/Works/MYS.****

Note: Necessary assistance will be extended to the contractor for issue of Railway, material, lifting machinery including FS letter for transporting the Rly items. The contractor should depute his Supervisor in-charge of the work, & sufficient labour along with request letter.

(List of rough sketch/drawing supplied by Railways: (whichever is applicable)

Sl. No.	Description	Drawing Reference No
1.	Specification for LED light fittings(indoor/outdoor)	SWR/LED light fittings (indoor/outdoor)/001-2016 Dt: 18.04.2016.
2.	Earthing Arrangements	Y/E.61/ GL/MYS/11 Dt: 12.06.2006
3.	Tubular Lamp post 6 Mtr long	Y/E.GL/04/55 LC Dt: 22.09.2004
4.	Mobile charging DB	Similar to diagram
5.	High mast 16 Mtr	Y/E.61/II/MYS/HM/16 Dated: 12.06.2025

1) Specifications for LED Light fittings:

<div>दक्षिण पश्चिम रेलवे</div> <div>SOUTH WESTERN RAILWAY</div> <div>SPECIFICATION FOR LED TYPE (INDOOR/ OUTDOOR) LIGHT FITTINGS</div>											
Page 1 of 2	Effective from 18.04.2016	Specification No.: SWR/LED LIGHT FITTING (Indoor/Outdoor) / 001-2016									
1. General requirements of LED Type (INDOOR/ OUTDOOR) Light Fitting											
1	LED Make	NICHIA / OSRAM / SEOUL / PHILIPS LUMILEDS / CREE / LEDNIUM / AVAGO									
2	Type of LED	High power, SMD (Surface Mounting Device) LED									
3	Lumen Output/Efficiency	> 100 Lumens/Watt									
4	Lumen Output at fitting level /Efficiency	> 75 Lumens/Watt									
5	LED Life	>50,000 burning hours.									
6	Depreciation	30% max. After 50,000 burning hours.									
7	Color Rendering Index (CRI)	> 75									
8	Nominal Voltage	220 V AC									
9	Input Operating Voltage	105-295 V AC									
10	Power Factor	> 0.9									
11	Protections										
	i. Surge protection	1.5 kV for 50 micro seconds									
	ii. Over voltage protection	300 V AC for 2 minutes									
	iii. High voltage protection	1.72 Kv AC for 1 minute									
	iv. Insulation Resistance	Minimum 2 mega ohms with 500 V megger									
12	Driver type	Constant Current driver with short circuit protection									
13	Driver components	Industrial grade only									
14	THD	< 20%									
15	Efficiency of Driver Electronic	Efficiency of driver >85%									
16	Construction of Housing	Pressure die cast aluminium or CRCA or Extruded aluminium									
17	Finishing	Powder coated / anodised									
18	Lamp Cover	Toughened glass of min. 0.8 mm thickness of sufficient strength or high transmittance efficiency (min.90%) Acrylic diffuser as per need of fitting.									
19	Secondary optics	Polycarbonate reflector /polycarbonate lence									
20	Mounting	Indoor : Suitable for Surface / Recessed /Hung Type Outdoor: Suitable for Existing Pole etc.									
21	Ingress protection	IP 20 - Indoor IP 65 - Outdoor									
<table border="1"> <tr> <td>Prepared By:</td> <td>Checked By:</td> <td>Approved By:</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>JE/Drg/SWR</td> <td>DY.CEE/HQ/SWR</td> <td>Chief Electrical Services Engineer South Western Railway, Hubli</td> </tr> </table>			Prepared By:	Checked By:	Approved By:				JE/Drg/SWR	DY.CEE/HQ/SWR	Chief Electrical Services Engineer South Western Railway, Hubli
Prepared By:	Checked By:	Approved By:									
											
JE/Drg/SWR	DY.CEE/HQ/SWR	Chief Electrical Services Engineer South Western Railway, Hubli									

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11/06/16

Page 2 of 2	Effective from 18.04.2016	Specification No.: SWR/LED LIGHT FITTING (Indoor /Outdoor) / 001-2016
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2. NOTE

- 1 Supplied LED Luminaires shall confirm to BIS:16107 or IEC:62722 and LEDs to BIS: 16103 or IEC: 62717
- 2 LED Luminaires shall also confirm to LM-79 (For quoted fitting) and LM-80 for LEDs used
- 3 Firms have to submit LM80 & LM 79 test certificate from National/International accredited Laboratory and OEM certificate for compliance of BIS/IEC along with offer.
- 4 Firms have to submit warranty certificate for 5 (five) years along with supply.

3. Following informations are to be mentioned by consignee in indent description.

i) Type of luminaire ; Like Street light , Flood light, Focus light, Retrofit (for retrofit type luminaire, this specification may be referred wherever applicable)

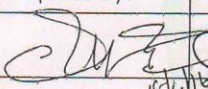
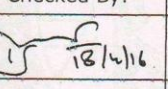
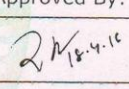
ii) Total wattage of LED luminaire

iii) Arrangement of LED :Single LED / Multi LED

iv) Dimentions if required.

v) Indoor / Outdoor

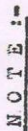
vi) Mounting type : i.e. Indoor : Suitable for Surface / Recessed /Hung Type
Outdoor : Suitable for Existing Pole etc.

Prepared By:	Checked By:	Approved By:
		
JE/Drg/SWR	DY.CEE/HQ/SWR	Chief Electrical Services Engineer South Western Railway, Hubli

This Specification supersedes earlier General specification for LED Luminaires No.SWR/Spec/LED
Dt.12.06.2015

SOUTH WESTERN RAILWAY

2)



1. ALL DIMENSION ARE IN M.M.
2. PIPE DIMENSION 50 mm DIA BORE CLASS HEAVY AS PER IS: 1239(PART-1) 1979 C LATEST
3. ALL THE MATERIALS REQUIRED FOR THE MASONRY WORK INCLUDING CEMENT ETC HA TO BE ARRANGED BY CONTRACTOR.
4. THE STRUCTURES TO BE EARTHED SHALL BE INDICATED BY THE AUTHORISED REPRESENTATIVE DIVISIONAL ELECTRICAL ENGINEER, SOUTH WESTERN RAILWAY MYSORI
5. QUANTITY OF SALT TO BE USED *25 kgs
6. QUANTITY OF CHARCOAL TO BE USED =50

TO BE ARRANGED BY CONTRACTOR.

THE STRUCTURES TO BE EARTHED SHALL BE INDICATED BY THE AUTHORISED REPRESENTATIVE, DIVISIONAL ELECTRICAL ENGINEER, SOUTH WESTERN RAILWAY MYSORE.

5. QUANTITY OF SALT TO BE USED = 25 Kgs

6. QUANTITY OF CHARCOAL TO BE USED = 50 L

M.S. FLAT 10 mm THICK WITH 15 mm DIA HOLE TO BE WELDED ON ONE SIDE OF G.I. PIPE. COPPER SOCKET, SOLDERED WITH 6 SWG GI/ COPPER WIRE. (TO BE)

SOUTH WESTERN RAILWAY

EARTING ARRANGEM

DRAWING No. Y/E. 61/GL/MYS/11

DRN
W. H. H. H.
W. H. H. H.

SS/EL

SCALE	NTS	00-0077	Sr. DEE/HYS
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3) Tubular Lamp post 6 Mtr long:

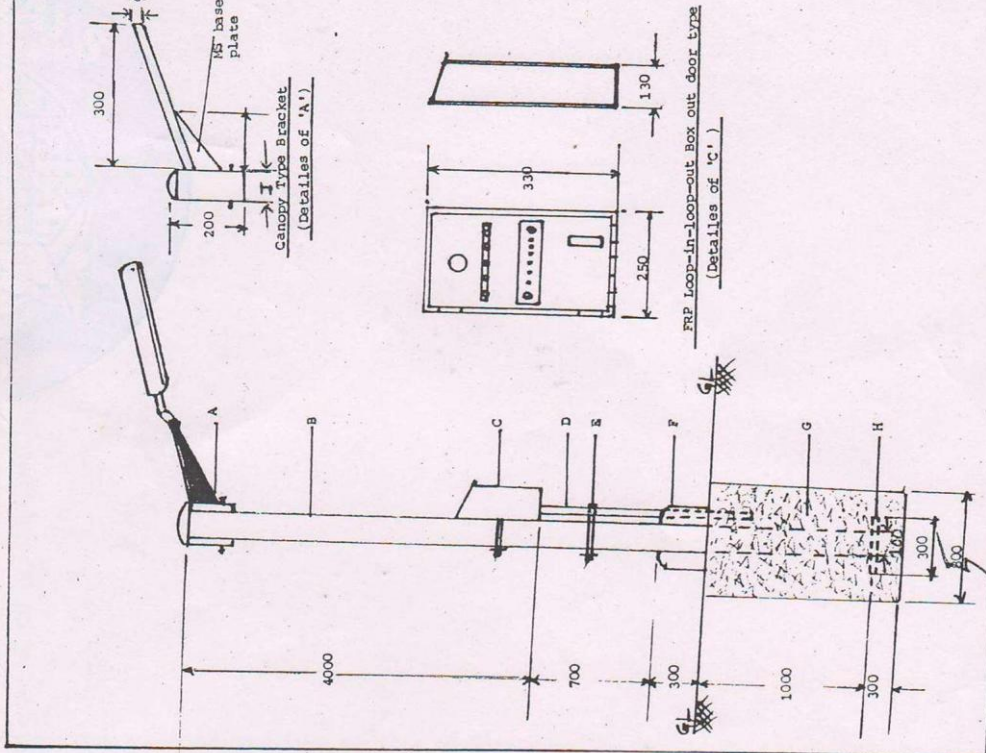
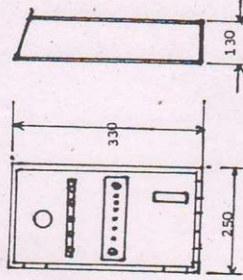
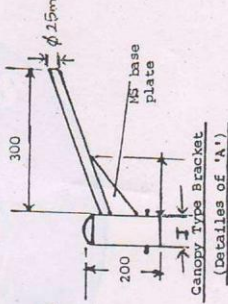
SOUTH WESTERN RAILWAY

NOTE :

1. All dimensions are in MM.
2. All gas cut and welded surfaces are to be painted with red oxide and Aluminium paint after fabrication of item.

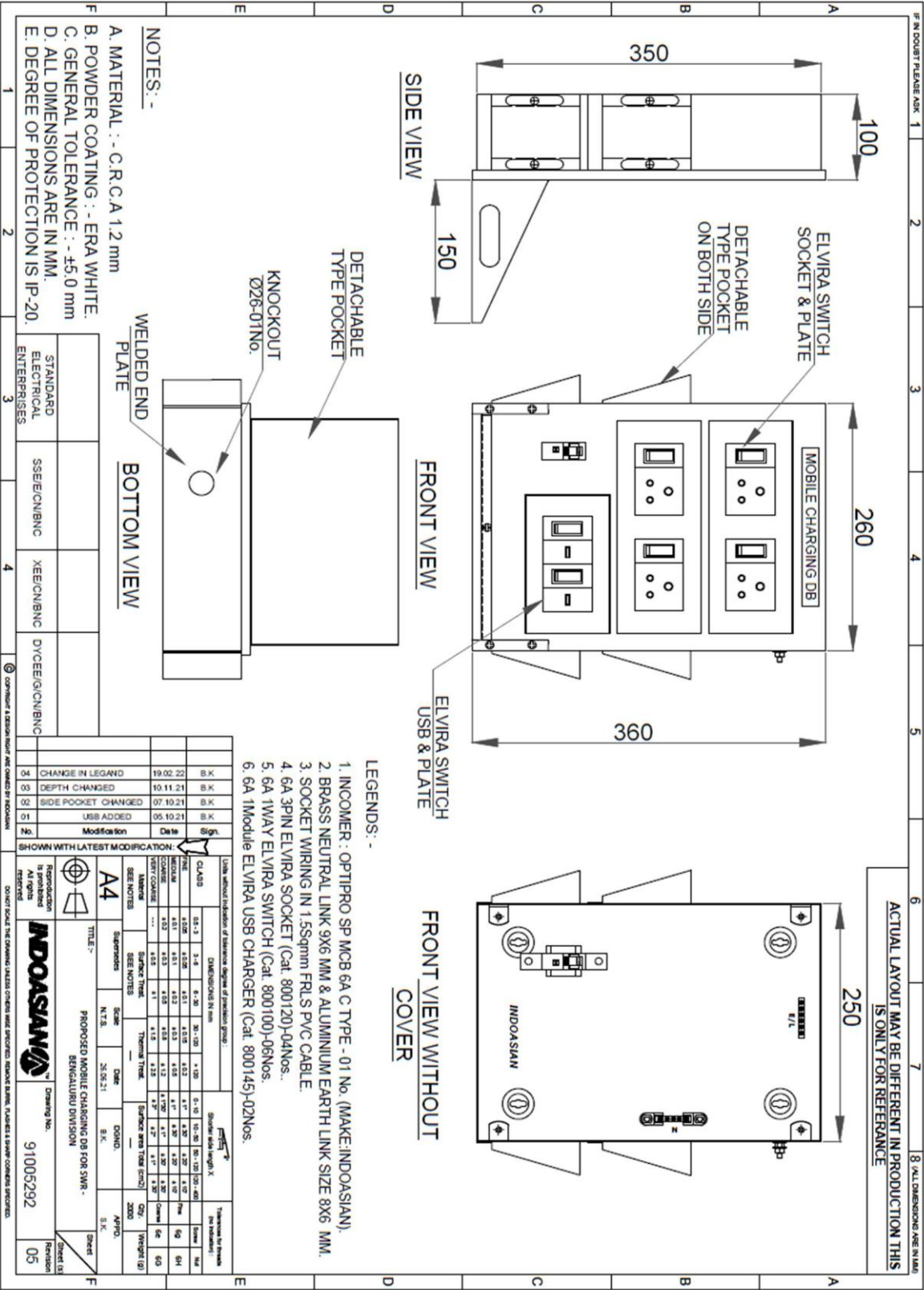
REFERENCE : -

- A : Canopy type bracket assembly with GI pipe
 B : Tubular lamp post 6 mtrs long-heavy duty Class-C, (MS tube with galvanised) as per IS-1239.
 C : FRP Loop-In-loop-out Box out door type for lighting poles
 D : G.I. Pipe for cable protection.
 E : Clamps for the fixing the pipe
 F : Muffling and coping for the lamp post
 G : Cement concrete mixture 1 : 3 : 6
 H : M.S base plate 300 x 300 x 3 mm thick to be welded to GI lamp pole
 I : Dia. of GI pipe 100mm (4").
 J : Suitable dia for 100mm GI pole.



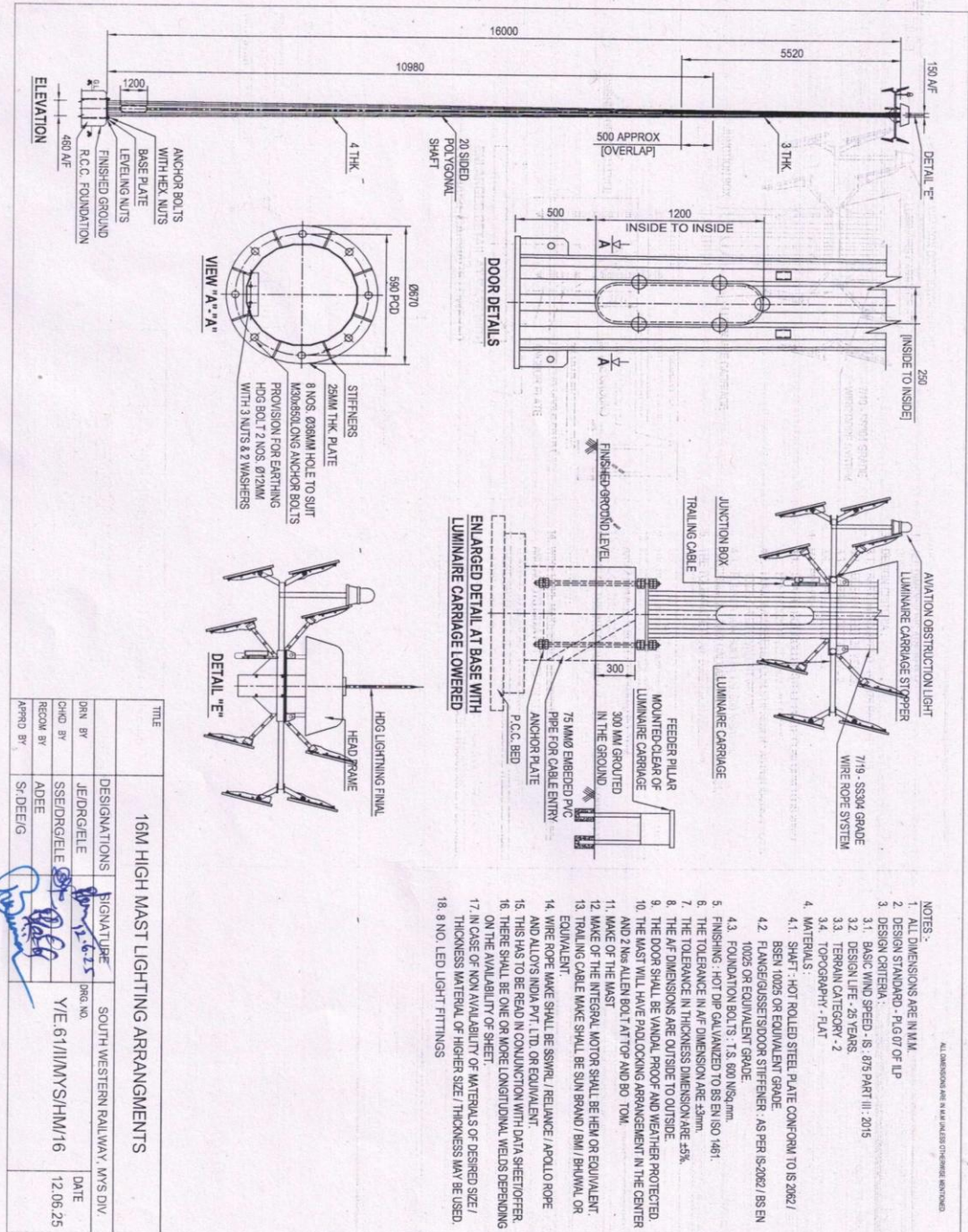
South Western Railway	
TUBULAR LAMP POST 6 METERS LONG FOR LIGHTING ARRANGEMENTS AT L.C. GATES OF MYS DIVISION	
Drawing No. Y/2. GL/04/55 LC	
Scale NTS	
Drawn <i>[Signature]</i> JE/07	
Date 22-09-2004.	

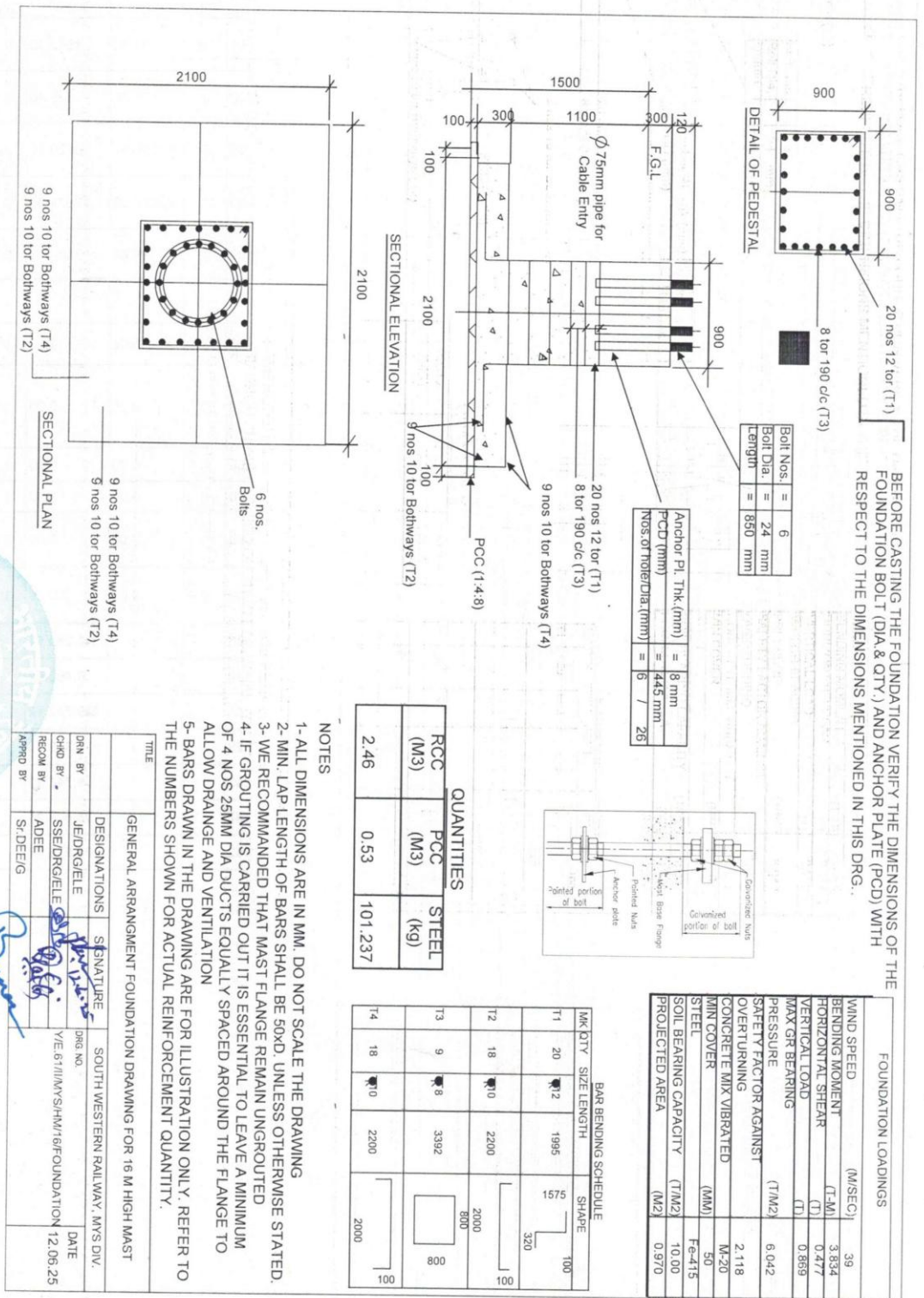
4) Mobile charging DB:



5) High mast 16 Mtr:

SOUTH WESTERN RAILWAY





**** End of Booklet ****