



**NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]**

START OF TENDER DOCUMENT

e-Tender Document

e-Tender No. DYCE-CON-HQ-GKP-05-2026

NAME OF WORK: Maintenance of newly commissioned section from Gorakhpur cantt (incl.) - Kaptanganj (excl.) in connection with in connection with doubling of Gorakhpur Cantt - Valmikinagar section in Varanasi Division of N. E. Railway.

OFFICE OF THE CHIEF ADMINISTRATIVE OFFICER [CON]

GORAKHPUR

**NORTH EASTERN RAILWAY
(CONSTRUCTION ORGANISATION)**



TENDER DOCUMENT CONSISTS OF THE FOLLOWING:-

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Signature of the Tenderer(s)

For Chief Administrative Officer/Con

TOP SHEET

1	E- Tender No.:	e-Tender No. DYCE-CON-HQ-GKP-05-2026
2	Bidding System:	Single packet System
3	Description of Work:	Maintenance of newly commissioned section from Gorakhpur cantt (incl.) - Kaptanganj (excl.) in connection with in connection with doubling of Gorakhpur Cantt - Valmikinagar section in Varanasi Division of N. E. Railway.
4	Approximate Value of Tender:	Rs. 2,40,51,355.00
5	Bid Security	Rs. 4,81,000.00
6	Payment of Bid Security	In respect of e-tendering, payment of Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled bank of India. The bank guarantee bond shall be as per Annexure- 3 of Chapter-2 and shall be valid for a period of 90 days beyond the bid validity period. The original Bank Guarantee should be delivered in person to the official nominated i.e. (OS/Con (Tender Cell) of CAO/Con/N.E. Railway, Gorakhpur office) before closing date for submission of bids (i.e. excluding the Last date of submission of bids). Tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
7	Dy. Chief Engineer [Con] Unit	Dy. CE/Con/HQ/GKP
8	Chief Engineer [Con] Unit	CE/Con/IV/GKP
9	Permissibility of Participation of Joint Venture Firms	Not Applicable
10	Applicability of Price Variation Clause	Applicable
11	Similar Nature of work	Track work (with or without transportation of materials) excluding supply of ballast/welding work
12	Completion period	04 (Four) months
13	Maintenance period	Applicable as per clause 1.0 (I) (p) of Chapter-6.
14	Mobilization advance	Applicable having advertised tender value more than Rs. 50 Crore with latest amendment if any as mentioned in clause 19.0 of Chapter-5.
15	Incentive bonus	Applicable as per clause 17C of Chapter-6.
16	Stage payment on supply of steel	Applicable as per clause 1.0 of CHAPTER-6A
17	Estimate No. and Allocation No.	0407230002 and 1530
18	Location of work [District/State]	Gorakhpur & Kushninagar/Uttar Pradesh
19	Special Instructions, if any	Nil
20	Date and Time of closing	22.06.2026 up to 15.00
21	Pre-Bid Conference date & venue	Nil
22	Postal Address for correspondence	Office of the Chief Administrative Officer (Con), North Eastern Railway, Gorakhpur-273012

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

CHAPTER-1
NORTH EASTERN RAILWAY
(CONSTRUCTION ORGANISATION)
GENERAL OBLIGATIONS

- 1.0 All mandatory fields marked with [*] have to be filled in by the bidders.**
- 2.0** The E-Tender documents shall consist of: -
- (a) Annexed Document to the Tender Document which includes [i] Top Sheet], [ii] General Obligations [Chapter-1], [iii] Instructions to Tenderer[s] for the Guidance of Engineers and Contractors [Chapter-2], [iv] Tender Form first Sheet [Annexure- 1 of Chapter-2], [v] Format for Certificate to be submitted by Tenderer along with the Tender document [Annexure 2 of Chapter-2], [vi] Bank guarantee proforma for Bid Security [Annexure-3 of Chapter-2], [vii] Eligibility Criteria [Chapter-3], [viii] Compliance of Technical Eligibility criteria [Annexure 1 of Chapter-3], [ix] Compliance of Financial Eligibility criteria [Annexure-2 of Chapter-3], [x] Tender's Credentials (BID CAPACITY) [Annexure 3 of Chapter-3], [xi] Experts of Conditions For Participation Tenders [Chapter-4], [xii] Guidelines for participation of Joint Venture Firms [Chapter-5], [xiii], Memorandum of Understanding (MOU) for Joint Venture Participation [Annexure 1 of Chapter-5], [xiv] Joint Venture Agreement for Joint Venture Participation [Annexure 2 of Chapter-5], [xv] Standard General Conditions of Contract [Chapter-6], [xvi] Additional Conditions of Contracts [Chapter-6A], [xvii] Document of Authorization [Annexure 4 of Chapter-6], [xviii] Request letter from Executive Branch to Accounts office for opening of LC [Annexure 5 of Chapter-6], [xix] Proforma of Guarantee Bond [Annexure 1 of Chapter-6], [xx] Proforma of Indemnity Bond [Annexure 2 of Chapter-6], [xxi] Agreement of Works [Annexure 3 of Chapter-6], [xxii] Final Supplementary Agreement [Annexure 6 of Chapter-6], [xxiii] Details of Annexure – A to M [Chapter-7] [xxiv] Additional Special Conditions of Contract i.e. (Technical Conditions) [Chapter-8] and [xxv] Schedule of Items (Rate to be quoted in this rate sheet only) Schedule A-I to A-II, Schedule B-I to B-XII, Schedule C-I to C-II with schedule of items [Chapter-9].
 - (b) Indian Railways Standard General Conditions of Contract-2022 (Latest) with correction slips up to the date of uploading of tender.
 - (c) Indian Railways Unified Standard Specification (IRUSS-2019) updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.
 - (d) Techno- Commercial Offer Form.
 - (e) Financial Offer Form.
- 3.0** Before submitting the offer, please read carefully complete e-tender document including Instructions to Tenderers, Indian Railways Standard General Conditions of Contract, Special Conditions of Contract, Additional Special Conditions of Contract i.e. Technical Conditions etc. as available on the page of North Eastern Railway [Construction] on the web site www.ireps.gov.in.
- 4.0** Your digital signature on the e-tender form will be considered as your confirmation that you have read and accepted all the conditions laid down in the documents referred in Para 3.0 above as well as schedule of tender consisting of techno-commercial offer form [including special conditions attached to E-Tender] and Financial offer form, unless specific deviation is quoted in the techno-commercial offer form.
- 5 (a) Bid Security:** In respect of e-tendering, payment of Bid Security shall be deposited either in cash through e-payment gateway on www.ireps.gov.in or submitted as Bank

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Guarantee bond from a scheduled bank of India. The bank guarantee bond shall be as per **Annexure-3 of Chapter-2** and shall be valid for a period of 90 days beyond the bid validity period. The original Bank Guarantee should be delivered in person as indicated in the tender document before closing date for submission of bids (**i.e. excluding the last date of submission of bids**). **Tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.**

- (b) **Tender Form:** Tender Forms shall embody the contents of the contract documents either directly or by reference and shall be as per specimen form uploaded on www.ireps.gov.in. **e-Tender Forms shall be issued free of cost to all tenderers.**
- 6.0 Time of availability of tender document on website: www.ireps.gov.in is divided into two parts viz, Advertisement period and offer submission period as detailed below:-**
- a) **Advertisement Period:-Time during which all information pertaining to tender shall be available but offers cannot be submitted**
 - b) **Offer submission period: - Fifteen days prior to opening of tender, during which tenderers can submit their offer.**
 - c) **The prospective tenderers are advised to revisit the website: www.ireps.gov.in within advertisement period to look for any changes/corrigenda issued for the tender. In the offer submission period, no changes will be issued for the tender.**
- 7.0 No Manual Offers sent by Post/FAX or in person shall be accepted against such e-tenders, even if these are submitted on the firm's letter head and received in time. The manual offer uploaded as attached document shall also not be considered. All such manual offers shall be considered as in-valid offers and shall be rejected summarily without any consideration.**
- 8.0** e-tender is not transferable and the same is to be submitted with digital signature by the pre-authorized personnel of the tenderer, already registered with the site.
- 9.0** If the required information asked for in the tender document is not furnished, the tender will be otherwise treated incomplete and hence may not be considered.
- 10** The on-line bidding doesn't permit submission of offer after stipulated date and time of the e-tender. Hence there is no scope for late/delayed tenders.
- 11.0** In case of Two Packet of bidding, after scrutinising the Techno-Commercial offer and short listing the tenderers, the Financial Bid shall be opened on a subsequent date only for those tenderers who will be qualifying Techno-Commercial Offers as per eligibility /qualifying criteria laid down. The date of opening of Financial Bid will be advised online. The Railway's decision in this regard will be final.
- 12.0 INSTRUCTIONS TO THE TENDERER FOR TWO PACKET SYSTEM OF TENDERING**
- 12.1** The tenderer shall visit the site of work and ascertain himself the conditions of work viz. approach roads and accessibility, nature of soil/rock, availability of materials, electric power, water for work and drinking purposes, site for labour camps, stores, godown, extent of lead/lift in work, availability of skilled and unskilled labour etc. that may be encountered in the course of execution of work. In short, he/they should familiarize himself fully with the conditions at site and FURNISH A CERTIFICATE TO THIS EFFECT, in the proforma appended as **Annexure-K**.
 - 12.2** Pre-bid conference will be held as per schedule mentioned in the Tender Notice of the tender. The intended bidders are advised to attend the pre-bid conference and discuss their points/clarifications etc. if any. Railway reserves the right to modify the tender documents as per the discussions held in Pre-bid conference. In that case tenderer will

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have to submit their bids as per the modified tender conditions as per the minutes of pre-bid conference, which would form part of tender documents, which will be available on IREPS.

- 12.3 The tender submitted by the tenderer/s will consist of TWO BIDS i.e. 'TECHNO-COMMERCIAL OFFER' and 'FINANCIAL BID'. Tenderers to note that Techno-Commercial offer and financial bid will be filled in the given proforma through IREPS only.
- 12.4 **"TECHNO-COMMERCIAL OFFER"** will be opened as per specified schedule. This bid shall contain the documents as listed below. Tenderers are requested to ensure that all such documents as listed are submitted duly filled in all respect in their technical bid.
 - 12.4.1 In terms of Railway Board letter No.2022/CE-1/CT/GCC dated 14.05.2024 regarding submission of Annexure-V (Annexure-2 of this documents) "On IREPS Module, a facility has already been created for online submission of Annexure-V. Therefore, the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS". However, in case of other than Company/Proprietary firm, **Annexure -2 (A)** (Annexure VA of GCC) shall be submitted 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) by the bidder shall result in summarily rejection of his/their bid.**
 - 12.4.2 Techno-Commercial offer shall include various documents mentioned in the tender conditions some of which are as under:-
 - 12.4.3 Bid security in the proper form as prescribed in tender Conditions under clause 5.0 of Chapter-2.
 - 12.4.4 The documents confirming the fulfilment of eligibility criteria (Technical, Financial & Bid Capacity) is laid down in Chapter-3 of the tender document. The document submitted as proof of fulfilling the eligibility criteria will be initially evaluated and offers not meeting the requisite eligibility criteria will be **summarily rejected**.

Documentary proof in support of Eligibility Criteria.

- (a) **Compliance of Technical Eligibility criteria** by the tenderer regarding execution of similar single work as per Proforma given in Annexure-1 of Chapter-3 of tender document.
- (b) **Compliance of Financial Eligibility criteria** by the Tenderer regarding contractual payments received during the qualifying period i.e. during the current financial year plus previous three financial years as per Proforma given in Annexure-2 of Chapter-3 of tender document.
- (c) **Compliance of Bid Capacity:** For tenders having advertised value more than Rs.20 Crore wherein eligibility criteria includes bid capacity also. The tender/technical bid will be evaluated based on bid capacity formula detailed in **Annexure-3 of Chapter-3**. The statement of existing commitments and balance amount of ongoing works should be submitted as per Annexure-E attached with tender document.

In addition to above, documents listed below are also required to be submitted with the offer:-

- (i) History Sheet of tenderer as per proforma given in Annexure –A
- (ii) Details of construction machineries, tools and plants, vehicle etc. available on hand and proposed to be utilised in work as per Proforma given in Annexure-B.

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- (iii) Details of technical and other personnels available on hand and proposed to be engaged as per Proforma given in Annexure-C
- (iv) Details of works completed during previous seven financial years and current year by the tenderer (s) as per Proforma given in Annexure-D.
- (v) Details of works in hand/progress of the tenderer(s) as per Proforma given in Annexure-E.
- (vi) Declaration regarding association of railway officer(s) with tenderer(s) as per Proforma given in Annexure-F
- (vii) List of court cases during previous three years as per Proforma given in Annexure-G.
- (viii) List of arbitration cases during previous three years as per Proforma given in Annexure-H.
- (ix) Broad plan of execution of this work within the stipulated completion period as per Proforma given in Annexure-I.
- (x) Other credentials/facilities of the firm/contractor in Annexure-J.
- (xi) Declaration regarding visiting site of the work Proforma as given in Annexure-K
- (xii) Constitution of Firm, Proforma as given in Annexure-L.
- (xiii) Details of Real Time Gross Saving (RTGS)/National Electronic Fund Transfer (NEFT) Proforma as given in **Annexure-M**.

12.5 (FINANCIAL BID):

- 12.5.1 The price bid of only those tenderer/s will be opened whose technical bids are found acceptable by the Railway.
- 12.5.2 The time, date and venue of opening of price bid shall be notified to successful tenderer/s after evaluation of technical bid.
- 12.5.3 If after the scrutiny of the TECHNO-COMMERCIAL OFFER, it is found necessary to have some revision in scope and/or content, to bring the same at par with one another and in conformity with the tender conditions and specifications and such other condition as found necessary, the tenderers will be advised accordingly to clarify their technical bids to bring all the technical bids at par.
- 12.5.4 It shall also be binding on the tenderer to keep the original Techno-Commercial offer and Financial bid open and the railway have the right to accept the original or revised technical bid and original price bids. The Railway's decision in this regard shall be final and binding on the tenderer/s.
- 12.5.5 The 'Original Financial Bids' and/or 'Revised Financial Bids' will be opened on the time, date and venue as notified in advance and advised to tenderer/s.
- 13.0 The tenderer/s may note that Railway reserve the right to either accept or reject any bid/s without assigning any reasons whatsoever and tenderer/s shall have no claim/s on this account.
- 14.0 Legal jurisdiction shall be Civil Court Gorakhpur.
- 15.0 All the payments for this work will be made only in Indian Rupees. Thus, Rates are to be quoted in Indian rupees only.
- 16.0 Prospective tenderer/s may contact concerned Chief Engineer/Construction or Dy. Chief Engineer (Construction), N. E. Railway for obtaining further clarifications, if required.
- 17.0 The tenderer/s is/are advised to submit all documents in one go with the offer i.e. technical bid.

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18.0 Tender To Be Digitally Signed By Authorised Person:-

- a) If the tender is submitted on behalf of a partnership firm, he should submit the certified copy of the partnership deed and authorization to sign the tender on behalf of partnership firm. If copies of these documents are not enclosed along with tender, the tender will be treated as having been submitted by the vender signing the tender.
 - b) The tenderer whether sole proprietor, a limited company or a partnership firm if they want to act through agent or individual partner(s) should submit along with the tender, a power of attorney duly stamped and authenticated by a Public Notary 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 submit the tender, sign the agreement, receive money, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign “No claim Certificate” and refer all or any disputes to arbitration.
 - 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 to the satisfaction of the Railway, the cost of which will be borne by the Contractor.
- 19.0** Tenderer[s] should upload a scanned attested BAR CHART, activity-wise detailed programme to complete the work.
- 20.0** **No correspondence shall be entertained after opening of tender and any suo-moto letters or submission in regard to tender, except specifically mentioned to be submitted as per the terms of the tender or sought for by the Railway, shall be treated as Null and Void.**

21.0 The tenderer[s] must fulfil/satisfy the following mandatory requirements:**MANDATORY REQUIREMENTS:**

- (a) **Bid Security:** In respect of e-tendering, payment of Bid Security shall be deposited either in cash through e-payment gateway on www.ireps.gov.in or submitted as Bank Guarantee bond from a scheduled bank of India. The bank guarantee bond shall be as per Annexure-3 of Chapter-2 and shall be valid for a period of 90 days beyond the bid validity period. **Tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.**
Fixed deposit receipt (FDR) will not be accepted as EMD for tenders invited on IREPS (e-tender portal).
- (b) **Regarding technical and financial (eligibility criteria as mentioned in Chapter -3), scanned copies of supportive documents/certificates from competent officials are to be submitted along with their offer.**
- (c) **Certified copies of Partnership Deed, Power of Attorney duly stamped and authenticated by Public Notary, documents related to Joint Venture/MOU/ Consortium duly notarized should be submitted along with their offer.**

Scanned copies of documents in support of formation/registration of the company/firm/legal authorization of the person to deal with the tender/notarized/registered wherever required as per tender conditions are to be submitted.

- 22.0** Indian Railways Unified Standard Specification (IRUSS-2019) updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.

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23.0 The tenderers, for carrying out any construction work must get themselves registered from the Registering Officer under Section-7 of the Building and other Construction workers' Welfare Cess Act, 1996 and rules made there to by the concerned State Govt. and submit certificate of Registration issued from the Registering Officer of the concerned State Govt.[Labour Dept]. **The Cess shall be deducted from the contractor's bills as per provisions of the Act. Building and other construction workers cess is applicable on the total cost of construction including the cost of material.**

24.0 False/incomplete statement:

Any statement/declaration made by the tenderer while uploading tender or submitted later as specifically required in the tender, if proved wrong or false or incomplete or such as to withhold any information relevant to the award of the tender, at any stage of the tender or in the event of his tender having been accepted, at any stage the contract, shall render his/their tender[s]/contract[s] liable to be cancelled /rescinded, in addition to the following:

- a) If such statement is found at the tender stage, his total Earnest Money shall be forfeited.
- b) In case such a statement is found at the contract stage, the conditions/rights available to the Railways under Clause 62 of the G.C.C. shall be applicable.
- c) In addition to above, action of banning of business may also be taken against such tenderers including prosecution under law.

25.0 Special Conditions:

- a. The copies of the various letters/documentary proof/statement etc. must be uploaded with e-Tender and shall be properly indexed by indicating the Annexure Nos. like Annexure-I, Annexure-2 etc. on the right hand side top corner of the same and this Annexure No. shall also be indicated in relevant column of the Annexure-A to Annexure-M supplied to the tenderer.
- b. The bidders are expected to obtain, on their own responsibility and expenses, all information which will be necessary for submitting the bid. Intending bidders may obtain clarification, if any, with regard to the tenders from the office of the concerned Chief Engineer [Construction], N.E. Railway, Gorakhpur [as mentioned in the Top Sheet] on any working day during the working hours. For any further information in regard to site conditions, facilities available at the work spot etc., the bidder may contact the office of concerned **Deputy Chief Engineer [Con]**, N.E. Railway, [as mentioned in the Top Sheet], on any working day during the working hours.
- c. In addition to the information given in the prescribed form of the Technical Commercial Offer, the tenderer may also submit any additional relevant information connected with this tender if considered necessary, uploading copies of the documents relied upon.
- d. Submission of Tender does not bind the Railway Authority for any claim of any nature whatsoever.

26.0 The tenderer has to submit QAP (if required by Railway) within 15 days of issue of LOA for approval of Railway. The tenderer will have to follow the same and submit monthly statement/test report duly test checked by the Railway.

27.0 Multiple L-1: In case of more than one L1 bidders, tender may be awarded to tenderer having higher Bid Capacity. In case Bid Capacity is also the same or there is no requirement of bid capacity as per tender conditions, tenderer having done more value

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of similar work in last three previous financial years and the current financial year up to the date of publishing of a tender, may be selected for the award. Instructions with respect to Bid Capacity will be followed as per **Annexure-3 of chapter-3**.

- 28.0 Tender notice:-** Sufficient notice shall be given for the submission of tenders, which in the case of large works will not be less than 21 days. The above prescribed tender notice period will be reduced from 21 days in the exceptional circumstances.

However,

For tenders valued up to and including Rs.2 crore invited through e – tendering, the tender notice period can be reduced up to 14 days.

For works in remote locations or of specialised nature or amount higher than Rs.50 crore, adequate tender notice period (not less than 21 days) shall be given for preparation to the potential bidders in order to ensure competitive and well informed bidding.

29.0 Advertisement of tender notice in newspaper- tender invited through IREPS.

With the implementation of e-tendering in railway works contracts invited through e-procurement website (i.e. IREPS) advertisement in news papers has also been published with following stipulation:-

- (i) Date of inviting tender on IREPS website shall be the date of publishing tender notice, if tender is published on website or the date of publication in newspaper in case tender is not published on website.
- (ii) Any instruction requiring minimum number of days for tender opening from the date of publication of tender invitation in print media/bulletin/journal shall now be the same minimum number of days required from the date of uploading on e-Procurement website (i.e. IREPS).

CHAPTER -2

INSTRUCTION TO TENDERERS (ITT) FOR THE GUIDANCE OF ENGINEERS & CONTRACTORS FOR WORKS CONTRACTS MEANING OF TERMS

- 1.0 **Applicability:** These instructions and conditions of contract shall be applicable for all the tenders and contracts of railways for execution of works as defined in GFR 2017.
- 1.01 **Order of Precedence of Documents:** In a contract agreement, in case of any difference, contradiction, discrepancy, with regard to conditions of tender/contract, specifications, drawings, bill of quantities etc., forming part of the tender/contract, the following shall be the order of precedence:
- i. Letter of Award
 - ii. Bill(s) of Quantities
 - iii. Special Conditions of Contract
 - iv. Technical Specifications as given in tender documents
 - v. Drawings
 - vi. Indian Railways Standard General Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
 - vii. Indian Railways Unified Standard Specification (IRUSS-2019) updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract
 - viii. CPWD Specifications 2019 Vol. I & II updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract..
 - ix. Indian Railways Unified Standard Specifications (Works and Material) 2010 updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents, if applicable in the contract.
 - x. IR Specifications/Guidelines updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
 - xi. Relevant B.I.S. Codes updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- 1.1 **Interpretation:** These Instructions to Tenders and Contracts shall be read in conjunction with the Standard General Conditions of Contract which are referred to herein and shall be subject to modifications additions or suppression by Special Conditions of Contract and/or Special Specifications, if any, annexed to the Tender Forms.
- 1.2 **Definition:** In these Instructions to Tenders, the following terms shall have the meanings assigned hereunder except where the context otherwise requires:
- (a) “Railway” shall mean the President of the Republic of India or the administrative officers of the Railway or Successor Railway authorized to deal with any matter, which these presents are concerned on his behalf.
 - (b) “General Manager” shall mean the Officer-in-Charge of the general superintendence and control of the Zonal Railway/Production Unit and shall also include Chief Administrative Officer (Construction) and shall mean and include their successors of the Successor Railway.

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- (c) “Chief Engineer” shall mean the Officer-in-Charge of the Engineering Department of N. E. Railway and shall also include Chief Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Signal & Telecom Engineer, Chief Signal & Telecom Engineer (Construction) and shall mean and include their successors of the Successor Railway.
- (d) “Divisional Railway Manager” shall mean the Officer- in – Charge of a Division of Zonal Railway and shall mean and include Divisional Railway Manager of the Successor Railway.
- (e) “Engineer” Construction Organisations, of Engineering, Signal & Telecom, Mechanical and Electrical Departments, i.e. the Senior Divisional Engineer/Deputy Chief Engineer, Senior Divisional Signal & Telecom Engineer / Dy. Chief Signal & Telecom Engineer, Senior Divisional Electrical Engineer/Deputy Chief Electrical Engineer, Senior Divisional Mechanical Engineer and shall mean & include the Engineers of the Successor Railway.
- (f) “Tenderer” shall mean the person / firm / co-operative or company whether incorporated or not who tenders for the works with a view to execute the works on contract with the Railway and shall include their representatives, successors and permitted assigns.
- (g) “Limited Tenders” shall mean tenders invited from all or some contractors on the approved or select list of contractors with the Railway.
- (h) “Open Tenders” shall mean the tenders invited in open and public manner and with adequate notice.
- (i) “Works” shall mean the works contemplated in the drawings and schedules set forth in the tender forms and required to be executed according to the specifications.
- (j) “Specifications” shall mean the Specifications for Materials and Works of the Railway as specified under the authority of the Ministry of Railways or Chief Engineer (Construction) or as amplified, added to or superseded by special specifications if any, appended to the Tender Forms.
- (k) Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway, which includes-
 - 1. “Unified Standard Schedule of Rates of the Railway (USSOR)” i.e. the Standard Schedule of Rates of the Railway issued under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents;
 - 2. “Delhi Schedule Of Rates (DSR)” i.e. the Standard Schedule of Rates published by Director General/ Central Public Works Department, Government of India, New Delhi, as adopted and modified by the Railway under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- (l) “Drawings” shall mean the maps, drawings, plans and tracings, or prints thereof annexed to the Tender Forms.
- (m) “Contractor’s authorized Engineer” shall mean a graduate engineer or equivalent, having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by the Engineer.
- (n) Date of inviting tender shall be the date of publishing tender notice on IREPS website if tender is published on website or the date of publication in newspaper in case tender is not published on website.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (o) “Bill of Quantities” shall mean Schedule of Item(s) included in the tender document along with respective quantities.
- 1.3 Words importing the singular number shall also include the plural and vice versa where the context requires.

CREDENTIALS OF CONTRACTORS

2. Application for Registration:

- 2.1 Works of construction and of supply of material shall be entrusted for execution to contractors whose capabilities and financial status have been investigated and approved to the satisfaction of the Railway. A list of approved contractors shall be maintained in the Railway. The said list be revised periodically once in a year or so by giving wide publicity through advertisements etc. A contractor including a contractor who is already on the approved list shall apply to the concerned General Manager (Construction)/Chief Administrative Officer (Construction)/ Signal & Telecommunication Engineer/(Construction), Chief Electrical Engineer/(Construction), furnishing particulars regarding:
- (a) his position as an independent contractor specifying engineering organization available with details of partners /staff /engineers employed with qualifications and experience;
 - (b) his capacity to undertake and carry out works satisfactorily as vouched for by a responsible official or firm; details about the transport equipments, construction tools and plants etc. required for the work, maintained by him;
 - (c) his previous experience of works similar to that to be contracted for, in proof of which original certificates or testimonials may be called for and their genuineness verified, if needs be, by reference to the signatories thereof;
 - (d) his knowledge from actual personal investigation of the resources of the area/zone or zones in which he offers to work;
 - (e) his ability to supervise the work personally or by competent and duly authorized agent;
 - (f) his financial position;
- 2.2 An applicant shall clearly state the categories of works and the area/zone/division(s)/district(s) in which he desires registration in the list of approved contractors.
- 2.3 The selection of contractors for enlistment in the approved list would be done by a committee for different value of slabs as notified by Railway.
- 2.4 An annual fee as prescribed by the Railway from time to time would be charged from such approved contractors to cover the cost of sending notices to them and clerkage for tenders etc. Notices shall be sent to them on registered e-mail address and registered postal address.

TENDERS FOR WORKS

3. **Tender Form:** Tender Forms shall embody the contents of the contract documents either directly or by reference and shall be as per specimen form uploaded. **e-Tender Forms shall be issued free of cost to all tenderers.**
4. **Omissions & Discrepancies:** Should a tenderer find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders. The tender inviting authority may, if deemed necessary, clarify the same to all tenderers. It shall be understood that every endeavour has been made to avoid any error which can materially affect the basis of tender and successful tenderer shall take upon himself and provide for the risk of any

error which may subsequently be discovered and shall make no subsequent claim on account thereof.

5. Bid Security:

5. (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 the work.

Note:

- (i) The Bid Security shall be rounded off to the nearest ₹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.
- (c) If his tender is accepted, this Bid Security mentioned in sub Para (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-3 of Chapter-2** and shall be valid for a period of 90 days beyond the bid validity period.
- (3) **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 **"TOP SHEET"** of tender document before closing date for submission of bids (**i.e. excluding the last date of submission of bids**).

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- 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.

6. Care in Submission of Tenders:

- (a) (i) Before submitting a 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.
- (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.
- (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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

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.

New Para 6(a)(v), Part I of GCC shall be read as under: (As per Correction Slip No.6 of GCC-2022)

6(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;

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, of failure 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.

- 6.1 In terms of Railway Board letter No.2022/CE-1/CT/GCC dated 14.05.2024 regarding submission of Annexure-V (Annexure-2 of this documents) "On IREPS Module, a facility has already been created for online submission of Annexure-V. Therefore, the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS". However, in case of other than Company/Proprietary firm, **Annexure -2 (A)** (Annexure VA of GCC) shall be submitted 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) 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.

CONSIDERATION OF TENDERS

7. **Right of Railway to Deal with Tenders:** The Railway reserves the right of not to invite tenders for any of Railway work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by Railway administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- 7A. **Two Packets System of Tendering:** With a view to assess the tenders technically without being influenced by the financial bids, 'Two Packets System of tendering' shall be adopted wherein tender documents provide for the same.
- 7B. **Pre Bid Conference:** Intenders having advertised value more than Rs.50 Crore or as mentioned in the tender document, Railway shall conduct Pre Bid Conference(s) with the prospective bidders.
- 7C. **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.
- 7D. **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.
- 7E. **Clarification of Bids:** To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the Railway may, at its 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.

EXECUTION OF CONTRACT DOCUMENTS

8. **Execution of Contract Document:** The Tenderer whose tender is accepted shall be required to appear in person at the office of **Chief Administrative Officer (Construction) North Eastern Railway, Gorakhpur-273012**, 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.
9. **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).

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (a) 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-3 of Chapte-6.**

10. TENDER FORM (Second Sheet)

- 1. Instructions to Tenderers and Conditions of Tender:** The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet and Second Sheet (Annexure-1 of chapter-2 attached)
- (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 up to latest correction slips, copies of which can be seen in the office of Chief Administrative Officer/Construction or obtained from the office of the Chief Engineer, Construction, N.E. Railway, Gorakhpur 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 Chief Administrative Officer/Construction or obtained from the office of the Chief Engineer, N.E. Railway, Gorakhpur 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 Chief Administrative Officer/Construction or obtained from the office of the Chief Engineer, Construction, N.E. Railway, Gorakhpur 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) as applicable 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 specified in tender documents from the date of issue of acceptance letter.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

6. Bid Security:

- (a) Subject to exemptions provided under Para 5(1) (a) of Chapter-2 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. **(Annexure-3 of Chapter-2 is also to be submitted).**
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90 days) 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 the 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 fulfilment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;
 - (ii) the Bid Security mentioned in sub Para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfilment 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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

ANNEXURE – I of Chapter-2

NORTH EASTERN 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 withand 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)

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

ANNEXURE-2 of Chapter-2)/(V)

Para 6.1 of chapter-2

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,

M/s _____ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of _____ as per the tender No. _____ of Construction Organisation of N.E.(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 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** year. Further, I/we (insert the name of the tenderer) **_____ and all my/our constituents understand that **my/our offer shall be summarily rejected.**

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

9. I/we also understand that if the contents of the certificate submitted by us are found to be false/forged 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*** year.

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 fulfill 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.**

ANNEXURE-2(A)/(VA)
Reference -Para 6.1 of ITT

(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 fulfill all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

SSEAL AND SIGNATURE
OF THE CONSTITUENT FIRM/CONSTITUENT PARTNER

Place:

Dated:

ANNEXURE –3 of Chapter-2

Para 5 of chapter-2

(Bid Security)

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 Chief Administrative Officer/Construction,
 N.E. Railway, Gorakhpur.

Beneficiary: FA&CAO/Con/N.E. Railway, Gorakhpur.

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 the **Bank**, 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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

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.
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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

CHAPTER-3

NORTH EASTERN RAILWAY CONSTRUCTION ORGANISATION
ELIGIBILITY CRITERIA

e-Tender No. DYCE-CON-HQ-GKP-05-2026

E-TENDER ARE INVITED ON BEHALF OF THE PRESIDENT OF INDIA FOR THE UNDER MENTIONED WORKS.

Sl. No.	Name of work	Approx. cost [Rs]	Time of completion	Maintenance Period	Date and Time of closing
1	Maintenance of newly commissioned section from Gorakhpur cantt (incl.) - Kaptanganj (excl.) in connection with doubling of Gorakhpur Cantt - Valmikinagar section in Varanasi Division of N. E. Railway.	24051355.00	06 [Six] Months	Nil	08.07.2026 up to 15.00 hrs.

NOTE: Tenderers who fulfil requisite eligibility criteria mentioned in forgoing Para shall participate the tender. Details as per **Annexure-1 of Chapter-3** is required to be submitted.

10.0 Eligibility Criteria:

10.1 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:
- (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 each costing not less than the amount equal to 60% of advertised value of the tender.

Similar nature of work means : **Track work (with or without transportation of materials) excluding supply of ballast/welding work.**

- (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 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 each component of tender, or

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or
- (iii) One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender.

Note for b (1): Separate completed works of minimum required values shall also be considered for due fulfilment of technical eligibility criteria for different components.

(b)(2) 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.

(b)(3) 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 General Conditions of Contract or through subcontractor fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract 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 notarised, 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 fulfil 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 Standard General Conditions of Contract, with prior approval of Chief Engineer in writing.

Note for Item 10.1:

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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- 10.2. 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-2 of Chapter-3**, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

- 10.3 Bid Capacity:** The tender/technical bid will be evaluated based on bid capacity formula detailed in **Annexure-3 of Chapter-3**. The statement of existing commitments and balance amount of ongoing works should be submitted as per Annexure-E attached with tender document.
- 10.4** No Technical and Financial credentials are required for tenders having value up to Rs 50 lakh.
- 10.5** 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 Para 10 above of the tender including Para 10.1 to 10.5 - 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 fulfilment 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 fulfilment of credentials.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

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 subcontractor by a Govt. Organisation or public listed company as defined in Note for item No.2.1 above, the same shall be considered for the purpose of fulfilment of credentials.
6. In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost 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 $0.3 \times 0.2 \times \text{value of the work done in the previous entity}$. 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 other 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 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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

11. 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.
12. 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.
13. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
14. *In case company A is merged with company B, then company B would get the credentials of company A also.*

11. 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 Construction Organisation of N.E. 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 –**Annecure-1 of chapter-3**
- (ii) Certificates which may be an attested Certificate from the client, Audited Balance Sheet duly certified by the Chartered Accountant etc regarding contractual payments received in the past –**Annexure-2 of Chapter-3**.
- (iii) The list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work–**Annexure-B** and the list of personnel / organization on hand and proposed to be engaged for the tendered work –**Annexure-C**.
- (iv) In terms of Railway Board letter No.2022/CE-1/CT/GCC dated 14.05.2024 regarding submission of Annexure-V (Annexure-2 of this documents) “On IREPS Module, a facility has already been created for online submission of Annexure-V. Therefore, the provision of downloading of Annexure-V of GCC & uploading of physically signed Annexure-V by the tenderer had been discontinued on IREPS”. However, in case of other than Company/Proprietary firm, **Annexure -2 (A)** (Annexure VA of GCC) shall be submitted 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) 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.
- (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 there under.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (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*. .
- 12.0 Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.**

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE –1 of Chapter-3'

Compliance of Technical Eligibility criteria by the tenderer regarding execution of similar single work of advertised tender value during last seven years ending last day of month previous to the one in which tender is invited.

1. Name and style of the contractor with address [Present tenderer]
2. Name and scope of the work executed
3. Authority who have awarded the contract.
4. Full address of the authority under whom the contract was executed.
5. Whether it is a Govt/Railway/Semi Govt organization.
6. Contractual Agreement No. and date.
7. Completed Value of the contract.

[a] Original value of the contract.

Technical Eligibility Criteria: 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 fulfilment of technical eligibility criteria for different components.

(b) (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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

(b) (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 2.1 of Chapter-6 or through subcontractor fulfilling the requirements as per clause 2.1 of Chapter-6 or jointly.

8. [a] Date of award of contract.

[b] Date of actual physical completion of work.

9. Details of copy of documents attached in support of completion of above similar single work.

[a] Certificate No. and date.

[b] Authority issued.

10. Declaration by the tenderer: I hereby declare that the information given above are true and the copy of the certificate enclosed is genuine. If any of the information given above is found to be wrong at any time, my tender will liable to be rejected and such liability will be compensated by me.

Name and signature of Tenderer
along with Seal.

Certificates containing the above information will only be considered. In complete certificates/copy of bills/letter of acceptance will not be considered.

ANNEXURE-2 of chapter -3

Reference -Para 10.2 of Chapter-3 & 17.15.2 of Chapter-5

Compliance of Financial Eligibility criteria**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)*****Signature of the Tenderer(s)****For Chief Administrative Officer/Con**

ANNEXURE – 3 of Chapter- 3

Reference -Para 10.3 of Chapter-3 & 17.15.3 of Chapter-5

TENDERER'S CREDENTIALS (BID CAPACITY)**RAILWAY**

For tenders having advertised value more than Rs 10 crore wherein eligibility criteria includes bid capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender. The available bid capacity shall be calculated as under:

$$\text{Available Bid Capacity} = [A \times N \times 2] - 0.33 \times N \times B$$

Where,

A = Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress.

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

B = Value of Existing commitments and balance amount of ongoing works with the tenderer as on date one month prior to the tender closing date to be completed in next “N” years per prescribed proforma of the Railway (ANNEXURE-E).

Note:

- (a) The Tenderer(s) shall furnish the details of -
 - (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender for calculating B as per ANNEXURE-E. In case of no works in hand, a ‘NIL’ statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

- (b) In case if a bidder is JV, the tenderer(s) must furnish the details of
 - (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) by each member of JV for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with each member of JV either in individual capacity or as a member of other JV as per the prescribed proforma of Railway ANNEXURE-E for statement of all works in progress and also the works which are awarded to each member of JV either in individual capacity or as a member of other JV but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a ‘NIL’ statement should be furnished.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

- (c) Value of a completed work/work in progress/work awarded but yet not started for a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned bid capacity in the tender under consideration.
- (d) The arithmetic sum of individual "bid capacity" of all the members shall be taken as JV's "bid capacity".
- (e) In case, the tenderer/s failed to submit the above statement along with offer, their/his offer shall be considered as incomplete and will be rejected **summarily**.
- (f) The available bid capacity of tenderer shall be assessed based on the details submitted by the tenderer. In case, the available bid capacity is lesser than estimated cost of work put to tender, his offer shall not be considered even if he has been found eligible in other eligibility criteria/tender requirement.

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]
EXCERPTS CONDITION FOR PARTICIPATION IN TENDER
TO BE SUBMITTED ALONG WITH THE TENDER

- 13. Execution of Contract Documents:** The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the Chief Administrative Officer/Construction/N.E. 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).
- 14. Documents to be submitted Along with Tender**
- (i) 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.
- (ii) **Following documents shall be submitted by the tenderer:**
- (a) Sole Proprietorship Firm:**
- (i) All other documents in terms of Para 10 of Chapter-3.
- (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 10 of Chapter-3.
- (c) Partnership Firm:**
- (i) **All other documents in terms of Para 18 of Chapter-5.**
- (d) Joint Venture (JV):** The tenderer shall submit documents as mentioned in **Para 17 of Chapter-5**
- (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 explanatory notes in clause 10 of Chapter-3.
- (f) LLP (Limited Liability Partnership):**
- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (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.
- (iii) 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.
- (iv) All other documents in terms of explanatory notes in clause 10 of Chapter-3.
- (g) Registered Society & Registered Trust:** The tenderer shall submit:
 - (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.
 - (iii) A copy of Rules & regulations of the Society.
 - (v) All other documents in terms of explanatory notes in clause 10 of Chapter-3.
- (iii) **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.**
- (iv) **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 suo moto 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.**
- (v) A tender from JV shall be considered only where permissible as per the tender conditions.
- (vi) 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.
- 15. The tenderer whether sole proprietor /a company or a partnership firm/ 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 a partner(s) of the firm or any other person, specifically authorizing him/them 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 Apostille certificate.

16. 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 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

THEN

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.

- 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 gazette 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

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For Chief Administrative Officer/Con

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 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.

The Guide Lines for Participation in Joint venture kindly see Chapter-5.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

CHAPTER-5**GUIDELINES FOR PARTICIPATION OF JOINT VENTURE FIRMS IN WORKS
TENDER (JV is applicable in the tenders valuing Rs.10 Crore & more)**

- 17. Participation of Joint Venture (JV) in Works Tender:** This Clause shall be applicable for works tenders wherein tender documents provide for the same.
- 17.1** Separate identity/name shall be given to the Joint Venture.
- 17.2** Number of members in a JV shall not be more than three, if the work involves only one department (say Civil or S&T or Electrical or Mechanical) and shall not be more than five, if the work involves more than one Department. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 20% each in case of JV with upto three members and not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.
- 17.3** A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.
- 17.4** The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.
- 17.5 Bid Security shall be submitted by JV or authorized person of JV either as:**
- (i) Cash through e-payment gateway or as mentioned in tender document, or
 - (ii) Bank Guarantee bond either in the name of JV, or in the name of all members of JV as per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.
- 17.6** A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU. (The MoU format for this purpose shall be finalized by the Railway in consultation with their Law Branch and enclosed along with the tender).
- 17.7** Once the tender is submitted, the MoU shall not normally be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Bid Security shall be liable to be forfeited.
- 17.8** Approval for change of constitution of JV shall be at the sole discretion of the Railway. The constitution of the JV shall not be allowed to be modified after submission of the tender bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.
- 17.9** Similarly, after the contract is awarded, the constitution of JV shall not be normally allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get

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vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.

- 17.10** On award of contract to a JV, a single Performance Guarantee shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.
- 17.11** On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted along with the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case of JV entity is to be registered as Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case of JV entity is to be registered as Partnership Firm) or under 'The LLP Act 2008' (in case of JV entity is to be registered as LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:
- 17.11.1 Joint And Several Liability** - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the Railway for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.
- 17.11.2 Duration of the Registered Entity** - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.
- 17.11.3 Governing Laws** - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 17.12 Authorized Member** - Joint Venture members in the JV MoU shall authorize **Lead member** on behalf of the Joint Venture to deal with the **Contract**, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV.
- 17.13** No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the Railway in respect of the said tender/contract.
- 17.14 Documents to be enclosed by the JV along with the tender:**
- 17.14.1 In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:**
- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar,
 - (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,

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- (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
- (iv) An undertaking by all partners of the partnership firm 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 in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

17.14.2 In case one or more members is/are Proprietary Firm or HUF, following documents shall be enclosed:

- (i) A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit 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.

17.14.3 In case one or more members of the JV is/are companies, the following documents shall be submitted:

- (i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
- (ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
- (iii) A copy of Certificate of Incorporation
- (iv) A copy of Authorization/copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual, to sign the tender, sign MOU/JV Agreement on behalf of the company and create liability against the company.

17.14.4 In case one or more members of the JV is/are LLP firm/s, the following documents shall be submitted:

- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation of LLP
- (iii) A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement
- (iv) A copy of Authorization /copy of Power of Attorney issued by the LLP firm (backed by resolution passed by the Partners) in favour of the individual, to sign the tender and/or sign the MOU/ JV agreement on behalf of the LLP and create liability against the LLP.
- (v) 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. Any Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

17.14.5 In case one or more members of the JV is/are Society/s or Trust/s, the following documents shall be submitted:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed

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For Chief Administrative Officer/Con

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

17.14.6 All other documents in terms of Para 10 of Chapter-3 above.

17.14.7 *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 Apostille certificate.*

17.15 Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfilment of the following criteria:

17.15.1 Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):

(a) For Works without composite components:

The technical eligibility for the work as per Para 10.1 of Chapter-3 above, shall be satisfied by either the 'JV in its own name & style' or Lead member of the JV,

Each other (non-lead) member(s) of JV, who is/are not satisfying the technical eligibility for the work as per Para 10.1 of Chapter-3 above, shall have technical capacity of minimum 10% of the cost of work i.e. each non-lead member of JV member must have satisfactory completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of advertised value of the tender.

(b) For works with composite components:

The technical eligibility for major component of work as per Para 10.1 of Chapter-3 above, shall be satisfied by either the 'JV in its own name & style' or Lead member of the JV and technical eligibility for other component(s) of work as per Para 10.1 of Chapter-3 above, shall be satisfied by either the 'JV in its own name & style' or 'any member of the JV'.

Each other (non-lead)member(s) of JV, who is/ are not satisfying the technical eligibility for any component of the work as per Para 10.1 of Chapter-3 above, shall have technical capacity of minimum 10% of the cost of any component of work mentioned in technical eligibility criteria. i.e., each other (non-lead) member of must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of cost of any component of work mentioned in technical eligibility criteria.

Note for Para 17.15.1:

- a) *The Major component of the work for this purpose shall be the component of work having highest value. In cases where value of two or more component of work is same, any one work can be classified as Major component of work.*
- b) *Value of a completed work done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration.*

17.15.2 Financial Eligibility Criteria:

The JV shall satisfy the requirement of “Financial Eligibility” mentioned at **Para 10.2 of Chapter-3 above**. The “financial capacity” of the lead partner of JV shall not be less than 51% of the financial eligibility criteria mentioned at Para 10.2 of Chapter-3 above.

The arithmetic sum of individual “financial capacity” of all the members shall be taken as JV’s “financial capacity” to satisfy this requirement.

Note: Contractual payment received by a Member in an earlier JV shall be reckoned only to the extent of the concerned member’s share in that JV for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in the tender under consideration.

17.15.3 Bid Capacity:

The JV shall satisfy the requirement of “Bid Capacity” requirement mentioned at **Para 10.3 of Chapter-3 above**. The arithmetic sum of individual “Bid capacity” of all the members shall be taken as JV’s “Bid capacity” to satisfy this requirement.

18.0 Participation of Partnership Firms in works tenders:

- 18.1 The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- 18.2 The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized as per the Indian Partnership Act, prior to submission of tender.
- 18.3 Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.
- 18.4 Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from Railway and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after submission of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full Bid Security shall be forfeited.

If any Partner/s withdraws from the firm after submission of the tender and before the award of the contract, the offer shall be rejected and Bid Security of the tenderer will be forfeited. If any new partner joins the firm after submission of tender but prior to award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform Railway beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for

determination of the contract under Clause 62 of the Standard General Conditions of Contract.

- 18.5 A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.
- 18.6 **The tender form shall be submitted only in the name of partnership firm.** The **Bid Security** shall be submitted by partnership firm through e-payment gateway or as mentioned in tender document. **The Bid Security submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.**
- 18.7 On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.
- 18.8 On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be executed in the name of the firm only and not in the name of any individual partner.
- 18.9 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.
- (a) **Joint and several liabilities:**
The partners of the firm to which the Letter of Acceptance (LOA) is issued, shall be jointly and severally liable to the Railway for execution of the contract in accordance with General and Special Conditions of the Contract. The partners shall also be liable jointly and severally for the loss, damages caused to the Railway during the course of execution of the contract or due to non-execution of the contract or part thereof.
- (b) **Duration of the partnership deed and partnership firm agreement:**
The partnership deed/partnership firm agreement shall normally not be modified/altered/terminated during the currency of contract and the maintenance period after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of Railway, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the General Conditions of Contract.
- (c) **Governing laws:** The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.
- (d) No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the Railway.
- 18.10 The tenderer shall clearly specify that the tender is submitted on behalf of a partnership firm. **The following documents shall be submitted by the partnership firm, with the tender:**
- (i) A notarized copy of partnership deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A notarized or registered copy of Power of Attorney in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.
- (iii) An undertaking by all partners of the partnership firm 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 in which they were / are partners/members. Any

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Concealment / wrong information in regard to above shall make the bid eligible or the contract shall be determined under Clause 62 of the General Conditions of Contract.

(iv) All other documents in terms of explanatory notes in **Para 10.0 of Chapter-3 above.**

18.11 Evaluation of eligibility of a partnership firm: Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfilment of the eligibility criteria laid down in Para 10 of Chapter-3 shall be taken.

19.0 Advances to Contractor –

If specifically provided in Tender Documents of tender having advertised value more than Rs.50 Crores with latest amendment if any, Railway shall make payment, as an Interest bearing advances, as per Contractor's request. These advances shall carry a simple interest as indicated in the Tender documents. The payment and recovery of such advances shall be made as per manners prescribed in Clause 46.4 of the Standard General Conditions of Contract.

**NORTH EASTERN RAILWAY
CONSTRUCTION ORGANISATION**

MEMORANDUM OF UNDERSTANDING [MOU] FOR JOINT VENTURE PARTICIPATION
[To be executed on non-judicial stamp paper of appropriate value in accordance with relevant stamp Act. The stamp paper is to be issued in the name of the Joint Venture Firm].

JOINT VENTURE PARTICIPATION

BETWEEN

[indicate the name of member] having its registered office at [indicate the address of the member] represented by their [indicate designation/capacity e.g Manager/General manager/Director/Managing Director/ Partner/Managing Partner/Proprietor etc.], Shri. [indicate the name] aged aboutyears, S/o Shri [indicate the name of father] resident of [indicate Address][hereinafter known as authorized signatory of the member] in the capacity of Lead Member of the first part.

AND

[indicate the name of member] having its registered office at [indicate the address of the member] represented by their [indicate designation/capacity e.g manager/General manager/Director/Managing Director/ Partner/Managing Partner/Proprietor etc.], Shri. [indicate the name] aged aboutyears, S/o Shri [indicate the name of father] resident of [indicate Address][hereinafter known as authorized signatory of the member] in the capacity of the constituent member of the other part.

[In case of more than two members, include the details accordingly].

Now, the Joint Venture Firm [JV] formed by the members i.e.[indicate name of lead member] and [indicate name of constituent member] and [indicate name of other constituent member] will be known as [indicate JV firm name and address].

The expressions [indicate name of the lead member] and [indicate name of the constituent members], shall whatever the context admits, mean and include their respective legal representatives, successors-in-interest and assigns, and shall collectively be referred to as **“Joint Venture Firm”** and individually as the **“Member”**

WHEREAS; President of India, acting through Ministry of Railways, **North Eastern Railway Construction Organisation** [hereinafter referred to as **“Employer”**] has invited Tender for “[indicate name of work as mentioned in Notice inviting Tender]”.

NOW, THEREFORE, THE MEMBERS AGREE AS FOLLOWS:

1. The **‘Members’** have studied the documents and have agreed to submit their Tender as Joint Venture [JV] Firm.

The following documents shall be deemed to form and be read and construed as an integral part of this MOU.

- i] Notice inviting Tender,
- ii] Tender document,
- iii] Any Addendum/Corrigendum issued by [North Eastern Railway Construction organization], and
- iv] The Tender for work submitted by Joint Venture Firm through Authorized member.

2. [indicate the name of the Lead Member] shall be the **“Lead member”** of the JV Firm, for all intents and purposes having majority share [i.e. 51% or more] and other member not less than 20% in Joint Venture Firm and who have also successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited. (as per technical eligibility criteria mentioned in chapter-5).

3. The **‘Members’** resolve that the distribution of share of Financial, Technical, and other responsibilities of the constituent members of JV Firm is as under:

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (a) [indicate name and Address of Lead Member] **Share%**
Lead Member
- (b) [indicate name and Address of Constituent Member] **Share%**
- (c) [indicate name and Address of Other Constituent Member] **Share%**
Other Constituent Member

4. JOINT AND SEVERAL RESPONSIBILITY

The Members undertake that they shall be jointly and severally liable to the Employer [Railways] for execution of the work in accordance with General and Special Conditions of Contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the Employer [Railways] during the course of execution of the contract or due to non-execution of the contract or part thereof.

5. ASSIGNMENT AND THIRD PARTIES

No member of the Joint Venture firm shall have the right to assign or transfer the interest, right or liability in the contract without the written consent of the other members and that of the Employer [Railways] in respect of the said tender/contract.

6. AUTHORIZED MEMBER

We, authorize [indicate lead member of JV firm], as **Authorized member** represented by their authorized signatory Shri. [indicate the name] to act on behalf of the Joint Venture Firm to deal with the **Contract**, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. However, authorized member shall not submit any such proposals, clarifications or commitments without securing clearance of other JV constituents[s].

All notices/correspondences with respect to the contract would be sent by Employer [Railways] **only to the authorized signatory of Authorized member at the address of JV**. All such notices/correspondences sent by Employer shall be legally binding on all the members of the J.V Firm.

7. GUARANTEES AND BONDS

Bid Security and all bonds/guarantees to the Employer [Railways] shall be submitted in the name JV Firm or in the name of authorized person of JV as per MOU, which shall be legally binding on all the members of the J.V Firm.

8. INDEMNITY

Each member hereto agrees to indemnify the other members against its respective parts in case of breach/default of the respective part of the contract/tender of any liabilities sustained by the Joint Venture Firm.

9. For the execution of the respective portions of works, the members shall make their own arrangements to bring the required finance, plants and equipment, materials, manpower and other resources.

10. DOCUMENTS and CONFIDENTIALITY

Each member shall maintain confidentiality regarding the information related to the tender/contract, commercial and technical information received or generated in the course of preparation and submission of the Tender.

11. ARBITRATION

Any dispute, controversy or claim arising out of or relating to this agreement shall be settled in the first instance amicably between the members. If an amicable settlement cannot be reached as above, it will be settled by arbitration in accordance with the Indian Arbitration and Conciliation Act 1996 or any amendments thereof. The Venue of the arbitration shall be **Gorakhpur**. Notwithstanding settlement of any dispute among the members of the JV Firm, the JV members shall ensure satisfactory completion of awarded work as per the contract with the Employer [Railways].

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

12. VALIDITY

This MOU shall remain in force till the occurrence of the earliest of the following, unless by mutual consent, the members agree in writing to extend the validity for a further period.

- a. Tender submitted by the joint venture Firm is declared unsuccessful, or
- b. Cancellation/shelving of the work by the Employer [Railways] for any reasons prior to award of work. In case, the Tender submitted by the joint venture Firm is declared successful; the validity of this MOU shall be upto the entire period of completion [inclusive of period of extension, if any] including maintenance period.

13. This MOU is drawn in requisite number of copies with equal legal strength and status. One copy is held by [indicate name of lead member] and the other by [indicate name of constituent member] and [indicate name of other constituent member] and one copy submitted with the tender to Employer [Railways].

14. This MOU shall in all respects be governed by and interpreted in accordance with Indian Laws.

15. NOTICES/CORRESPONDANCES

All Notices/Correspondence by Employer [Railways] in writing shall be sent by Fax confirmed, by registered post or commercial courier to the following Fax number and address.

[Indicate name of authorized signatory of authorized member, name and address of JV Firm with Fax number]

16. JV Agreement.

We the constituent member of the JV Firm are aware that after issue of Letter of Acceptance by the Employer [Railways], an agreement among the members of the JV firm has to be executed and got registered before the Registrar of Companies under the Companies Act or with the Registrar/Sub-Registrar under the Registration Act. This agreement shall be submitted by the JV firm to the Employer [Railways] as per Standard J.V. Agreement format before signing the contract agreement for the work. In case the JV members fail to observe/comply with stipulations, the Bid Security, deposited with the Employer [Railways] shall be forfeited and other penal actions due shall be taken against the members and the JV Firm by the Employer [Railways] as per provision in tender.

17. We, the members of JV Firm shall furnish along with the tender, requisite documents as mentioned under Chapter-5 [as the case may be] of the Guidelines for Participation of J.V. firms in works tender.

18. Declaration

It is certified that we 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 in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

IN WITNESS WHEREOF THE MEMBERS, have executed this MOU on [indicate day, month and year].

[indicate name of authorized signatory] [indicate name and address of lead member] with [Seal]	[indicate name of authorized signatory] [indicate name and address of constituent member] with [Seal]
---------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------

Witness:

1..... [Name and Address]

2..... [Name and Address]

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Annexure -2 of Chapter -5

JOINT VENTURE AGREEMENT FOR JOINT VENTURE CONTRACT

[The J.V. Agreement to be executed on non-judicial stamp paper of appropriate value, in accordance with relevant stamp Act. The stamp paper is to be issued in the name of the Joint Venture Firm and should not be more than six months old from the date of execution of the J.V. Agreement, on it]

JOINT VENTURE AGREEMENT**BETWEEN**

[indicate the name of member] having its registered office at [indicate the address of the member] represented by their [indicate designation/capacity e.g. Manager/General manager/Director/Managing Director/ Partner/Managing Partner/Proprietor etc.], Shri----- [indicate the name] aged aboutyears, S/o Shri [indicate the name of father] resident of [indicate Address][hereinafter known as authorized signatory of the member] in the capacity of Lead Member of the first part.

And

[indicate the name of member] having its registered office at [indicate the address of the member] represented by their [indicate designation/capacity e.g. manager/General manager/Director/Managing Director/ Partner/Managing Partner/Proprietor etc.], Shri. [indicate the name] aged aboutyears, S/o Shri [indicate the name of father] resident of [indicate Address][hereinafter known as authorized signatory of the member] in the capacity of the constituent member of the other part.

[In case of more than two members, include the details accordingly].

Now, the Joint Venture Firm [JV] formed by the members i.e.[indicate name of lead member] and [indicate name of constituent member] and [indicate name of other constituent member] will be known as [indicate JV firm name and address].

The expressions [indicate name of the lead member] and [indicate name of the constituent members], shall whatever the context admits, mean and include their respective legal representatives, successors-in-interest and assigns, and shall collectively be referred to as **“Joint Venture Firm”** and individually as the **“Member”**

1. WHEREAS; President of India, acting through Ministry of Railways, **North Eastern Railway Construction Organisation** [hereinafter referred to as **“Employer”**] has invited Tender for “[indicate name of work as mentioned in Notice inviting Tender]”.

And Whereas, the above members to the Joint Venture Firm have submitted the tender in the name of the said JV Firm formed as per the MOU signed on dated..... and whereas the said tender has finally been accepted by the Employer [Railways] vide Letter Of Acceptance No.....dated....., we [indicate name of the lead member] and [indicate name of the constituent members], herewith sign the above formal JV agreement for registration of the above joint venture Firm viz [indicate JV firm name and address] and for entering into contract Agreement with the “Employer” [Railway].

2. **NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:**

The following documents shall be deemed to form and be read and construed as an integral part of this J.V. Agreement.

- i] Notice inviting Tender,
- ii] Tender document,
- iii] Any Addendum/Corrigendum issued by [North Eastern Railway]
- iv] MOU signed on.....by us.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- v) Tender submitted on our behalf by the Authorized Member.
- vi] Letter Of Acceptance issued by Employer [Railways].
- 3. The 'Members' have studied the documents, JV guidelines and have agreed to participate in submitting the 'Tender' jointly; signed the JV MOU and submitted the tender accordingly.
- 4. [indicate the name of the Lead Member] shall be the **"Lead member"** of the JV Firm ,for all intents and purposes having majority share [i.e 51% or more] and other member not less than 20% in Joint Venture Firm and who have also successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited.(as per technical eligibility criteria mentioned in Para 2.1(a) & (b) of chapter-3)
- 5. We, authorize [indicate lead member of JV firm], as **Authorized member** represented by their authorized signatory Shri ----- [indicate the name] to act on behalf of the Joint Venture Firm to deal with the tender, sign the agreement or enter into contract in respect of the said tender/contract, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/ contract. However, authorized member shall not submit any such proposals, clarifications or commitments without securing clearance of other JV constituents[s].

All notices/correspondences with respect to the tender/contract would be sent by Employer [Railways] **only to the authorized signatory of Authorized member at the address of JV firm**. All such notices/correspondences sent by Employer shall be legally binding on all the members of the J.V Firm.

- 6. The 'Members' resolve that the distribution of share of Financial, Technical, and other responsibilities of the constituent members of JV Firm is as under:
 - (a) [indicate name and Address of Lead Member] **Share%**
Lead Member
 - (b) [indicate name and Address of Constituent Member] **Share%**
Constituent Member
 - (c) [indicate name and Address of Other Constituent Member] **Share%**
Other Constituent Member
- 7. The constitution of JV firm shall not be altered during the currency of the contract except when modification become inevitable due to succession laws etc. provided that the minimum eligibility criteria are not got vitiated. Failure to observe this stipulation shall be deemed to be breach of contract, which will entitle the Employer[Railway] to take all consequential action as per contract conditions.

8. **JOINT AND SEVERAL RESPONSIBILITY**

The Members undertake that they shall be jointly and severally liable to the Employer [Railways] for execution of the work in accordance with General and Special Conditions of Contract. The JV members shall also be liable jointly and severally for the loss, damages caused to the Employer [Railways] during the course of execution of the contract or due to non-execution of the contract or part thereof. The members solemnly affirm and declare that every possible care will be taken by them for ensuring satisfactory execution and completion of the work awarded under the contract.

9. **ASSIGNMENT AND THIRD PARTIES**

No member of the Joint Venture firm shall have the right to assign or transfer the interest, right or liability in the contract without the written consent of the other members and that of the Employer [Railways] in respect of the said tender/contract.

10. GUARANTEES AND BONDS

All bonds/guarantees e.g. Performance Guarantee, Bank Guarantee etc. to the Employer [Railways] shall be submitted by the JV Firm as per tender conditions, only in the name of J.V Firm.

11. INDEMNITY

Each member hereto agrees to indemnify the other members against its respective parts in case of breach/default of the respective part of the contract/tender of any liabilities sustained by the Joint Venture Firm.

12. USE OF MACHINERY, INSTRUMENT, LABOUR FORCE etc.

For the execution of the respective portions of works, the members shall make full arrangements to bring the required finance, plants and equipment, materials, manpower and other resources. However, the members here to undertake that whatever the machinery, instruments, labour force, [including unskilled, skilled, inspectors, Engineer etc.] they possess at the time of entering into Joint Venture Agreement or which subsequently shall come in their possession and if such machinery, instruments, labour force is required for the speedy and efficient execution of any portion of the work, the member/members having the control over the said machinery, instruments, labour force etc. without having any regard to their share of profit and loss agreed to between the members in Joint Venture Agreement shall hand over the same which shall be placed at the disposal of the other member actually executing that portion of the work at mutually agreed terms for the purpose of execution of the contract without any hindrance and obstacle

13. DOCUMENTS and CONFIDENTIALITY.

Each member shall maintain confidentiality regarding the information related to the tender/contract, commercial and technical information received or generated in the course of preparation and submission of the Tender and execution of contract.

14. ARBITRATION

Any dispute, controversy or claim arising out of or relating to this agreement shall be settled in the first instance amicably between the members. If an amicable settlement cannot be reached as above, it will be settled by arbitration in accordance with the Indian Arbitration and Conciliation Act 1996 or any amendments thereof. The Venue of the arbitration shall be Gorakhpur. Notwithstanding settlement of any dispute among the members of the JV Firm, the JV members shall ensure satisfactory completion of awarded work as per the contract with the Employer [Railways].

15. DURATION OF JOINT VENTURE AGREEMENT

It shall be valid during the entire currency of the contract including the period of extension if any and the maintenance period after the work is completed and till Security Deposit is released.

16. NOTICES/CORRESPONDANCE

All Notices/Correspondence by Employer [Railways] in writing shall be sent by Fax confirmed, by registered post or commercial courier to the following Fax number and address.

[Indicate name of authorized signatory of authorized member, name and address of JV Firm with Fax number]

17. Governing Laws: The J.V. Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Declaration:-

It is certified that we 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 in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

IN WITNESS WHEREOF THE MEMBERS, have executed this JV Agreement on

[indicate day, month and year]

[indicate name of authorized signatory]

[indicate name and address of constituent member][indicate name and address of lead member]

[Seal][Seal]

Witness:

1 [Name and Address]

2 [Name and Address]

Place :

Date :

[The J.V. Agreement should be got registered with Registrar of Company Act or with the Registrar/Sub-registrar under the registration act.]

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

STANDARD GENERAL CONDITIONS OF CONTRACT

- 1. (1) Definitions:** In these Standard General Conditions of Contract, the following terms shall have the meaning assigned hereunder except where the context otherwise requires:
- (a) "Railway" shall mean the President of the Republic of India or the Chief Administrative Officer (Construction) N. E. Railway or of the Successor Railway authorized to deal with any matters which these presents are concerned on his behalf.
 - (b) "General Manager" shall mean the Officer in-charge of the General Superintendence and Control of the Railway and shall also include Addl. General Manager, the General Manager (Construction) and shall mean and include their successors, of the successor Railway.
 - (c) "Chief Engineer" shall mean the Officer in-charge of the Engineering Department of N. E. Railway, Chief Engineer (Construction), Chief Signal & Telecommunication Engineer (Construction), Chief Electrical Engineer (Construction), and shall mean & include their successors, of the Successor Railway.
 - (d) "Divisional Railway Manager" shall mean the Officer- in – Charge of a Division of Zonal Railway and shall mean and include Divisional Railway Manager of the Successor Railway.
 - (e) "Engineer" shall mean the Executive Engineer, Divisional Signal & Telecom Engineer, Divisional Electrical Engineer in charge of the works AND the Deputy Chief Engineer, Dy. Chief Signal & Telecom Engineer, Deputy Chief Electrical Engineer of Construction Organisations on the N. E. Railway and shall mean & include the Engineers of the Successors Railway.
 - (f) "Engineer" shall mean the Divisional Engineer or the Executive Engineer, Divisional Signal & Telecom Engineer, Divisional Electrical Engineer, Divisional Mechanical Engineer in executive charge of the works and shall include the superior officers of Open Line and Construction organisations on the Railway of the Engineering, Signal & Telecom, Electrical and Mechanical Departments, i.e. the Senior Divisional Engineer/Deputy Chief Engineer, Senior Divisional Signal & Telecom Engineer / Dy.Chief Signal & Telecom Engineer, Senior Divisional Electrical Engineer / Deputy Chief Electrical Engineer, Senior Divisional Mechanical Engineer and shall mean & include the Engineers of the Successors Railway.
 - (g) "Contractor" shall mean the Person/Firm/LLP/Trust/Co-operative Society or Company whether incorporated or not who enters into the contract with the Railway and shall include their executors, administrators, successors and permitted assigns.
 - (h) "Contract" shall mean and include the Agreement of the Work Order, the accepted Bill(s) of Quantities or Chapter(s) of Standard Schedule of Rates (SSOR) of the Railway modified by the tender percentage for items of works quantified, or not quantified, the Standard General Conditions of Contract, the Special Conditions of Contracts, if any; the Drawing, the Specifications, the Special Specifications, if any and Tender Forms, if any.
 - (i) "Works" shall mean the works to be executed in accordance with the contract.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- (j) "Specifications" shall mean the Standard Specifications for Materials & Works of Railway as specified by Railway under the authority of the Chief Engineer or as amplified, added to or superseded by Special Specifications, if any.
- (k) Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway, which includes-
 - 1. "Unified Standard Schedule of Rates of the Railway (USSOR)" i.e. the Standard Schedule of Rates of the Railway issued under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents;
 - 2. "Delhi Schedule Of Rates (DSR)" i.e. the Standard Schedule of Rates published by Director General/ Central Public Works Department, Government of India, New Delhi, as adopted and modified by the Railway under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- (l) "Drawing" shall mean the maps, drawings, plans and tracings or prints there of annexed to the contract and shall include any modifications of such drawings and further drawings as may be issued by the Engineer from time to time.
- (m) "Constructional Plant" shall mean all appliances or things of whatsoever nature required for the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- (n) "Temporary Works" shall mean all temporary works of every kind required for the execution completion and/or maintenance of the works.
- (o) "Site" shall mean the lands and other places on, under, in or through which the works are to be carried out and any other lands or places provided by the Railway for the purpose of the contract.
- (p) **"Period of Maintenance" shall mean the specified period of 12 months maintenance from the date of completion of the works, as certified by the Engineer.**
(This Condition is not applicable in case of contract for ballast supply, Carting /Transportation, Hiring of Road vehicle, Survey & Soil testing).
- (q) 'Contractor's authorized Engineer' shall mean a graduate Engineer or equivalent, having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by Engineer.
- (r) Date of inviting tender shall be the date of publishing tender notice on IREPS website if tender is published on website or the date of publication in newspaper in case tender is not published on website.
- (s) "Bill of Quantities" shall mean Schedule of Item(s) included in the tender document along with respective quantities and rates, accepted by the Railway.
- 1. (2) Singular and Plural:** Words importing the singular number shall also include the plural and vice versa where the context requires.
- 1.(3) Headings and Marginal Headings:** The headings and marginal headings in these Standard General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof the contract.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

GENERAL OBLIGATIONS

- 2. (1) Execution Co-Relation and Intent of Contract Documents:** The contract documents shall be signed in triplicate by the Railway and the Contractor. The contract documents are complementary and what is called for by anyone shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipments and transportation necessary for proper execution of work. Materials or works not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the Railway to the Contractors unless distinctly specified in the contract documents. Materials or works described in words which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.
- 2.(2)** If a work is transferred from the jurisdiction of one Railway to another Railway or to a Project authority or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor Railway/Project in the same manner & take effect in all respects as if the Contractor and the Successor Railway/Project were parties thereto from the inception and the corresponding officer or the Competent Authority in the Successor Railway/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor Railway/Project under the original contract/agreement entered into.
- 2. (3)** If for administrative or other reasons the contract is transferred to the Successor Railway, the contract shall, notwithstanding any things contained herein contrary there to, be binding on the Contractor and the Successor Railway in the same manner and take effect in all respects as if the Contractor and the Successor Railway had been parties thereto from the date of this contract.
- 3. (1) Law Governing the Contract:** The contract shall be governed by the law for the time being in force in the Republic of India.
- 3.(2) Compliance to Regulations and Bye-Laws:** The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.
- 3.(3) Environmental and Forest clearances:**
The Railway represents and warrants that the environmental and forest clearances pertaining to the work commensurate with the progress of work/agreed programme will be obtained by Engineer. In the event of any delay in securing respective clearances leading to delay in execution of work, the Contractor shall be entitled to Extension of Time for the period of such delay in accordance with the provisions of Clause-17A(ii).

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

4. **Communications to be in Writing:** All notices, communications, reference and complaints made by the Railway or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing or e-mail on registered e-mail IDs i.e. the e mail id provided for correspondence in the contract agreement, otherwise email id registered with IREPS and no notice, communication, reference or complaint not in writing or through e-mail, shall be recognized.
5. **Service of Notices on Contractors:** The Contractor shall furnish to the Engineer the name, designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given to the Contractor, if delivered to the Contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor to the Engineer.
6. **Occupation and Use of Land:** No land belonging to or in the possession of the Railway shall be occupied by the Contractor without the permission of the Railway. The Contractor shall not use, or allow to be used the site for any purposes other than that of executing the works. Whenever non-railway bodies/persons are permitted to use railway premises with competent authority's approval, conservancy charges as applicable from time to time may be levied.
7. **Assignment or Subletting of Contract:** The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the Chief Engineer, save as provided below. Any breach of this condition shall entitle the Railway to rescind the contract under Clause 62 of these Conditions and also render the Contractor liable for payment to the Railway in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause.

In case Contractor intends to subcontract part of work, he shall submit a proposal in writing seeking permission of Chief Engineer for the same. While submitting the proposal to railway, Contractor shall ensure the following:

- (a) (i) The Contractor shall not sub-contract the Works comprising more than 40% (forty per cent) of the Contract Price and shall carry out Works for at least 60% (sixty per cent) of the total Contract Price directly under its own supervision and through its own personnel. The Parties expressly agree that for the purposes of computing the value of sub-contracts under this Clause 3.2.1, the Contract Price shall exclude any sub-contract for the procurement of goods and equipment like [rails, sleepers and track fittings, signaling and telecommunication & Power supply equipment]. The Parties agree that all obligations and liabilities under this Agreement for the entire Railway Project shall at all time remain with the Contractor. {The Parties agree that works equal to at least 30% (thirty per cent) of the Contract Price shall be discharged solely by the Lead Member.}\$

Procurement of material, hire of equipment or engagement of labour by prime contractor or procuring entity will not mean sub-contracting.

\$ May be deleted if the Contractor is not a Consortium/Joint Venture.

- (ii) The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract in last 5 years, ending date of submission of proposal by Contractor to Railway, costing not less than 35% value of work to be subletted, through a works contract. For fulfilment of above, Work Experience Certificate issued by a Govt. Department/Organisation shall be considered. Further, Work Experience Certificate issued by a Public listed company shall be considered provided the company is 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, registered at least 5 years back from the date of submission of proposal by Contractor to Railway and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates.

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

In case contractor submits subcontractor's work experience certificate issued by public listed company, the contractor 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.

- (iii) There is no banning of business with the sub-contractor in force over IR.
- (b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.
- (c) On receipt of approval from Chief Engineer, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer.
- (d) The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of commencement of subcontractor's work.
- (e) Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of Railway, with prior intimation to Chief Engineer.
- (f) The Contractor shall indemnify railway against any claim of subcontractor.
- (g) The Contractor shall release payment to the Sub-contractor(s) promptly and shall endeavour to resolve all issues amicably and speedily with the Sub-contractor(s), so that the execution of work is not affected in any manner whatsoever.
- (h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out

by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.

*Note: Work Experience Certificate to the subcontractor shall be issued only when the contractor's work is complete and contractor is entitled for the issuance of Work Experience Certificate. However, in the same contract, when the Chief Engineer, based on documents, is satisfied that the subcontractor has successfully carried out subletted work; without issuance of work experience certificate to subcontractor at this stage, the Chief Engineer can, **only once**, consider the successfully completed subletted work for the fulfilment of eligibility for further subletting of work to the subcontractor in the same contract. When the contractor's work is complete and contractor is entitled for the issuance of work experience certificate, the subcontractor shall be issued one Work Experience Certificate for the total scope of work executed by the subcontractor in the contract.*

- (i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.
 - (j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the Railway and this shall be deemed as 'excepted matter' (matter not arbitrable).
 - (k) The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the Railway and shall not relieve the Contractor of any responsibility under the Contract.
- 8. Assistance by Railway for the Stores to be obtained by the Contractor:** Owing to difficulty in obtaining certain materials (including Tools & Plant) in the market, the Railway may have agreed without any liability therefore to endeavour to obtain or assist the Contractor in obtaining the required quantities of such materials as may be specified in the Tender. In the event of delay or failure in obtaining the required quantities of the aforesaid material, the Contractor shall not be deemed absolved of his own responsibility and shall keep in touch with the day to day position regarding their availability and accordingly adjust progress of works including employment of labour and the Railway shall not in any way be liable for the supply of materials or for the non-supply thereof for any reasons whatsoever nor for any loss or damage arising in consequence of such delay or non-supply.
- 9. Railway Passes:** No free railway passes shall be issued by the Railway to the Contractor or any of his employee/worker.
- 10. Carriage of Materials:** No forwarding orders shall be issued by the Railway for the conveyance of Contractor's materials, tools and plant by train which may be required for use in the works and the Contractor shall pay full freight charges at public tariff rates therefor.
- 11. Use of Ballast Trains:** The Railway may agree to allow the Contractor use of the ballast or material trains under such conditions as shall be specially prescribed, provided that the Contractor shall pay for the use thereof charges calculated at public tariff rates on the marked carrying capacity of each vehicle subject to specified minimum charge per day or part of day and provided further that the Contractor shall indemnify the Railway against any claims or damages arising out of the use or

misuse thereof and against any liabilities under the Workmen's Compensation Act, 1923 or any statutory amendments thereto.

12. **Representation on Works:** The Contractor shall, when he is not personally present on the site of the works place, keep a responsible agent at the works during working hours who shall on receiving reasonable notice, present himself to the Engineer and orders given by the Engineer or the Engineer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this clause and failure on the part of the Contractor to comply with this provision at any time will entitle the Railway to rescind the contract under Clause 62 of these Conditions.
13. **Relics and Treasures:** All gold, silver, oil, other minerals of any description, all precious stones, coins, treasures relics antiquities and other similar things which shall be found in or upon the site shall be the property of the Railway and the Contractor shall duly preserve the same to the satisfaction of the Railway and shall from time to time deliver the same to such person or persons as the Railway may appoint to receive the same.
14. **Excavated Material:** The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay ballast, earth, trees, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings and produce shall be the property of the Railway provided that the Contractor may, with the permission of the Engineer, use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer.
15. **Indemnity by Contractors:** The Contractor shall indemnify and save harmless the Railway from and against all actions, suit, proceedings, losses, costs, damages, charges, 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 the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.
- 16.(1) **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 less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

- 16.(2) (i) Refund of Security Deposit:** Security Deposit mentioned in sub clause (1) above shall be returned to the Contractor along with or after, the following:

Final Payment of the Contract as per clause 51.(1) **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), in case applicable.

- 16.(2) (ii) Forfeiture of Security Deposit:** Whenever the contract is rescinded as a whole under clause 62 (1) 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 these conditions, the Security Deposit shall not be forfeited.

- 16.(3)** 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.

16.(4) Performance Guarantee:

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 22nd day after the date of issue of LOA. Further, if the 60th 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;
 - (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, 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;
- (ix) Twelve years National Defence Certificates;
- (x) Ten years 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/Con (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.
- (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%

- 17. Force Majeure Clause:** If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics/pandemics, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

- 17A Extension of Time in Contracts:** Subject to any requirement in the contract as to completion of any portion or portions of the works before completion of the whole, the Contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:

- (i) **Extension due to Modification:** Extension due to Modification: If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise.

- (ii) **Extension for Delay not due to Railway or Contractor:** If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of Railway's employees or by other Contractor employed by the Railway under Sub-Clause (4) of Clause 20 of these Conditions or in executing the work not forming part of the contract but on which Contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the Contractor not having received in due time necessary instructions from the Railway for which he shall have specially applied in writing to the Engineer or his authorized representative then upon happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening, but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The Contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time.
- (iii) **Extension for Delay due to Railways:** In the event of any failure or delay by the Railway to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the Railway due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the Contractor to damages or compensation therefor, but in any such case, the Railway may grant such extension or extensions of the completion date as may be considered reasonable. The Contractor shall indicate the period for which the work is likely to be delayed and shall seek extension of time as may be considered necessary under clause 17A(i) or/and 17A(ii) or/ and 17A(iii) above, as soon as the cause thereof shall arise and, in any case, not less than 15 days before the expiry of the date fixed for completion of the works. The Engineer shall consider the same and shall grant and communicate such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time; the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself.

The non-submission of request for extension or submission of request within less than 15 days before the expiry of the date fixed for completion of the works, shall make him ineligible for extension under these sub clauses, subject to final decision of Engineer.

- 17B Extension of Time with Liquidated Damages (LD) for delay due to Contractor:** The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17-A, the Railway may, if satisfied that the works can be completed by the Contractor within reasonable short time thereafter, allow the Contractor for further extension of time (Proforma at Annexure-VII) as the Engineer may decide. On such extension the Railway will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the

Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the *rate of Liquidated Damages as decided by Engineer, between 0.05% to 0.30% of contract value of the works for each week or part of the week*.

For the purpose of this 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.

S. No.	Duration of extension of time under Clause 17-B	Rate of Liquidated Damages
(i)	Up to Twenty Five percent of original period of completion including period of extension of time granted under Section 17A(i)	As decided by Engineer, between 0.01% to 0.05% of contract value for each week or part of the week
(ii)	Above Twenty Five percent but upto Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)	0.10 % of contract value for each week or part of the week
(iii)	Above Fifty percent of original period of completion including period of extension of time granted under Section 17A(i)	0.30 % of contract value for each week or part of the week

Provided further, that if the Railway is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the Railway shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's Security Deposit and rescind the contract under Clause 62 of these Conditions, whether or not actual damage is caused by such default.

NOTE:

In a contract, where extension(s) of time have been allowed once under clause 17B, further request(s) for extension of time under clause 17A can also be considered under exceptional circumstances. Such extension(s) of time under clause 17A shall be without any Liquidated damages, but the Liquidated damages already recovered during extension(s) of time granted previously under clause 17B shall not be waived. However, Price variation during such extension(s) shall be dealt as applicable for extension(s) of time under clause 17B.

17C Bonus for Early Completion of Work: In open tenders having advertised value more than Rs 50 crore and original period of completion 12 months or more, when there is no reduction in original scope of work by more than 10%, and no extension granted on either railway or Contractor's account, Contractor shall be entitled for a bonus of 1% for each 30 days early completion of work. The period of less than 30 days shall be ignored while working out bonus. The maximum bonus shall be limited to 5% of original contract value. The completion date shall be reckoned as the date of issuance of completion certificate by engineer.

18.(1) Illegal Gratification:

Procuring authorities as well as bidders, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

practices, either directly or indirectly, at any stage during the procurement process or during execution of resultant contracts:

- i) **"Corrupt practice"**: making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;
- ii) **"Fraudulent practice"**: any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;
- iii) **"Anti-competitive practice"**: any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of the procuring entity, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
- iv) **"Coercive practice"**: any coercion or any threat to impair or harm, directly or indirectly, any party or its property to influence the procurement process or affect the execution of a contract;
- v) **"Conflict of interest" (COI)**: any personal, financial, or business relationship between the bidder and any personnel of the procuring entity who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of the procuring entity directly or indirectly;
- vi) **"Undue Advantage"**: improper use of information obtained by the bidder from the procuring entity with an intent to gain an unfair advantage in the procurement process or for personal gain. This also includes if the bidder (or his allied firm) provided services for the need assessment/procurement planning of the tender process in which he is participating;
- vii) **"Obstructive practice"**: materially impede the procuring entity's investigation of a procurement process either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to such investigation or from pursuing the investigation; or by impeding the procuring entity's rights of audit or access to information;

18.(2) Punitive Provisions:

Without prejudice to and in addition to the rights of the procuring entity to other penal provisions as per the bid documents or contract, if the procuring entity comes to a conclusion that a (prospective) bidder contractor directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the procuring entity may take appropriate measures including one or more of the following:

- i) If his bids are under consideration in any procurement
 - a) Forfeiture or encashment of bid security;
 - b) calling off of any pre-contract negotiations; and
 - c) rejection and exclusion of the bidder from the procurement process
- ii) If a contract has already been awarded

- a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the procuring entity;
 - b) Forfeiture or encashment of any other security or bond relating to the procurement;
 - c) Recovery of payments including advance payments, if any, made by the procuring entity along with interest thereon at the prevailing rate;
- iii) Provisions in addition to above:
- a) Removal from the list of enlisted contractors and banning/debarment of the bidder from participation in future procurements of the procuring entity for a period not less than one year;
 - b) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;
 - c) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

Any question or dispute as to the commission of any such offence or compensation payable to the Railway under this Clause shall be settled by the General Manager of the Railway, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive.

EXECUTION OF WORKS

- 19.(1) Contractor's understanding:** It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the progress of the works, the general and local conditions, the labour conditions prevailing therein and all other matters which can in any way affect the works under the contract.
- 19.(2) Commencement of Works:** The Contractor shall commence the works within 15 days after the receipt by him of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay
- 19.(3) Accepted Programme of Work:** The Contractor who has been awarded the work shall as soon as possible but not later than 30 days after the date of receipt of the acceptance letter in respect of contracts with initial completion period of two years or less or not later than 90 days for other contracts have to submit the detailed programme of work indicating the time schedule of various items of works in the form of Bar Chart/PERT/CPM. He shall also submit the details of organisation (in terms of labour and supervisors), plant and machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The programme of work amended as necessary by discussions with the Engineer, shall be treated as the agreed programme of the work for the purpose of this contract and the Contractor shall endeavor to fulfil this programme of work. The progress of work will be watched accordingly and the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the Contractor in achieving earlier completion of item or whole of the works than indicated in the programme.

In Contracts for works of New Line/Gauge Conversion/Doubling/Railway Electrification, finalized through Tenders having advertised value more than Rs.100

crores, the Contractor shall submit a detailed time programme to the Engineer within 30 days after issue of LOA. The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software such as **Primavera/Sure Track/MS Project etc.** The program must identify the milestones, interface requirements and program reporting elements. The Contractor shall supply, free of cost one set of authorized software to the Engineer and the soft copy of structured program for the project. This shall be updated every month. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress. Each programme shall include:

The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage, Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing, each of these stages for work by each Subcontractor, if any, the sequence and timing of inspections and tests specified in the Contract, and a supporting report which includes:

a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works,

and details showing the Contractor's reasonable estimate for the number of each class of Contractor's Personnel & Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Engineer shall be entitled to rely upon the programme when planning their activities.

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer within 15 days in accordance with this Sub-Clause.

- 19.(4) Setting out of Works:** The Contractor shall be responsible for the correct setting out of all works in relation to original points, lines and levels of reference at his cost. The Contractor shall execute the work true to alignment, grade, levels and dimensions as shown in the drawing and as directed by the Engineer's representative and check these at frequent intervals. The Contractor shall provide all facilities like labour and instruments and shall cooperate with the Engineer's representative for checking of all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error appear or arise in any part of the work, the Contractor, on being required so to do by the Engineer's representative shall, at his own cost rectify such errors, to the satisfaction of the Engineer's representative.

Such checking shall not absolve the Contractor of his own responsibility of maintaining accuracy in the work. The Contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the work.

- 20.(1) Compliance to Engineer's Instructions:** The Engineer shall direct the order in which the several parts of the works shall be executed and the Contractor shall execute without delay all orders given by the Engineer from time to time; but the

Contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.

- 20.(2) Alterations to be Authorized:** No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorised, except under instructions from the Engineer. The Contractor shall be responsible to obtain such instructions in each and every case in writing from the Engineer.
- 20.(3) Extra Works:** Should works over and above those included in the contract require to be executed at the site, the Contractor shall have no right to be entrusted with the execution of such works which may be carried out by another Contractor or Contractors or by other means at the option of the Railway.
- 20.(4) Separate Contracts in Connection with Works:** The Railway shall have the right to let other contracts in connection with the works. The Contractor shall afford other Contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part of the Contractor's work depends upon proper execution or result upon the work of another Contractor(s), the Contractor shall inspect and promptly report to the Engineer any defects in such works that render it unsuitable for such proper execution and results. The Contractor's failure so-to inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other Contractor's work after the execution of his work.
- 21. Instruction of Engineer's Representative:** Any instructions or approval given by the Engineer's representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the Engineer provided always as follows:
- (a) Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or material and to order the removal or breaking up thereof.
 - (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm or vary such decision.
- 22.(1) Adherence to Specifications and Drawings:** The site and the detailed drawings shall be made available to the contractor commensurate with the accepted programme of work submitted under clause 19(3). The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If Contractor performs any works in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer, he shall bear all the costs arising or ensuing therefrom and shall be responsible for all loss to the Railway.
- 22.(2) Drawings and Specifications of the Works:** The Contractor shall keep one copy of Drawings and Specifications at the site, in good order, and such contract documents as may be necessary, available to the Engineer or the Engineer's Representative.
- 22.(3) Ownership of Drawings and Specifications:** All Drawings and Specifications and copies thereof furnished by the Railway to the Contractor are deemed to be the property of the Railway. They shall not be used on other works and with the exception of the signed contract set, shall be returned by the Contractor to the Railway on completion of the work or termination of the Contract.
- 22.(4) Compliance with Contractor's Request for Details:** The Engineer shall furnish with reasonable promptness, after receipt by him of the Contractor's request,

additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable there from.

- 22.(5) Meaning and Intent of Specification and Drawings:** If any ambiguity arises as to the meaning and intent of any portion of the Specifications and Drawings or as to execution or quality of any work or material, or as to the measurements of the works the decision of the Engineer thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the Chief Engineer who shall have the power to correct any errors, omissions, or discrepancies in aforementioned items and whose decision in the matter in dispute or doubt shall be final and conclusive.
- 23. Working during Night:** The Contractor shall not carry out any work between sunset 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.
- 24. Damage to Railway Property or Private Life and Property:** The Contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway, although all reasonable and proper precautions may have been taken by the Contractor. In case the Railway shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway may incur in reference thereto, shall be charged to the Contractor. The Railway shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.
- 25. Sheds, Storehouses and Yards:** The Contractor shall at his own expense provide himself with sheds, storehouses and yards in such situations and in such numbers as in the opinion of the Engineer is requisite for carrying on the works and the Contractor shall keep at each such sheds, storehouses and yards a sufficient quantity of materials and plant in stock as not to delay the carrying out of the works with due expedition and the Engineer and the Engineer's representative shall have free access to the said sheds, store houses and yards at any time for the purpose of inspecting the stock of materials or plant so kept in hand, and any materials or plant which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, storehouses or yards by the Contractor. The Contractor shall at his own expenses provide and maintain suitable mortar mills, soaking vats or any other equipments necessary for the execution of the works.

26. Provision of Efficient and Competent Staff at Work Sites by the Contractor:

26.1 The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound & proper manner and shall employ only such supervisors, workmen & labourers in or about the execution of any of these works as are careful and skilled in the various trades.

26.2 The Contractor shall at once remove from the works any agents, permitted subcontractor, supervisor, workman or labourer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him.

26.3 In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the Railway to rescind the contract under Clause 62 of these conditions.

26A. Deployment of Qualified Engineers at Work Sites by the Contractor:

26A.1 The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s), as prescribed in the tender documents.

26A.2 In case the Contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.

26A.3 No. of qualified Engineers required to be deployed by the Contractor for various activities contained in the works contract shall be as under as 'Special Condition of Contract'.

- (a) One Qualified Graduate Engineer when cost of work to be executed is Rs.200 lakh and above, and
- (b) One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs.25 lakh, but less than Rs.200 lakh.
- (c) If contract value is more than 5.0 Crore, additional qualified graduate engineer shall be deployed by the contractor as desired by the Engineer – in – charge and the decision will be final.

26A.4 Further in case the contractor fails to employ the Qualified Engineers, as aforesaid in Para 26A.2, shall be liable to pay an amount of Rs.50,000/- and Rs.30000/-, for each month or part thereof for the default period for the provisions respectively as contained in Para (a), (b) & (c) above with latest amendment if any.

27.(1) Workmanship and Testing: The whole of the works and/or supply of materials specified and provided in the contract or that may be necessary to be done in order to form and complete any part thereof shall be executed in the best and most substantial workman like manner with materials of the best and most approved quality of their respective kinds, agreeable to the particulars contained in or implied by the specifications and as referred to in and represented by the drawings or in such other additional particulars, instructions and drawings given during the carrying on of the works and to the entire satisfaction of the Engineer according to the instructions and directions which the Contractors may from time to time receive from the Engineer.

The materials may be subjected to tests by means of such machines, instruments and appliances as the Engineer may direct and wholly at the expense of the Contractor.

- 27.(2) Removal of Improper Work and Materials:** The Engineer or the Engineer's Representative shall be entitled to order from time to time:
- (a) The removal from the site, within the time specified in the order, of any materials which in his opinion are not in accordance with the specifications or drawings.
 - (b) The substitution of proper and suitable materials, and
 - (c) the removal and proper re-execution, notwithstanding any previous tests thereof or on account payments therefore, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order, the Railway shall be entitled to rescind the contract under Clause 62 of these conditions.
 - (d) The provision of Construction and Demolition Waste Management Rule 2016 issued by Ministry of Environment Forest and Climate Change dated 29.03.2016 and published in the Gazette of India, Part – II, Section -3, Sub-section (ii) are binding upon the Contractor. Contractor shall implement these provisions at worksites, for which no extra payment will be payable.
- 28. Facilities for Inspection:** The Contractor shall afford the Engineer and the Engineer's Representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, planks, ladders, pumps, appliances and things of every kind required for the purpose and the Engineer and the Engineer's Representative shall at all times have free access to every part of the works and to all places at which materials for the works are stored or being prepared.
- 29. Examination of Work before Covering Up:** The Contractor shall give 7 days' notice to the Engineer or the Engineer's Representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the reach of measurements in order that the work may be inspected or that correct dimensions may be taken before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer or the Engineer's Representative be uncovered and measured at the Contractor's expense or no allowance shall be made for such work or materials.
- 30. Temporary Works:** All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor and subject to the consent of the Engineer shall be removed by him at his expenses when they are no longer required and in such manner as the Engineer shall direct. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer will cause them to be removed and cost as increased by supervision and other incidental charges shall be recovered from the Contractor. If temporary huts are provided by the Contractor on the Railway land for labour engaged by him for the execution of works, the Contractor shall arrange for handing over vacant possession of the said land after the work is completed; if the Contractor's labour refuse to vacate, and have to be evicted by the Railway, necessary expenses incurred by the Railway in connection therewith shall be borne by the Contractor.
- 31.(1) Contractor to Supply Water for Works:** Unless otherwise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.

- 31.(2) Water Supply from Railway System:** The Railway may supply to the Contractor part or whole of the quantity of the water required for the execution of works from the Railway's existing water supply system at or near the site of works on specified terms and conditions and at such charges as shall be determined by the Railway and payable by the Contractor, provided that the Contractor shall arrange, at his own expense, to effect the connections and lay additional pipelines and accessories on the site and that the Contractor shall not be entitled to any compensation for interruption of failure of the water supply.
- 31.(3) Water Supply by Railway Transport:** In the event of the Railway arranging supply of water to the Contractor at or near the site of works by travelling water tanks or other means, the freight and other charges incurred thereby, including demurrage charges that may be levied, shall be paid by the Contractor in addition to the charges referred to in Sub-Clause (2) of the Clause provided that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.
- 31.(4)(a) Contractor to Arrange Supply of Electric Power for Works:** Unless otherwise provided in the contract, the Contractor shall be responsible for arrangements to obtain supply of Electric Power for the works.
- (b) Electric Supply from the Railway System:** The Railway may supply to the Contractor part or whole of the electric power wherever available and possible, required for execution of works from the Railway's existing electric supply systems at or near the site of works on specified terms and conditions and such charges as shall be determined by the Railway and payable by the Contractor provided the cost of arranging necessary connections to the Railway's Electric Supply systems and laying of underground/overhead conductor, circuit protection, electric power meters, transmission structure, shall be borne by the Contractor and that the Contractor shall not be entitled to any compensation for interruption or failure of the Electric supply system.
- 32. Property in Materials and Plant:** The materials and plant brought by the Contractor upon the site or on the land occupied by the Contractor in connection with the works and intended to be used for the execution thereof shall immediately be deemed to be the property of the Railway. Such of them as during the progress of the works are rejected by the Engineer under Clause 25 of these conditions or are declared by him not to be needed for the execution of the works or such as on the grant of the certificate of completion remain unused shall immediately on such rejection, declaration or grant cease to be deemed the property of the Railway and the Contractor may then (but not before) remove them from the site or the said land. This clause shall not in any way diminish the liability of the Contractor nor shall the Railway be in any way answerable for any loss or damage which may happen to or in respect of any such materials or plant either by the same being lost, stolen, injured or destroyed by fire, tempest or otherwise.
- 33.(1) Tools, Plant and Materials Supplied by Railway:** The Contractor shall take all reasonable care of all tools, plant and materials or other property whether of a like description or not belonging to the Railway and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents, permitted sub-contractor, or his workmen or others while they are in his charge. The Contractors shall sign accountable receipts for tools, plants and materials made over to him by the Engineer and on completion of the works shall hand over the unused balance of the same to the Engineer in good order and repair, fair wear

and tear excepted, and shall be responsible for any failure to account for the same or any damage done thereto.

- 33.(2) Hire of Railway's Plant:** The Railway may hire to the Contractor such plant as concrete mixers, compressors and portable engines for use during execution of the works on such terms as may be specified in the special conditions or in a separate agreement for Hire of Plant.
- 34.(1) Precaution During Progress of Works:** During the execution of works, unless otherwise specified, the Contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.
- 34.(2) Roads and Water Courses:** Existing roads or water courses shall not be blocked cut through, altered, diverted or obstructed in any way by the Contractor, except with the permission of the Engineer. All compensations claimed for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
- 34.(3) Provision of Access to Premises:** During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reasons of the execution of the works and shall react and maintain at his own cost barriers, lights and other safeguards as prescribed by the Engineer, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day, if so ordered by the Engineer and with such vigour so that the traffic way be impeded for as short a time as possible.
- 34.(4) Safety of Public:** The Contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or railway property and shall post such look out men as may, in the opinion of the Engineer, be required to comply with regulations appertaining to the work. Contractor shall ensure placement of barricading / partitions at the place of work to ensure safety of habitants of adjacent area, failing which Engineer may advise stoppage of work as per his discretion.
- 34.(5) Display Board:** The Contractor shall be responsible for displaying the details of works i.e. name of work, approximate cost, expected date of completion, name and address of the Contractor and address of Engineer on a proper steel Board of size not less than 1m x 1m.
- 35. Use of Explosives:** Explosives shall not be used on the works or on the site by the Contractor without the permission of the Engineer and then also only in the manner and to the extent to which such permission is given. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance with the Explosive Rules. The Contractor shall obtain the necessary license for the storage and the use of explosives. All operations in which or for which explosives are employed shall be at the sole risk and responsibility of the Contractor and the Contractor shall indemnify the Railway in respect thereof.
- 36.(1) Suspension of Works:** The Contractor shall on the order of the Engineer, suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension

properly protect and secure the work so far as is necessary in the opinion of the Engineer. If such suspension is:

- (a) Provided for in the contract, or
- (b) Necessary for the proper execution of the works or by the reason of weather conditions or by some default on the part of the Contractor, and or
- (c) Necessary for the safety of the works or any part thereof.
- (d) Necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site, or
- (e) Necessary to avoid disruption of traffic and utilities, as also to permit fast repair and restoration of any damaged utilities, or
- (f) Due to instruction of The National Green Tribunal or any other statutory authority due to high level of pollution in the city of worksite.

36.(2) The Contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works, but in the event of any suspension ordered by the Engineer for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer may consider proper having regard to the period or periods of such suspensions and to such compensations as the Engineer may consider reasonable in respect of salaries or wages paid by the Contractor to his employees during the periods of such suspension.

36.(3) Suspension Lasting More than 3 Months: If the progress of the works or any part thereof is suspended on the order of the Engineer for more than three months at a time, the Contractor may serve a written notice on the Engineer requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the Railway.

37. Rates for Items of Works:

- (i) The rates, entered in the accepted Schedule of Rates of the Contract are intended to provide for works duly and properly completed in accordance with the General and Special (if any) Conditions of the Contract and the Specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations or additions as may be ordered in terms of Clause 42 of these conditions and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply, including full freight of materials, stores, patterns, profiles, moulds, fittings, centerings, scaffolding, shoring props, timber, machinery, barracks, tackle, roads, pegs, posts, tools and all apparatus and plant required on the works, except such tools, plant or materials as may be specified in the contract to be supplied to the Contractor by the Railway, the erection, maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the Railway, the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners for surface damage or taxes and

impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract and all such other incidental charges or contingencies as may have been specially provided for in the Specifications.

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.

- 38. Demurrage and Wharfage Dues:** Demurrage charges calculated in accordance with the scale in force for the time being on the Railway and incurred by the Contractor failing to load or unload any goods or materials within the time allowed by the Railway for loading as also wharfage charges, of materials not removed in time, as also charges due on consignments booked by or to him shall be paid by the Contractor, failing which such charges shall be debited to the Contractor's account in the hands of the Railway and shall be deducted from any sums which may become due to him in terms of the contracts.

39.(1) Rates for Extra Items of Works:

- (a) Standard Schedule of Rates (SSOR) Items: Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted Bill(s) of Quantities but figures in the Standard Schedule of Rates (SSOR), shall be executed at the rates set forth in the "Standard Schedule of Rates (SSOR)" modified by the tender percentage as accepted in the contract for that chapter of Standard Schedule of Rates (SSOR). However, the cumulative value of all such extra item(s) together (modified by the respective tender percentage) shall not exceed 10 % of the original contract value.

For item(s) not covered in this sub clause, the rate shall be decided as agreed upon between the Engineer and the Contractor before the execution of such items of work as per sub clause (b).

- (b) Other Items: For any item of work to be carried out by the Contractor but not included in the accepted Bill(s) of Quantities and also not covered under sub clause (a) above, the Contractor shall be bound to notify the Engineer at least seven days before the necessity arises for the execution of such items of works that the accepted Bill(s) of Quantities does not include rate or rates for such extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer and Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the Contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at, the Railway shall be entitled to execute the extra works by other means and the Contractor shall have no claim for loss or damage that may result from such procedure.

The assessment of rates for extra item(s) shall be arrived at based on the prevailing market rates of labour, machinery & materials and by taking guidance from the following documents in order of priority:

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- i. Analysis of Rates for “Unified Standard Schedule of Rates of Indian Railways (USSOR)”
- ii. Analysis of Rates for “Delhi Schedule of Rates issued by CPWD (DSR)”
- iii. Market Analysis

39.(2) Provided that if the Contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereuntofore-mentioned, then and in such a case the Contractor shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be fixed by the Engineer. However, if the Contractor is not satisfied with the decision of the Engineer in this respect, he may appeal to the Chief Engineer within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The Chief Engineer's decision after hearing both the parties in the matter would be final and binding on the Contractor and the Railway.

40.(1) Handing over of Works: The Contractor shall be bound to hand over the works executed under the contract to the Railway complete in all respects to the satisfaction of the Engineer. The Engineer shall determine the date on which the work is considered to have been completed, in support of which his certificate shall be regarded as sufficient evidence for all purposes. The Engineer shall determine from time to time, the date on which any particular section of the work shall have been completed, and the Contractor shall be bound to observe any such determination of the Engineer.

40.(2) Clearance of Site on Completion: On completion of the works, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer. No final payment in settlement of the accounts for the works shall be paid, held to be due or shall be made to the, Contractor till, in addition to any other condition necessary for final payment, site clearance shall have been affected by him, and such clearance may be made by the Engineer at the expense of the Contractor in the event of his failure to comply with this provision within 7 days after receiving notice to that effect. Should it become necessary for the Engineer to have the site cleared at the expenses of the Contractor, the Railway shall not be held liable for any loss or damage to such of the Contractor's property as may be on the site and due to such removal there from which removal may be affected by means of public sales of such materials and property or in such a way as deemed fit and convenient to the Engineer.

40A: At the final stage of completion/ commissioning of work, in case the contractor fails to complete the final part(s) of the work and the value of such part(s) of the work is limited to 5% of the original contract value, the Engineer may allow/decide for offloading of such part(s) of works, either after the Contractor's request in writing to do so or after serving a 14 (Fourteen) days suo-moto notice (as per annexure- VIIA), if the Engineer is of the opinion that :-

- (i) Such Offloading of works (up to 5% of original contract value) would enable successful completion of contract/work,
- (ii) Termination/ Part termination of the contract at this stage is not be in the interest of the Railway/work;, and
- (iii) The anticipated additional cost for execution of such works through other mode would not be substantial and can be recovered from the pending dues of the contractor;

The Contractor shall be informed, in due course, by the Engineer of the mode and cost of execution of such offloaded work through other agency (ies) (as per annexure-VIIB). The extra expenditure so incurred in execution of the offloaded work, shall be recovered from subsequent Bill(s) or any other dues of the Contractor, but not exceeding the value of Performance Guarantee available in the contract. There shall be no other repercussion of such offloading on execution of the balance contract. The Contractor shall have no claim on account of above mentioned offloading of works.

VARIATIONS IN EXTENT OF CONTRACT

- 41. Modification to Contract to be in Writing:** In the event of any of the provisions of the contract required to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the Railway and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the Railway unless and until the same is incorporated in a formal instrument and signed by the Railway and the Contractor, and till then the Railway shall have the right to repudiate such arrangements.
- 42.(1) Powers of Modification to Contract:** The Engineer on behalf of the Railway shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.
- 42.(2) (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

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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.
 - (iv) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earthwork items and variation in the quantities of individual classifications of soil shall not be subject to this limit.
 - (v) As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule(s) 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).
- 42.(3) Valuation of Variations:** The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub-Clause (2) of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressively included and provided for in the Specifications and Drawings and the amounts to be paid therefor shall be calculated in accordance with the accepted Bill(s) of Quantities. Any extra items/quantities of work falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates determined under Clause-39 of these Conditions.

CLAIMS

- 43.(1) Quarterly Statement of Claims:** The Contractor shall prepare and furnish to the Engineer once in every quarter commencing from the month following the month of issue of Letter of Acceptance, an account giving full and detailed particulars of all claims for any additional expenses to which the Contractor may consider himself entitled to and of all extra or additional works ordered by the Engineer which he has executed during the preceding month quarter and no claim for payment for such work will be considered which has not been included in such particulars.
- 43.(2) Signing of "No Claim" Certificate:** The Contractor shall not be entitled to make any claim whatsoever against the Railway under or by virtue of or arising out of this contract, nor shall the Railway entertain or consider any such claim, if made by the Contractor, after he shall have signed a "No Claim" Certificate in favour of the Railway in such form as shall be required by the Railway after the works are finally measured up. The Contractor shall be debarred from disputing the correctness of the items covered by "No Claim" Certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

- 44. Quantities in Bill(s) of Quantities Annexed to Contract:** The quantities set out in the accepted Bill(s) of Quantities with items of works quantified are the estimated

quantities of the works and they shall not be taken as the actual and correct quantities of the work to be executed by the Contractor in fulfilment of his obligations under the contract.

45(i). Measurement of Works by Railway: The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Engineer or the Engineer's representative in accordance with the rules prescribed for the purpose by the Railway. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of works. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the Contractor's attendance, the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:

- (a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any re-measurement taken by the Engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and Classification of the measurements.
- (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

45(ii). Measurement of Works by Contractor's Authorized Representative (in case the contract provides for the same):

- (a) The Contractor shall be paid for the works at the rates in the accepted Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Contractor's authorized Engineer in accordance with the rules prescribed for the purpose by the Railway. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Engineer.

The date and time of test checks shall be communicated to the Contractor who shall be present at the site and shall witness the test checks, failing the Contractor's attendance the test checks may be conducted in his absence and such test checks shall not withstanding such absence be binding upon Contractor provided always that any

objection made by Contractor to test check shall be duly investigated and considered in the manner set out below:

- (i) It shall be open to the Contractor to take specific objection to test checks of any recorded measurement within 7 days of date of such test checks. Any re-test check done by the concerned Railway's authority in the presence of the Contractor or in his absence after due notice given to him in consequent of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
- (ii) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.
- (b) **Incorrect measurement, actions to be taken:** If in case during test check or otherwise, it is detected by the Engineer that agency has claimed any exaggerated measurement or has claimed any false measurement for the works which have not been executed; amounting to variation of 5% or more of claimed gross bill amount, action shall be taken as following:
 - (i) On first occasion of noticing exaggerated/ false measurement, Engineer shall recover liquidated damages equal to 10% of claimed gross bill value.
 - (ii) On any next occasion of noticing any exaggerated/false measurement, railway shall recover liquidated damages equal to 15% of claimed gross bill value. In addition the facility of recording of measurements by Contractor as well as release of provisional payment shall be withdrawn. Once withdrawn, measurements shall be done by railway as per clause 45(i) above.
- 46.(1) **"On-Account " Payments:** The Contractor shall be entitled to be paid from time to time by way of "On-Account" payment only for such works as in the opinion of the Engineer he has executed in terms of the contract. All payments due on the Engineer's/Engineer's Representative's certificates of measurements or Engineer's certified "Contractor's authorized Engineer's measurements" shall be subject to any deductions which may be made under these presents and shall further be subject to, unless otherwise required by Clause 16 of these Conditions, a retention of six percent by way of Security Deposits, until the amount of Security Deposit by way of such retentions shall amount to 5% of the total value of the contract provided always that the Engineer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer may withhold any certificate, if the works or any part thereof are not being carried out to his satisfaction.
- 46.(2) **Rounding off Amounts:** The total amount due on each certificate shall be rounded off to the nearest rupee, i.e. sum less than 50 paise shall be omitted and sums of 50 paise and more upto ₹1 will be reckoned as ₹ 1.
- 46.(3) **On Account Payments not Prejudicial to Final Settlement:** "On-Account" payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurements are specifically noted in the Measurement Book as "Final Measurements" and as such have been signed by the Contractor and Engineer/Engineer's Representative) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts nor of any particular quantity of work having been executed nor of the manner of its execution being satisfactory.
- 46.(4) If payment(s) of Advances are applicable in the contract, as mentioned in the Tender Documents, Railway shall make payment(s) of Interest bearing advances, on the

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request of contractor. The payment and recovery of such Advances shall be made as under:

(a): Mobilisation Advance –

This shall be limited to 10% of the Contract value and shall be paid in 2 stages:

Stage 1– 5% of Contract Value on signing of the contract agreement.

Stage 2 – 5% on mobilization of site-establishment, setting up offices, bringing in equipment and actual commencement of work.

The stage 1 of advance shall be payable immediately after signing of contract agreement.

The stage 2 of advance shall be payable at the time of mobilisation, only after submission of an utilization certificate by the contractor that the Stage 1 advance has been properly utilized in the contract.

These Advances shall be payable against irrevocable guarantee (Bank Guarantee, FDRs) from a scheduled commercial bank of India of at least 110% of the value of the sanctioned advance amount (covering principal plus interest).

(b) Advance Against Machinery and Equipment –

This advance shall be limited to a maximum of 10% of the contract value against new Machinery & Equipment, involving substantial outlay, brought to site and essentially required for the work. This advance shall not exceed 75% of the purchase price of such Equipment and shall be payable when Equipment is hypothecated to the President of India by a suitable bond or alternatively covered by an irrevocable Bank Guarantee from a scheduled commercial bank of India for full cost of the Plant & Equipment in a form acceptable to Railways. The Plant & Equipment shall be insured for the full value and for the entire period, they are required for the work. This Plant & Equipment shall not be removed from the site of work without prior written permission of the Engineer. No advance should be given against old Plant & Machinery.

The advances under sub clause (a) and (b) above, are subject to the following conditions -

(i) The full amount of Advances shall be recovered from contractor dues. The recovery shall commence when the value of contract executed reaches 15% of original contract value and shall be completed when the value of work executed reaches 85% of the original contract value. The installments on each "on account bill" will be on pro-rata basis.

Interest shall be recovered on the advance outstanding for the period commencing from the date of payment of advance till date of particular on-account bill (through which recovery of principal is effected) and adjusted fully against on-account bill along with pro-rata principal recovery. In the event of any short-fall, the same shall be carried forward to the next on-account bill and shall attract interest.

(ii) The advances shall be used by the Contractor for the purpose of the Contract, and for the purpose for which they are paid. Under no circumstances, shall the advances be diverted for other purposes. Any such diversion shall be construed as a breach of the Contract and the Contractor shall be asked to return the advance at once and pay interest at 15% per annum till the advance is recovered back from him. The Contractor shall return the advance and pay the interest in one go without demur. The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilisation advance.

(iii) If the Contractor is found to have contravened the provision, it will constitute a breach of contract and Railway shall be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.

(iv) In cases, where the Contract is rescinded as per clause 62 of the contract or short closed under any other condition(s) of the contract, without making full recovery of advances and accrued interest thereon, by the Railway, such balance of advances and accrued interest thereon shall immediately become due and payable by the Contractor to the Railway. The same shall be recovered from any due of Contractor with the Government of India.

46.(5) Manner of Payment: Unless otherwise specified payments to the Contractor will be transferred electronically to his bank account.

46A. PRICE VARIATION CLAUSE (PVC):

46A.1 Applicability: Price Variation Clause (PVC) shall be applicable only in tender having advertised value above **Rs.2 Crores**. Provided further that, in a contract where PVC is applicable, following shall be outside the purview of price adjustments (i.e. shall be excluded from the gross value of the work for the purpose of price variation) :

- a) Materials supplied by Railway to the Contractors, either free or at fixed rate;
- b) Any extra item(s) included in subsequent variation falling outside the purview of the Bill(s) of Quantities of tender, under clause 39. (1) (b) of these Standard General Conditions, unless applicability of PVC and 'Base Month' has been specially agreed, while fixing the rates of such extra item(s).

46A.2 Base Month: The Base Month for 'Price Variation Clause' shall be taken as one month prior to closing of tender, unless otherwise stated elsewhere.. The quarter for applicability of PVC shall commence from the month following the Base month. The Price Variation shall be based on the average Price Index of the quarter under consideration.

46A.3 Validity:

Rates accepted by Railway Administration shall hold good till completion of work and no additional individual claim shall be admissible except:

- (a) Payment/recovery for increase/decrease in GST on works contract or imposition /removal of any tax/cess on Works Contract as per Clause 37,
- (b) Payment/recovery for overall market situation as per Price Variation Clause given hereunder.

46A.4 Components of various items in a contract on which variation in prices be admissible, shall be steel, cement, ferrous material, non-ferrous material, insulators, zinc and other materials, labour, plant & machinery, fuel, explosives, detonators etc.

Adjustment for variation in prices of these items shall be determined in the manner prescribed.

46A.5 No price variation shall be admissible for fixed components.

46A.6 The percentages of various components in various type of works shall be as specified for all item (s)/ Bill(s) of Quantities in tender document and the same shall be fixed as per table & classifications given below:

(I). For Civil Engineering Works

S N	Classification		1A, 2 & 3A	4A	5A	6A	7	8A	9A	1B, 3B, 4B, 5B, 6B 8B & 9B	1C, 3C, 4C, 5C, 6C, 8C & 9C	3D, 4D, 5D, 6D, 8D & 9D	3E, 4E, 5E, 6E, 8E & 9E
	Components												
1	Fixed	*	15	15	15	15	15	15	15	15	15	15	15
2	Labour	L _c	20	25	30	20	50	20	20	0	0	10	25
3	Steel	S _c	0	0	0	0	0	0	0	85	0	50	0
4	Cement	C _c	0	0	15	0	0	0	0	0	85	0	0
5	Plant Machinery & Spares	PM _c	30	15	5	20	15	20	30	0	0	10	30
6	Fuel & Lubricants	F _c	25	15	5	15	15	20	15	0	0	10	20
7	Other materials	M _c	10	15	30	30	5	25	20	0	0	5	10
8	Detonators & Explosive	E _c	0	15	0	0	0	0	0	0	0	0	0
Total			100	100	100	100	100	100	100	100	100	100	100

* It shall not be considered for any price variation.

The classification mentioned in the table above represents following type of item(s) in the work(s) –

1 Earthwork in Formation

1A All Item(s) excluding 1B or/and 1C

1B Item(s) for supply of Steel

1C Item(s) for supply of Cement

2 Ballast Supply Works

3 Tunnelling Works (Without Explosives)

3A All Item(s) excluding 3B or/and 3C or/and 3D or/and 3E

3B Item(s) for supply of Steel

3C Item(s) for supply of Cement or/and Grout

3D Item(s) for Fabrication & Erection of Structures including supply of Steel

3E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

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4 Tunnelling Works (With explosives)

- 4A All Item(s) excluding 4B or/and 4C or/and 4D or/and 4E
- 4B Item(s) for supply of Steel
- 4C Item(s) for supply of Cement or/and Grout
- 4D Item(s) for Fabrication & Erection of Structures including supply of Steel
- 4E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

5 Building Works

- 5A All Item(s) excluding 5B or/and 5C or/and 5D or/and 5E
- 5B Item(s) for supply of Steel
- 5C Item(s) for supply of Cement
- 5D Item(s) for Fabrication & Erection of Structures including supply of Steel
- 5E Item(s) for Fabrication & Erection of Structures excluding supply of Steel.

6 Bridges & Protection work

- 6A All Item(s) excluding 6B or/and 6C or/and 6D or/and 6E
- 6B Item(s) for supply of Steel
- 6C Item(s) for supply of Cement
- 6D Item(s) for Fabrication, Assembly, Erection& Launching of Girders including supply of Steel
- 6E Item(s) for Fabrication, Assembly, Erection & Launching of Girders excluding supply of Steel

7 Permanent Way linking**8 Platform, Passenger Amenities**

- 8A All Item(s) excluding 8B or/and 8C or/and 8D or/and 8E
- 8B Item(s) for supply of Steel item/fittings
- 8C Item(s) for supply of Cement Item
- 8D Item(s) for Fabrication & Erection of Structures including supply of Steel
- 8E Item(s) for Fabrication & Erection of Structures excluding supply of Steel

9 Any Other Works not covered in Classification 1 to 8

- 9A All Item(s) excluding 9B or/and 9C or/and 9D or/and 9E
- 9B Item(s) for supply of Steel
- 9C Item(s) for supply of Cement or/and Grout
- 9D Item(s) for Fabrication & Erection of Structures including supply of Steel
- 9E Item(s) for Fabrication & Erection of Structures excluding supply of Steel

46A.7 Formulae: The Amount of variation in prices in various components (labour, material etc.) shall be worked out by the following formulae:

$$(i) \quad L = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (L_Q - L_B) \times L_C}{L_B \times 100}$$

$$(ii) \quad M = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (M_Q - M_B) \times M_C}{M_B \times 100}$$

$$(iii) \quad F = \frac{(W \text{ or } W_{SF} \text{ or } W_{SFL} \text{ or } W_{FL}) \times (F_Q - F_B) \times F_C}{F_B \times 100}$$

$$(iv) \quad E = \frac{(W) \times (E_Q - E_B) \times E_C}{E_B \times 100}$$

$$(v) \quad PM = \frac{(W \text{ or } W_{SF} \text{ or } W_F \text{ or } W_{SFL} \text{ or } W_{FL}) \times (PM_Q - PM_B) \times PM_C}{PM_B \times 100}$$

$$(vi) \quad S = \frac{(W \text{ or } W_S \text{ or } W_{SF}) \times (S_Q - S_B) \times S_C}{S_B \times 100}$$

$$(vii) \quad C = \frac{(W \text{ or } W_C) \times (C_Q - C_B) \times C_C}{C_B \times 100}$$

(II) For Railway Electrification Works:

$$(viii) \quad T = [0.4136 \times (C_Q - C_B) / C_B] \times 85$$

$$(ix) \quad R = [0.94 \times (R_T - R_O) / R_O + 0.06 \times (Z_T - Z_O) / Z_O] \times 85$$

$$(x) \quad N = [(P_T - P_O) / P_O] \times 85$$

$$(xi) \quad I = [(I_T - I_O) / I_O] \times 85$$

$$(xii) \quad G = [(M_Q - M_B) / M_B] \times 85$$

$$(xiii) \quad Er = [(L_Q - L_B) / L_B] \times 85$$

Where,

L Amount of price variation in Labour

M Amount of price variation in Materials

F Amount of price variation in Fuel

E Amount of price variation in Explosives

PM Amount of price variation in Plant, Machinery and Spares

S Amount of price variation in Steel Supply Item

C Amount of price variation in Cement Supply Item

T Percentage variation payable on the gross value of bill of Concreting (Bill(s) of Quantities for concrete items)

R Percentage variation payable on the gross value of bill of Ferrous Items (Bill(s) of Quantities for ferrous items)

N Percentage variation payable on the gross value of bill of Non-Ferrous Items (Bill(s) of Quantities for non-ferrous items)

I Percentage variation payable on the gross value of bill of Insulator (Bill(s) of Quantities for Insulator items)

G Percentage variation payable on the gross value of bill of General Works (Bill(s) of Quantities for General items)

Er Percentage variation payable on the gross value of erection (Bill(s) of Quantities for Erection Item)

L_C	% of Labour Component in the item(s)
M_C	% of Material Component in the item(s)
F_C	% of Fuel Component in the item(s)
E_C	% of Explosive Component in the item(s)
PM_C	% of Plant, Machinery and Spares Component in the item(s)
S_C	% of Steel Supply item Component in the item(s)
C_C	% of Cement Supply item Component in the item(s)
W	Gross value of work done by Contractor as per on-account bill(s) excluding the Gross value of work under W_S or/and W_C or/and W_{SF} or/and W_F or/and W_{SFL} or/and W_{FL} and cost of materials supplied by Railway either free or at fixed rate,
W_S	Gross value of work done by Contractor for item(s) of supply of steel.
W_C	Gross value of work done by Contractor for item(s) of supply of cement and /or supply of grout material.
W_{SF}	Gross value of work done by Contractor for item(s) of Fabrication & Erection of Structures including supply of Steel.
W_F	Gross value of work done by Contractor for Fabrication & Erection of Structures excluding supply of Steel.
W_{SFL}	Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders including supply of Steel.
W_{FL}	Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders excluding supply of Steel.
L_B	Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the base period
L_Q	Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
M_B	Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the base period
M_Q	Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
F_B	The average of official prices of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the base period
F_Q	The average of official prices of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the 3 months of the quarter under consideration

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E _B	Index number of Monthly Whole Sale Price Index for the category 'Explosive' of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.
E _Q	Index number of Monthly Whole Sale Price Index for the category 'Explosive' of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the average price index of 3 months of the quarter under consideration.
PM _B	Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction'– published in RBI (Reserve Bank of India) Bulletin, for the base period.
PM _Q	Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction'– published in RBI (Reserve Bank of India) Bulletin, for the average price index of 3 months of the quarter under consideration.
S _B	The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the base period.
S _Q	The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the 3 months of the quarter under consideration.
C _B	Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period
C _Q	No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the average price index of the 3 months of the quarter under consideration
R _T	IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is two months prior to date of inspection of material.
R _O	IEEMA price index for Steel Blooms (size 150mmx150mm)for the month which is one month prior to date of opening of tender.
P _T	IEEMA price index for Copper wire rods for the month which is two months prior to date of inspection of material.
P _O	IEEMA price index for Copper wire rods for the month which is one month prior to date of opening of tender.
Z _T	IEEMA price index for Zinc for the month which is two months prior to date of inspection of material
Z _O	IEEMA price index for Zinc for the month which is one month prior to date of opening of tender

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- I_T RBI wholesale price index for the sub-group “Insulators” for the month which is two months prior to date of inspection of material
- I_o RBI wholesale price index for the sub-group “Insulators” for the month which is one month prior to date of opening of tender

(III) **SIGNALING & TELECOMMUNICATION WORKS:**

- (a) The following expressions and meanings are assigned to the value of the work done for signalling and telecommunication works:

SIGWK = Value of signalling works for a stage payment of the item signalling works;

INVSIG = Value of inventory for signalling works for a stage payment of the item inventory for signalling works;

INTGTESTSIG = Value of integrated testing and commission for signalling works of the Railway Project;

COMWK = Value of telecommunication works for a stage payment of the item telecommunication works;

INVCOM = Value of inventory for telecommunication works for a stage payment of the item inventory for telecommunication works; and

INTGTESTCOM = Value of integrated testing and commission for telecommunication works of the Railway Project.

- (b) Price adjustment for changes in cost of signalling works and telecommunication works shall be paid in accordance with the following formula:

$$(i) \quad VSIGWK = 0.85 \text{ SIGWK} \times [PELEX \times (ELEX_i - ELEX_o) / ELEX_o + POFC \times (OFC_i - OFC_o) / OFC_o + PLB \times (LBI - LBo) / LBo + POTH \times (OTH_i - OTH_o) / OTH_o + S30C \times (P30C_i - P30C_o) / P30C_o + S24C \times (P24C_i - P24C_o) / P24C_o + S19C \times (P19C_i - P19C_o) / P19C_o + S12C \times (P12C_i - P12C_o) / P12C_o + S9C \times (P9C_i - P9C_o) / P9C_o + S6C \times (P6C_i - P6C_o) / P6C_o + S4C \times (P4C_i - P4C_o) / P4C_o + S2C \times (P2C_i - P2C_o) / P2C_o + S12C2.5 \times (P12C2.5_i - P12C2.5_o) / P12C2.5_o + S2C2.5 \times (P2C2.5_i - P2C2.5_o) / P2C2.5_o + S2C25 \times (P2C25_i - P2C25_o) / P2C25_o + QC \times (PQC_i - PQC_o) / PQC_o];$$

$$(ii) \quad VINVSIG = 0.85 \text{ SIGWK} \times [PELEX \times (ELEX_i - ELEX_o) / ELEX_o + POTH \times (OTH_i - OTH_o) / OTH_o];$$

$$(iii) \quad VINTGTESTSIG = 0.85 \text{ INTGTESTSIG} \times [PLB \times (LBI - LBo) / LBo + POTH \times (OTH_i - OTH_o) / OTH_o];$$

$$(iv) \quad VCOMWK = 0.85 \text{ COMWK} \times [PELEX \times (ELEX_i - ELEX_o) / ELEX_o + POFC \times (OFC_i - OFC_o) / OFC_o + PLB \times (LBI - LBo) / LBo + POTH \times (OTH_i - OTH_o) / OTH_o + S30C \times (P30C_i - P30C_o) / P30C_o + S24C \times (P24C_i - P24C_o) / P24C_o + S19C \times (P19C_i - P19C_o) / P19C_o + S12C \times (P12C_i - P12C_o) / P12C_o + S9C \times (P9C_i - P9C_o) / P9C_o + S6C \times (P6C_i - P6C_o) / P6C_o + S4C \times (P4C_i - P4C_o) / P4C_o + S2C \times (P2C_i - P2C_o) / P2C_o + S12C2.5 \times (P12C2.5_i - P12C2.5_o) / P12C2.5_o + S2C2.5 \times (P2C2.5_i - P2C2.5_o) / P2C2.5_o + S2C25 \times (P2C25_i - P2C25_o) / P2C25_o + QC \times (PQC_i - PQC_o) / PQC_o + PCEQP \times (CEQP_i - CEQP_o) / CEQP_o];$$

- (v) $VINVCOM = 0.85 \text{ SIGWK} \times [\text{PELEX} \times (\text{ELEX}_i - \text{ELEX}_o) / \text{ELEX}_o + \text{PCEQP} \times (\text{CEQP}_i - \text{CEQP}_o) / \text{CEQP}_o + \text{POTH} \times (\text{OTH}_i - \text{OTH}_o) / \text{OTH}_o]$; and
- (vi) $VINTGTESTCOM = 0.85 \text{ INTGTESTCOM} \times [\text{PLB} \times (\text{LBI} - \text{LBO}) / \text{LBO} + \text{POTH} \times (\text{OTH}_i - \text{OTH}_o) / \text{OTH}_o]$.

Where

VSIGWK = Increase or decrease in the cost of signalling works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VINVSIG = Increase or decrease in the cost of inventory for signalling during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VINTGTESTSIG = Increase or decrease in the cost of integrated testing and commissioning of signalling works of the Railway Project during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VCOMWK = Increase or decrease in the cost of communication works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VINVCOM = Increase or decrease in the cost of inventory for telecommunications works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VINTGTESTCOM = Increase or decrease in the cost of integrated testing and commissioning of telecommunication works of the Railway Project during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

PCEQP, PELEX, PIC, PLB, POFC, and POTH are the percentages of communication equipment, electronics, PVC insulated cables, labour, optical fibre cables, and other materials respectively;

CEQP_o = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called “WPI”) for communication equipment for the month of the Base Month;

CEQP_i = The WPI for communication equipment for the average price index of the 3 months of the quarter under consideration;

ELEX_o = The WPI for electronics for the month of the Base Month;

ELEX_i = The WPI for electronics for the average price index of the 3 months of the quarter under consideration;

P30C_i = Price payable per Km as adjusted in accordance with price variation Clause for size 30C x 1.5 sq mm signalling cable

P30C_o = Price per Km of cable as per purchase order/ Contract agreement.

S30C = Percentage of size 30C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P24C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 24C x 1.5 sq mm signalling cable

$P24C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S24C$ = Percentage of size 24C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P19C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 19C x 1.5 sq mm signalling cable

$P19C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S19C$ = Percentage of size 19C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P12C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 12C x 1.5 sq mm signalling cable

$P12C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S12C$ = Percentage of size 12C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P9C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 9C x 1.5 sq mm signalling cable

$P9C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S9C$ = Percentage of size 9C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P6C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 6C x 1.5 sq mm signalling cable

$P6C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S6C$ = Percentage of size 6C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P4C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 4C x 1.5 sq mm signalling cable

$P4C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S4C$ = Percentage of size 4C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P2C_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 1.5 sq mm signalling cable

$P2C_o$ = Price per Km of cable as per purchase order/ Contract agreement.

$S2C$ = Percentage of size 2C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

$P12C2.5_i$ = Price payable per Km as adjusted in accordance with price variation Clause for size 12C x 2.5 sq mm signalling cable

$P12C2.5_o$ = Price per Km of cable as per purchase order/ Contract agreement.

S12C2.5 = Percentage of size 12C x 2.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P2C2.5_i = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 2.5 sq mm signalling cable

P2C2.5_o = Price per Km of cable as per purchase order/ Contract agreement.

S2C2.5 = Percentage of size 2C x 2.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P2C25_i = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 25 sq mm signalling cable

P2C25_o = Price per Km of cable as per purchase order/ Contract agreement.

S2C25 = Percentage of size 2C x 25 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

PQC_i = Price payable per Km as adjusted in accordance with price variation Clause for size 0.9mm dia, 6 Quad cable.

PQC_o = Price per Km of cable as per purchase order/ Contract agreement.

QC = Percentage of size 0.9mm dia, 6 Quad cable shall govern the price.

LBo = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called “CPI”) for the month of the Base Month;

LBi = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration;

OFC_o = The WPI for fibre cables for the month of the Base Month;

OFC_i = The WPI for fibre cables for the average price index of the 3 months of the quarter under consideration;

OTH_o = The WPI for all commodities for the month of the Base Month; and

OTH_i = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration.

- (c) The following percentages shall govern the price adjustment of the Contract Price for signalling and telecommunication works:

Works Component	Signalling			Telecommunication		
	Signalling Works	Signalling inventory	Integrated testing and Commissioning	Telecommunication Works	Telecomm inventory	Integrated testing and Commissioning
Electronics (PELEX)	****%	****%	—	****%	****%	—

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Communication Equipment (PCEQP)	—	—	—	***0%	***0%	—
Optical Fibre Cable (POFC)	***0%	—	—	***0%	—	—
30C x 1.5 sq mm signalling cable(S30C)	***0%	—	—	***0%	—	—
24C x 1.5 sq mm signalling cable (S24C)	***0%	—	—	***0%	—	—
19Cx 1.5 sq mm signalling cable (S19C)	***0%	—	—	***0%	—	—
12C x 1.5 sq mm signalling cable (S12C)	***0%	—	—	***0%	—	—
9C x 1.5 sq mm signalling cable (S9C)	***0%	—	—	***0%	—	—
6C x 1.5 sq mm signalling cable (S6C)	***0%	—	—	***0%	—	—
4C x 1.5 sq mm signalling cable (S4C)	***0%	—	—	***0%	—	—
2C x 1.5 sq mm signalling cable (S2C)	***0%	—	—	***0%	—	—
12C x 2.5 sq mm signalling cable (S12C2.5)	***0%	—	—	***0%	—	—
2C x 2.5 sq mm signalling cable (S2C2.5)	***0%	—	—	***0%	—	—
2C x 25 sq mm signalling cable (S2C25)	***0%	—	—	***0%	—	—
0.9 mm dia, 6Quad cable (QC)	***0%	—	—	***0%	—	—
Labour (PLB)	***0%	—	***0%	***0%	***0%	***0%
Other materials	***0%	***0%	***0%	***0%	***0%	***0%
Total	100%	100%	100%	100%	100%	100%

(Note- the percentages may be finalized by tendering authority depending on BOQ)

FORMULAE FOR SIGNALING & TELECOM CABLE

The price payable for signalling cables is variable as per Price Variation Formula given below:

For Signalling Copper Cables:

$$P_i = P_o + CuF (Cu - Cu_o) + CCF_{cu}(CC - CC_o) + FeF (Fe - Fe_o)$$

For Telecom Copper Cables For Jelly Filled, 0.9 mm dia, 6 quad cable

$$P_i = P_o + CuF (Cu - Cu_o) + AlF_{cu}(Al - Al_o) + CCF_{cu} (CC - Cc_o) + FeF (Fe - Fe_o)$$

For Aluminium Power Cables:

$$P_i = P_o + AlF (Al - Al_o) + CCF_{Al}(CC - CC_o) + FeF (Fe - Fe_o)$$

Where,

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

P_i = Price payable per KM as adjusted in accordance with Price variation clause.

P_o = Price per KM of cable as per Purchase order.

CuF = Variation factor for Copper

Cu_o = Price of copper Rod in Rs. Per MT

$CCFCu$ = Variation factor for PVC Compound for Copper Signalling & Telecom cable

CCo = Price of PVC Compound in Rs. Per MT

AlF = Variation factor for Aluminium

Al_o = Price of EC grade LME Aluminium rods (Properzi rods) in Rs. Per MT.

$CCFAI$ = Variation factor for PVC Compound for Aluminium power cable

FeF = Variation factor for Steel

Fe_o = Price of Steel for Armour (Flat strip 4 mm. x 0.8mm/ Round 1.4mm dia) in Rs. Per MT

(Prices per MT for Cu_o , CCo , Fe_o , Al_o as applicable on the 1st working day of the month, one month prior to the deadline for submission of bids. The above prices and indices are as published by IEEMA vide circular reference no. IEEMA (PVC) /CABLE --/--/-- one month prior to the deadline for submission of bids.)

Cu = Price of Copper Rod in Rs. Per MT.

C_c = Price of PVC Compound in Rs. Per MT.

Fe = Price of Steel for Armouring (Flat strip 4mm x 0.8 mm/ Round 1.4mm dia) in Rs. Per MT.

Al = Price of EC grade LME Aluminium rods (Properzi rods) in Rs. Per MT.

(Prices per MT for Cu , CC , Fe , Al as prevailing on 1st working day of the calendar month covering the date One month prior to the date of inspection call letter will be applicable for the calculation of updated price. The above prices and indices are as published by IEEMA vide circular reference no. IEEMA (PVC) /CABLE --/--/-- one month prior to the date of inspection.)

The value of variation factors for copper, steel and PVC Compound are different for different sizes of signalling cables. Accordingly, the PVC formula for some of the types of signalling cable is as given under:-

Underground Railway Signalling Cable unscreened and armoured copper conductor

- (i) Size 30 C x 1.5 sq.mm.

$$P_{30C_i} = P_{30C_o} + 0.391(Cu - Cu_o) + 0.557(CC - CCo) + 0.425(Fe - Fe_o)$$

For armouring, price of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

- (ii) Size 24C x 1.5 sq.mm

$$P_{24C_i} = P_{24C_o} + 0.313(Cu - Cu_o) + 0.481 (CC - CCo) + 0.398(Fe - Fe_o)$$

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

- (iii) Size 19C x 1.5 sq.mm

$$P19C_i = P19C_o + 0.248(Cu-Cu_o) + 0.395(CC-CC_o) + 0.343(Fe-Fe_o)$$

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

- (iv) Size 12C x 1.5 sq.mm

$$P12C_i = P12C_o + 0.157(Cu-Cu_o) + 0.277(CC-CC_u) + 0.289(Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (v) Size 9C x 1.5 sq.mm

$$P9C_i = P9C_o + 0.117(Cu-Cu_o) + 0.241(CC-CC_u) + 0.383(Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (vi) Size 6Cx 1.5 sq.mm

$$P6C_i = P6C_o + 0.078(Cu-Cu_o) + 0.199(CC-CC_u) + 0.329(Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (vii) Size 4Cx1.5 sq.mm

$$P4C_i = P4C_o + 0.052(Cu-Cu_o) + 0.152(CC-CC_o) + 0.277(Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (viii) Size 2C x 4 sq.mm(multistrand)

$$P2C_i = P2C_o + 0.073(Cu-Cu_o) + 0.156(CC-CC_o) + 0.3(Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (ix) Size 12C x 2.5 sq.mm

$$P12C2.5_i = P12C2.5_o + 0.282 (Cu-Cu_o) + 0.371 (CC-CC_o) + 0.342 (Fe-Fe_o)$$

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

- (x) Size 2C x 2.5 sq.mm

$$P2C2.5_i = P2C2.5_o + 0.047 (Cu-Cu_o) + 0.139 (CC-CC_o) + 0.277 (Fe-Fe_o)$$

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

- (xi) Size 2C x 25 sq.mm PVC insulated, armoured, Aluminium power cable

$$P2C25_i = P2C25_o + 0.146 (Al-Alo) + 0.303 (CC-CC_o) + 0.306 (Fe-Fe_o)$$

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

- (xii) For Jelly filled, 0.9mm dia, 6 quad cable

$$PQC_i = PQC_o + 0.135 (Al-Alo) + 0.139 (Cu-Cu_o) + 0.515 (CC-Cco) + 0.693 (Fe-Fe_o)$$

For PVC Compound Grade CW-22, is to be taken into consideration.

46A.8 The demands for escalation of cost shall be allowed on the basis of provisional indices as mentioned above in Clause 46A.7. Any adjustment needed to be done based on the finally published indices shall be made as and when they become available.

46A.9: (1) Relevant categories of steel for the purpose of operating Price Variation formula as mentioned in this Clause shall be as under:

SL	Classification	Rates to be used for calculating S_Q or S_B
1.	Reinforcement bars and other rounds	Average of per tonne rates of 10mm dia TMT & 25mm dia TMT; confirming IS1786; Fe 500
2.	All types and sizes of angles, channels and joists	Average of per tonne rates of 'Angle 75x75x6mm, Mild Steel Plate 10mm thickness and Channel 150x75mm; confirming IS2062, E250 Gr "A"
3.	All types and sizes of plates	Average of per tonne rates of 'MS Plates 10mm thickness and 25mm thickness; confirming IS2062, E250 Gr "A"
4.	Any other section of steel not covered in the above categories	Average of price for the 3 categories covered under SL 1, 2 & 3 in this table.

(2). Relevant city for referring "JPC (Joint Plant Committee)" rates of steel items (S_Q / S_B) in different Zonal Railways shall be as under :

SL	City	Railway
1.	Delhi	Northern , North Central, North Eastern, North Western
2.	Kolkata	Eastern, East Central, East Coast, Northeast Frontier, South Eastern, Southeast Central
3.	Mumbai	Central, Western, West Central
4.	Chennai	Southern, South Central&South Western

46A.10 Price Variation during Extended Period of Contract

The price adjustment as worked out above, i.e. either increase or decrease shall be applicable upto the stipulated date of completion of work including the extended period of completion where such extension has been granted under Clause 17A of the Standard General Conditions of Contract. However, where extension of time has been granted due to Contractor's failure under Clause 17B of the Standard General Conditions of Contract, price adjustment shall be done as follows:

- a. In case the indices increase above the indices applicable to the last month of original completion period or the extended period under Clause 17A, the price adjustment for the period of extension granted under Clause 17B shall be limited to the amount payable as per the Indices applicable to the last month of the original completion period or the extended period under Clause 17A of the Standard General Conditions of Contract; as the case may be.
- b. In case the indices fall below the indices applicable to the last month of original/ extended period of completion under Clause 17A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17B of the Standard General Conditions of Contract.

47. Maintenance of Works: The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form after the date of issue of the certificate of completion by the Engineer or any other

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

earlier date subsequent to the completion of the works that may be fixed by the Engineer, be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the Railway or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.

- 48.(1) Certificate of Completion of Works:** As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways against the contract concerned.

The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the Railway. When any such certificate is given in respect of part of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

- 48.(2) Contractor not Absolved by Completion Certificate:** The Certificate of Completion in respect of the works referred to in Sub-Clause (1) of this Clause shall not absolve the Contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor, the Engineer may employ labour and materials or appoint another Contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.
- 48.(3) Final Supplementary Agreement:** After the work is completed or otherwise concluded by the parties with mutual consent, and taken over by the Railway as per terms and conditions of the contract agreement, and there is unequivocal no claim on either side under the Contract other than as mentioned in item 4 of Annexure XIV, the parties shall execute the Final Supplementary Agreement as per Annexure XIV.

49. Approval only by Maintenance Certificate: No certificate other than Maintenance Certificate, if applicable, referred to in Clause 50 of the Conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof.

50.(1) Maintenance Certificate: The Contract shall not be considered as completed until a Maintenance Certificate, if applicable, shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period pursuant to Sub Clause (2) to Clause 48 of these Conditions shall have been completed to the satisfaction of the Engineer, and full effect shall be given to this Clause notwithstanding the taking possession of or using the works or any part thereof by the Railway.

The Competent Authority to issue above Maintenance Certificate shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the Certificate. The Certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways against the contract concerned

50.(2) Cessation of Railway's Liability: The Railway shall not be liable to the Contractor for any matter arising out of or in connection with the contract for execution of the works unless the Contractor has made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this clause.

50.(3) Unfulfilled Obligations: Notwithstanding the issue of the Maintenance Certificate the Contractor and (subject to Sub-Clause (2) of this Clause) the Railway shall remain liable for the fulfilment of any obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such Certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.

51.(1) Final Payment: On the Engineer's certificate of completion in respect of the works, adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements or Engineer's certified "contractor's authorized engineer's measurements" of the total quantity of work executed by the Contractor upto the date of completion and on the rates accepted in Bill(s) of Quantities and for extra works on rates determined under Clause 39 of these Conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having signed delivered to the Engineer enclosing either a full account in detail of all claims he may have on the Railway in respect of the works or having delivered No Claim Certificate and the Engineer having after the receipt of such account given a certificate in writing that such claims are not covered under excepted matter i.e. Clauses 7(j), 8, 18, 22(5), 39.1, 39.2, 40A, 43(2), 45(i)(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1), 63(iv) and 63.2.11 of the Standard General Conditions of Contract or in any Clause (stated as excepted matter) of the

Special Conditions of the Contract, that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the Railway for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.

51.(2) Post Payment Audit: It is an agreed term of contract that the Railway reserves to itself the right to carry out a post-payment audit and/ or technical examination of the works and the Final Bill including all supporting vouchers, abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him till the release of security deposit or settlement of claims, whichever is later, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.

51-A. Production of Vouchers etc. by the Contractor:

- (i) For a contract of more than one crore of rupees, the Contractor shall, whenever required, produce or cause to be produced for examination by the Engineer any quotation, invoice, cost or other account, book of accounts, voucher, receipt, letter, memorandum, paper of writing or any copy of or extract from any such document and also furnish information and returns verified in such manner as may be required in any way relating to the execution of this contract or relevant for verifying or ascertaining cost of execution of this contract (the decision of the Engineer on the question of relevancy of any documents, information or return being final and binding in the parties). The Contractor shall similarly produce vouchers etc., if required to prove to the Engineer, that materials supplied by him, are in accordance with the specifications laid down in the contract.
- (ii) If any portion of the work in a contract of value more than one crore of rupees be carried out by a sub-contractor or any subsidiary or allied firm or company (as per Clause 7 of the Standard General Conditions of Contract), the Engineer shall have power to secure the books of such sub-contract or any subsidiary or allied firm or company, through the Contractor, and such books shall be open to his inspection.
- (iii) The obligations imposed by Sub Clause (i) & (ii) above is without prejudice to the obligations of the Contractor under any statute rules or orders binding on the Contractor.

52. Withholding and Lien in Respect of Sums Claimed: Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the Contractor, the Railway shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the Contractor and for the purpose aforesaid, the Railway shall be entitled to withhold the said cash Security Deposit or the Security if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the Railway shall be entitled to withhold and have a lien to the extent of the such claimed amount or amounts referred to supra, from any sum or sums found payable or which at any time thereafter may become payable to the Contractor under the same contract or any other contract with this or any other Railway or any

Department of the Central Government pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the Railway will be kept withheld or retained as such by the Railways till the claim arising out of or under the contract is determined by the arbitrator (if the contract governed by the Arbitration Clause) or by the competent court as the case may be and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a partnership firm or a company, the Railway shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner / company, as the case may be whether in his individual capacity or otherwise.

52-A Lien in Respect of Claims in other Contracts:

- (i) Any sum of money due and payable to the Contractor (including the Security Deposit returnable to him) under the contract may be withheld or retained by way of lien by the Railway, against any claim of this or any other Railway or any other Department of the Central Government in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with this or any other Department of the Central Government.
 - (ii) However, recovery of claims of Railway in regard to terminated contracts may be made from the Final Bill, Security Deposits and Performance Guarantees of other contract or contracts, executed by the Contractor. The Performance Guarantees submitted by the Contractor against other contracts, if required, may be withheld and encashed. In addition, 10% of each subsequent 'on-account bill' may be withheld, if required, for recovery of Railway's dues against the terminated contract.
 - (iii) It is an agreed term of the contract that the sum of money so withheld or retained under this Clause by the Railway will be kept withheld or retained as such by the Railway till the claim arising out of or under any other contract is either mutually settled or determined by arbitration, if the other contract is governed by Arbitration Clause or by the competent court as the case may be and Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this Clause and duly notified as such to the Contractor.
- 53. Signature on Receipts for Amounts:** Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents, shall, if signed in the partnership name by anyone of the partners of a Contractor's firm be a good and sufficient discharge to the Railway in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor, partners during the pendency of the contract, it is hereby expressly agreed that every receipt by anyone of the surviving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this Clause contained shall be deemed to prejudice or effect any claim which the Railway may hereafter have against the legal representative of any Contractor partner so dying for or in respect to any breach of any of the conditions of the contract, provided also that nothing in this clause contained shall be deemed to prejudice or effect the respective

rights or obligations of the Contractor partners and of the legal representatives of any deceased Contractor partners interse.

LABOUR

- 54. Wages to Labour:** The Contractor shall be responsible to ensure compliance with the provision of the Minimum Wages Act, 1948 (hereinafter referred to as the “said Act”) and the Rules made there under in respect of any employees directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out this contract.

If, in compliance with the terms of the contract, the Contractor supplied any labour to be used wholly or partly under the direct orders and control of the Railways whether in connection with any work being executed by the Contractor or otherwise for the purpose of the Railway such labour shall, for the purpose of this Clause, still be deemed to be persons employed by the Contractor.

If any moneys shall, as a result of any claim or application made under the said Act be directed to be paid by the Railway, such money shall be deemed to be moneys payable to the Railway by the Contractor and on failure by the Contractor to repay the Railway any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the Railways shall be entitled to recover the same from Contractor’s bills/Security Deposit or any other dues of Contractor with the Government of India.

- 54-A. Apprentices Act:** The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued there under from time to time in respect of apprentices directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out the Contract.

If the Contractor directly or through petty Contractors or sub-contractors fails to do so, his failure will be a breach of the contract and the Railway may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

- 55. Provisions of Payments of Wages Act:** The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made thereunder in respect of all employees employed by him either directly or through petty Contractors or sub-contractors in the works. If in compliance with the terms of the contract, the Contractor directly or through petty Contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall nevertheless be deemed to comprise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the Railways deduct the same from any moneys due to the Contractor in terms of the contract. The Railway shall be entitled to recover the same from Contractor’s bills/Security Deposit or any other dues of Contractor with the Government of India all moneys paid or payable by the Railway by way of compensation of aforesaid or for costs of expenses in connection with

any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

55-A. Provisions of Contract Labour (Regulation and Abolition) Act, 1970:

55-A.(1) The Contractor shall comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.

55-A.(2) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Act.

55-A.(3) The Contractor shall pay to the labour employed by him directly or through sub-contractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour, indirectly engaged on the works including any engaged by sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

55-A.(4) In respect of all labour directly or indirectly employed in the work for performance of the Contractor's part of the contract, the Contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.

55-A.(5) In every case in which, by virtue of the provisions of the aforesaid Act or the rules, the Railway is obliged to pay any amount of wages to a workman employed by the Contractor or his sub-contractor in execution of the work or to incur any expenditure on account of the contingent, liability of the Railway due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the Railway will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the Railway under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the Railway shall be at liberty to recover such amount or part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. The Railway shall not be bound to contest any claim made against it under Sub-Section (1) of Section 20 and Sub-Section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to the Railway full security for all costs for which the Railway might become liable in contesting such claim. The decision of the Chief Engineer regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

55-B. Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952: The Contractor shall comply with the provisions of Para 30 & 36-B of the Employees Provident Fund Scheme, 1952; Para 3 & 4 of Employees' Pension Scheme, 1995; and Para 7 & 8 of Employees Deposit Linked Insurance Scheme, 1976; as modified from time to time through enactment of "Employees Provident Fund & Miscellaneous Provisions

Act, 1952”, wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.

55-C (i) Contractor is to abide by the provisions of various labour laws in terms of above clause 54, 55, 55-A and 55-B of the Standard General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website ‘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 in Portal shall be done as under:

- (a) Contractor shall apply for onetime 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 in 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 Letter of Acceptances (LoAs) issued in his favour.
- (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoAs) / 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 & payments made thereof after each wage period.
- (ii) While processing payment of any ‘On Account Bill’ or ‘Final Bill’ or release of ‘Advances’ or ‘Performance Guarantee / Security Deposit’, contractor shall submit a certificate to the Engineer or Engineer’s representatives that “I have uploaded the correct details of contract labours 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’ till ____Month, ____Year.”

55-D. Provisions of “The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996” and “The Building and Other Construction Workers’ Welfare Cess Act, 1996”:

The tenderers, for carrying out any construction work, shall get themselves registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and Rules made thereto by the concerned State Govt., and submit Certificate of Registration issued by Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor’s bills as per provisions of the Act.

The Cess shall be deducted from contractor's bills as per provisions of the Act. Building and other construction workers cess is applicable on the total cost of construction including the cost of material. (Authority: Railway Board's letter no. 2008/CE-I/CT/6 dated 09.08.2019 with latest amendment if any).

56. **Reporting of Accidents:** The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or sub-contractor employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineers Representative and shall make every arrangements to render all possible assistance.
57. **Provision of Workmen's Compensation Act:** In every case in which by virtue of the provisions of Section 12 Sub-Section (1) of the Workmen's Compensation Act 1923, Railway is obliged to pay compensation to a workman directly or through petty Contractor or subcontractor employed by the Contractor in executing the work, Railway will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of Railway under Section 12 Sub-section (2) of the said Act, Railway shall be at liberty to recover such amount or any part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. Railway shall not be bound to contest any claim made against it under Section 12 Sub-Section (1) of the said Act except on the written request of the Contractor and upon his giving to Railway full security for all costs for which Railway might become liable in consequence of contesting such claim.
- 57-A. **Provision of Mines Act:** The Contractor shall observe and perform all the provisions of the Mines Act, 1952 or any statutory modifications or re-enactment thereof for the time being in force and any rules and regulations made thereunder in respect of all the persons directly or through the petty Contractors or sub-contractors employed by him under this contract and shall indemnify the Railway from and against any claims under the Mines Act, or the rules and regulations framed thereunder, by or on behalf of any persons employed by him or otherwise.
58. **Railway not to Provide Quarters for Contractors:** No quarters shall normally be provided by the Railway for the accommodation of the Contractor or any of his staff employed on the work. In exceptional cases where accommodation is provided to the Contractor at the Railway's discretion, recoveries shall be made at such rates as may be fixed by the Railway for the full rent of the buildings and equipments therein as well as charges for electric current, water supply and conservancy.
- 59.(1) **Labour Camps:** The Contractor shall at his own expense make adequate arrangements for the housing, supply of drinking water and provision of latrines and urinals for his staff and workmen, directly or through the petty Contractors or sub-contractors and for temporary creche (Bal-Mandir) where 50 or more women are employed at a time. Suitable sites on Railway land, if available, may be allotted to the Contractor for the erection of labour camps, either free of charge or on such terms and conditions that may be prescribed by the Railway. All camp sites shall be maintained in clean and sanitary conditions by the Contractor at his own cost.
- 59.(2) **Compliance to Rules for Employment of Labour:** The Contractor(s) shall conform to all laws, bye-laws rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty contractors or sub-contractors on the works.
- 59.(3) **Preservation of Peace:** The Contractor shall take requisite precautions and use his best endeavours to:

- (i) Prevent any riotous or unlawful behaviour by or amongst his workmen and other employed directly or through the petty Contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and
 - (ii) Security of property in the neighbourhood of the works. In the event of the Railway requiring the maintenance of a Special Police Force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the Railway shall be recoverable from the Contractor.
- 59.(4) Sanitary Arrangements:** The Contractor shall obey all sanitary rules and carry out all sanitary measures that may from time to time be prescribed by the Railway Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative or the Medical Staff of the Railway. Should the Contractor fail to make the adequate sanitary arrangements, these will be provided by the Railway and the cost thereof recovered from the Contractor.
- 59.(5) Outbreak of Infectious Disease:** The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer or the Engineer's Representative on the advice of the Railway Medical Authority. Should cholera, plague, or other infectious disease break out, the Contractor shall burn the huts, beddings, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer, failing which within the time specified in the Engineer's requisition, the work may be done by the Railway and the cost thereof recovered from the Contractor.
- 59.(6) Treatment of Contractor's Staff in Railway Hospitals:** The Contractor and his staff, other than labourers and their families requiring medical aid from the railway hospital and dispensaries will be treated as private patients and charged accordingly. The Contractors' labourers and their Families will be granted free treatment in railway hospitals and dispensaries where no other hospitals or dispensaries are available provided the Contractor pays the cost of medicines, dressing and diet money according to the normal scale and additional charges for special examinations such as pathological and bacteriological examination, X-Ray, etc. and for surgical operation.
- 59. (7) Medical Facilities at Site:** The Contractor shall provide medical facilities at the site as may be prescribed by the Engineer on the advice of the Railway Medical Authority in relation to the strength of the Contractor's resident staff and workmen.
- 59. (8) Use of Intoxicants:** The sale of ardent spirits or other intoxicating beverages upon the work or in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.
- 59.(9) 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.
- 60.(1) Non-Employment of Labourers below the age of 15:** The Contractor shall not employ children below the age of 15 as labourers directly or through petty Contractors or subcontractors for the execution of work.

- 60.(2) Medical Certificate of Fitness for Labour:** It is agreed that the Contractor shall not employ a person above 15 and below 19 years of age for the purpose of execution of work under the contract unless a medical certificate of fitness in the prescribed form (Proforma at Annexure-VIII) granted to him by a certifying surgeon certifying that he is fit to work as an adult, is obtained and kept in the custody of the Contractor or a person nominated by him in this behalf and the person carries with him, while at work; a token giving a reference to such certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the Contractor and all the expenses to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.
- 60.(3) Period of Validity of Medical Fitness Certificate:** A certificate of fitness granted or renewed for the above said purposes shall be valid only for a period of one year at a time. The certifying surgeon shall revoke a certificate granted or renewed if in his opinion the holder of it, is no longer fit for work in the capacity stated therein. Where a certifying surgeon refuses to grant or renew a certificate or revoke a certificate, he shall, if so required by the person concerned, state his reasons in writing for doing so.
- 60.(4) Medical Re-Examination of Labourer:** Where any official appointed in this behalf by the Ministry of Labour is of the opinion that any person employed in connection with the execution of any work under this contract in the age group 15 to 19 years is without a certificate of fitness or is having a certificate of fitness but no longer fit to work in the capacity stated in the certificate, he may serve on the Contractor, or on the person nominated by him in this regard, a notice requiring that such persons shall be examined by a certifying surgeon and such person shall not if the concerned official so directs, be employed or permitted to do any work under this contract unless he has been medically examined and certified that he is fit to work in the capacity stated in the certificate.

EXPLANATIONS:

- (1) Only Qualified Medical Practitioners can be appointed as "Certifying Surgeons" and the term "Qualified Medical Practitioners" means a person holding a qualification granted by an authority specified in the Schedule to the Indian Medical Degrees Act, 1916 (VII to 1916) or in the Schedule to the Indian Medical Council Act, 1933 (XXVII) of 1933.
- (2) The Certifying surgeon may be a medical officer in the service of State or Municipal Corporation.

DETERMINATION OF CONTRACT

- 61.(1) Right of Railway to Determine the Contract:** The Railway shall be entitled to determine and terminate the contract at any time should, in the Railway's opinion, the cessation of work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the Railway of such determination and the reasons therefor shall be conclusive evidence thereof.
- 61.(2) Payment on Determination of Contract:** Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Railways shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Railway's decision on the necessity and propriety of such expenditure shall be final and conclusive.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

61.(3) The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

62.(1) Determination of Contract owing to Default of Contractor:

If the Contractor should:

- (i) Becomes bankrupt or insolvent, or
- (ii) Make an arrangement for assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or
- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
- (iv) Have an execution levied on his goods or property on the works, or
- (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
- (vi) Abandon the contract, or
- (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
- (viii) Fail to adhere to the agreed programme of work by a margin of 10% of the stipulated period, or
- (ix) Fail to Execute the contract documents in terms of Clause 8 of the Instructions to Tenderers.
- (x) Fails to submit the documents pertaining to identity of JV and PAN in terms of Clause 17.11 of Tender Form available in the Regulations for Instructions to Tenderers.
- (xi) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected under Clause 25 and 27 of these Conditions, or
- (xii) Fail to take steps to employ competent or additional staff and labour as required under Clause 26 of the Conditions, or
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of the Conditions, or
- (xiv) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the Railway or to any person on his or on their behalf in relation to the execution of this or any other contract with this Railway.
- (xv) Fail to adhere to the provisions of Para 16 of Tender Form (Second Sheet) of Instruction to Tenderers, or provision of above Clause 59(9) of these conditions.
- (xvi) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer.

Then and in any of the **said Clause**, the Engineer on behalf of the Railway may serve the Contractor with a notice (Proforma at Annexure-IX) in writing to that effect and if the Contractor does not within seven days after the delivery to him of such notice proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid of the entire satisfaction of the Engineer, the Railway shall be entitled after giving 48 hours' notice (Proforma at Annexure-X or XII, as the case may be) in writing under the hand of the Engineer to rescind the contract as a whole or in part or parts (as may be specified in such notice) and after expiry of 48 hours' notice, a final termination notice (Proforma at Annexure-XI or XIII, as the case may be) should be issued.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Note:

Engineer at his discretion may resort to the part termination of contract with notices (Proforma at Annexure- IX, XII and XIII), only in cases where progress of work is more than or equal to 80% of the original scope of work.

62.(2) Right of Railway after Rescission of Contract owing to Default of Contractor: In the event of any or several of the courses, referred to in Sub-Clause(1) of this Clause, being adopted:

(a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.

(b) In the contract which has been rescinded as a whole, the Security Deposit already with railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

Further the authorized representative of failed Contractor cannot be accepted as authorized representative in new contract.

(c) In the contract rescinded in part or parts,

(i) The full Performance Guarantee for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.

(ii) The Security Deposit of part terminated contract shall be dealt as per clause 16(2) of these conditions.

(iii) The defaulting Contractor shall not be issued any completion certificate for the contract.

(iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

(v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.

(d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the

completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.

- (e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

SETTLEMENT OF DISPUTES – INDIAN RAILWAY ARBITRATION AND CONCILIATION RULES

63. Conciliation of Disputes:

- (i) This clause is applicable in the tender having advertised value less than or equal to Rs 50 Crore.
- (ii) All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the Contractor to the "Chief Engineer" or "Divisional Railway Manager" through "Notice of Dispute" provided that no such notice shall be served later than 30 days after the date of issue of Completion Certificate by the Engineer. Chief Engineer or Divisional Railway Manager shall, within 30 days after receipt of the Contractor's "Notice of Dispute", notify the name of conciliator(s) to the Contractor.
- (iii) The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of contract.
- (iv) If the parties reach agreement on a settlement of the dispute, they shall draw up and sign a written settlement agreement duly signed by Engineer In-charge, Contractor and conciliator(s). When the parties sign the settlement agreement, it shall be final and binding on the parties.
- (v) The parties shall not initiate, during the conciliation proceedings, any arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.
- (vi) The conciliation proceedings shall be terminated as per Section 76 of 'The Arbitration and Conciliation Act, 1996.

63.1 Matters Finally Determined by the Railway: All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the Contractor to the GM and the GM shall, within 120 days after receipt of the Contractor's representation, make and notify decisions on all matters referred to by the Contractor in writing provided that matters for which provision has been made in Clauses 7(j), 8, 18, 22(5), 39.1, 39.2, 40A, 43(2), 45(i)(a), 55, 55-A(5), 57, 57A, 61(1), 61(2), 62(1), 63(iv) and 63.2.11 of the Standard

General Conditions of Contract or in any Clause (stated as excepted matter) of the Special Conditions of the Contract, shall be deemed as 'excepted matters' (matters not arbitrable) and decisions of the Railway authority, thereon shall be final and binding on the Contractor; provided further that 'excepted matters' shall stand specifically excluded from the purview of the Dispute Adjudication Board (DAB) and Arbitration.

63.2 Dispute Adjudication Board (DAB): This clause is applicable in the tender having advertised value more than Rs 50 Crore.

63.2.1 Any dispute/s if not settled with the Engineer, shall be referred to DAB.

The DAB shall consist of a panel of three Retired Railway Officers, retired not below senior administrative grade (SAG). The DAB shall be formed within 90 days of signing of Contract Agreement. For this purpose, a panel of DAB members shall be maintained in the General Manager's office. The complete panel, which shall not be less than five members, shall be sent by Chief Engineer to the Contractor to nominate one member of the DAB from the panel as Contractor's nominee within two weeks of receipt of the panel. On receipt of Contractor's nominee, the Chief Engineer shall nominate one member from the same panel as Railway nominee for the DAB. Both above nominees shall jointly select presiding member of the DAB from the same panel.

63.2.2 The appointment of DAB shall be effectuated by way of a tri-partite agreement among the Railway, Contractor and the respective DAB members. The terms of the remuneration of each member shall be as fixed by Ministry of Railways from time to time. Each party shall be responsible for paying one-half of this remuneration.

63.2.3 If one or more of the members appointed refuses to act as DAB member, or is unable or unwilling to perform his functions as DAB member for any reason whatsoever or dies or in the opinion of the Chief Engineer fails to act without undue delay, the parties shall terminate the mandate of such DAB member and thereupon new DAB member shall be appointed in the same manner, as the outgoing DAB member had been appointed.

63.2.4 The appointment of any member may be terminated by mutual agreement of both Parties, but not by the Railway or the Contractor acting alone. Unless otherwise agreed by both the Parties, the appointment of the DAB (including each member) shall expire upon expiry of this Contract Agreement.

63.2.5 Before start of DAB proceedings, each DAB member shall give the following certificate to the Railway and the Contractor:

"I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. Further, I have no any past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality."

63.2.6 DAB proceedings shall be conducted as decided by the DAB. The DAB shall give its decision within 90 days of a Dispute referred to it by any of the Parties, duly recording the reasons before arriving at the decision. The DAB shall decide the issue within terms and conditions of the contract. This time limit shall be extendable subject to the Parties mutual agreement.

- 63.2.7** The DAB decision shall not be binding on both the Parties. In case any party is not satisfied by the decision of DAB, then the aggrieved party may approach Arbitral Tribunal for arbitration proceedings.
- 63.2.8** No dispute shall be referred to Arbitral Tribunal unless the same has been referred to DAB for adjudication. However, in case DAB is not formed due to any reason, the disputes can be directly referred to Arbitral Tribunal to adjudicate the dispute.
- 63.2.9** In the specific cases of any misconduct by any of the members of the DAB, the parties shall have the right to specifically bring it to the notice of the DAB such conduct, through a statement filed with necessary documents in proof of such misconduct and the DAB, after taking NOTICE of such conduct initiate the replacement of the member concerned, in the same manner the member to be replaced was appointed.
- 63.2.10** Once the decision is given by DAB, DAB cannot review the decision at its own or on the request of one party, unless both parties agree for review of decision by DAB.
- 63.2.11** In case DAB decision is not challenged by either party within 180 days of receipt of decision of DAB, the decision shall be considered as final and parties would be barred for referring the same to Arbitral Tribunal for adjudication.
- 63.2.12** The obligation of the Railway and the Contactor shall not be altered by reasons of issue being or under reference to DAB.
- 63.2.13** The DAB shall conduct the proceedings at any convenient venue which shall be decided by DAB in consultations with parties.
- 63.2.14** It is a term of this contract that the Parties shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through DAB and Arbitral Tribunal.

64.(1) : Demand for Arbitration:

- 64.(I)(i)(a):** In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account or as to the withholding by the Railway of any certificate to which the Contractor may claim to be entitled to, or if the Railway fails to make a decision within 120 days, then and in any such case, but except in any of the "excepted matters" referred to in Clause 63.1 of these Conditions, the Contractor, after 120 days but within 180 days of his presenting his final claim on disputed matters shall demand in writing that the dispute or difference be referred to arbitration.
- 64.(I)(i)(b):** Arbitration as a method of dispute resolution should not be routinely or automatically included in procurement contacts/tenders, especially in large contracts.
- 64.(I)(i)(c):** As a norm, arbitration as a method of dispute resolution may be restricted to disputes with a value less than Rs.10 crore. This figure is with reference to the value of the dispute (not the value of the contract, which may be much higher).
- 64.(I)(i)(d):** Inclusion of arbitration clauses covering disputes with a value exceeding Rs.10 crore, should be based on careful application of mind and recording of reasons and

with the approval of an officer not below the rank of Senior Administrative Grade (SAG) or the Accepting Authority of the tender whichever is higher.

- 64.(1)(ii)(a):** The demand for arbitration shall specify the matters which are in question, or subject of the dispute or difference as also the amount of claim item-wise. Only such dispute or difference, in respect of which the demand has been made, together with counter claims or set off, given by the Railway, shall be referred to arbitration and other matters shall not be included in the reference.
- 64.(1)(ii)(b):** The parties may waive off the applicability of Sub-Section 12(5) of Arbitration and Conciliation (Amendment) Act 2015, if they agree for such waiver in writing, after dispute having arisen between them, in the format given under Annexure XV of these conditions.
- 64.(1)(iii)(a):** The Arbitration proceedings shall be assumed to have commenced from the day, a written and valid demand for arbitration is received by the Railway.
- 64.(1)(iii)(b):** The claimant shall submit his claims stating the facts supporting the claims along with all the relevant documents and the relief or remedy sought against each claim within a period of 30 days from the date of appointment of the Arbitral Tribunal.
- 64.(1)(iii)(c):** The Railway shall submit its defence statement and counter claim(s), if any, within a period of 60 days of receipt of copy of claims from Tribunal, unless otherwise extension has been granted by Tribunal.
- 64.(1)(iii)(d):** Place of Arbitration: The place of arbitration would be within the geographical limits of the Division of the Railway where the cause of action arose or the Headquarters of the concerned Railway or any other place with the written consent of both the parties.
- 64.(1)(iv):** No new claim shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defense thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.
- 64.(1)(v):** If the Contractor(s) does/do not prefer his/their specific and final claims in writing, within a period of 90 days of receiving the intimation from the Railways that the final bill is ready for payment, he/they will be deemed to have waived his/their claim(s) and the Railway shall be discharged and released of all liabilities under the contract in respect of these claims.
- 64.(2):** **Obligation During Pendency of Arbitration:** Work under the contract shall, unless otherwise directed by the Engineer, continue during the arbitration proceedings, and no payment due or payable by the Railway shall be withheld on account of such proceedings, provided, however, it shall be open for Arbitral Tribunal to consider and decide whether or not such work should continue during arbitration proceedings.
- 64.(3) :** **Appointment of Arbitrator:**
- 64.(3)(a):** The Arbitral Tribunal shall consist of a panel of three arbitrators. General Manager/ Additional General Manager will appoint two arbitrators, one railway nominee and other from among the contractor's nominee. Contractor can recommend his nominee either from approved panel of Railways or from approved panel of Indian Council of Arbitration (ICA) within 30 days from the date of dispatch of approval of written and valid acceptance of demand for arbitration by the General Manager/Additional General Manager.
- 64.(3)(a)(i):** If contractor wants to choose his nominee from Railway panel, the Railway will send a panel of at least four (4) names of retired Railway Officers empanelled to

work as Arbitrator within 30 days from the day when a written and valid demand for arbitration is received by the General Manager/Additional General Manager. Contractor will be asked to suggest to General Manager/Additional General Manager at least 2 names out of the panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by Railway. The General Manager/Additional General Manager shall appoint at least one out of them as the Contractor's nominee within 30 days from the receipt of the names of Contractor's nominees. The railway panel shall be provided free of cost to the contractor.

64.(3)(a)(ii): If contractor wants to choose his nominee from Indian Council of Arbitration panel, Contractor will send at least 2 names of Arbitrators from the ICA panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by Railway. The General Manager/Additional General Manager shall appoint at least one out of them as the Contractor's nominee within 30 days from the receipt of the names of Contractor's nominees. Nomination and appointment of arbitrators from ICA panel shall be as per the ICA Rules for Domestic Commercial Arbitration and amended from time to time.

Some general guidelines of ICA Rules for Domestic Commercial Arbitration are as under:-

- i. Contractor may access the ICA's panel of arbitration through ICA's official webpage: <https://icaindia.co.in/pdf/Engineers.pdf>.
- ii. A formal request for nomination shall be submitted to ICA, accompanied by:-
 - a. A brief Statement of Claim outlining the nature and quantum of the disputes.
 - b. A copy of the relevant contract and any supporting documents.
 - c. A copy of the notice intimating the other party of the initiation of arbitration proceedings, with proof of delivery (if any).
- iii. Ad-hoc appointment fees for the nomination and appointment of arbitrators shall be as per the ICA Rules for Domestic Commercial Arbitration and revised from time to time and shall be submitted along with the request.

64.(3)(b): Two selected arbitrators are free to select presiding arbitrator (3d arbitrator) within thirty (30) days from the date of their appointment. The presiding arbitrator may be selected from approved panel of Railways or approved panel of Indian Council of Arbitration (as per mutual agreement), which will be approved by General Manager/Additional General Manager. General Manager/Additional General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of all the three arbitrators.

64.(3)(c)(i): If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the General Manager/Additional General Manager fails to act without undue delay, the General Manager/Additional General Manager shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator (s).

64.(3)(c)(ii): (a) The Arbitral Tribunal shall have power to call for such evidence by way of affidavits or otherwise as the Arbitral Tribunal shall think proper, and it shall be the duty of the parties hereto to do or cause to be done all such things as may be

necessary to enable the Arbitral Tribunal to make the award without any delay. The proceedings shall normally be conducted on the basis of documents and written statements.

(b) Before proceeding into the merits of any dispute, the Arbitral Tribunal shall first decide and pass its orders over any plea submitted/objections raised by any party, if any, regarding appointment of Arbitral Tribunal, validity of arbitration agreement, jurisdiction and scope of the Tribunal to deal with the dispute (s) submitted to arbitration, applicability of time 'limitation' to any dispute, any violation of agreed procedure regarding conduct of the arbitral proceedings or plea for interim measures of protection and record its orders in day to day proceedings. A copy of the proceedings duly signed by all the members of tribunal should be provided to both the parties.

64.(3)(c)(iii): (i) Qualification of Railway Empanelled Arbitrator (s):

- (a) Retired Railway Officers not below SA Grade level, one year after his date of retirement.
 - (b) Age of arbitrator at the time of appointment shall be below 70 years.
 - (c) Persons not involved in any current vigilance/CBI cases or against whom disciplinary or prosecution proceedings are not in process.
 - (d) Persons who had not been imposed a major penalty or two or more minor penalties or against whom administrative action has not been taken three times or more or
 - (e) Persons who have not been imposed one minor Penalty and against whom two administrative actions have not been taken as a result of vigilance/CBI action while in service on Railways.
- (ii) An arbitrator may be appointed notwithstanding the total number of arbitration cases in which he has been appointed in the past.
- (iii) While appointing arbitrator(s) under Sub-Clause 64.(3)(a), 64.(3)(a)(i), 64.(3) (a) (ii) & 64.(3) (b) above, due care shall be taken that he/they is/are not the one/those who had an opportunity to deal with the matters to which the contract relates or who in the course of is/ their duties as Railway servant(s) expressed views on all or any of the matters under dispute or differences. A certification to this effect as per annexure- XVI shall be taken from Arbitrators also. The proceedings of the Arbitral tribunal or the award made by such Tribunal will, however, not be invalid merely for the reason that one or more arbitrator had, in the course of his service, opportunity to deal with the matters to which the contract relates or who in the course of his/their duties expressed views on all or any of the matters under dispute.
- 64.(3)(d)(i):** The arbitral award shall state item wise, the sum and reasons upon which it is based. The analysis and reasons shall be detailed enough so that the award could be inferred there from.
- 64.(3)(d)(ii):** A party may apply for corrections of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award of a Tribunal and interpretation of a specific point of award to Tribunal within 60 days of receipt of the award.
- 64.(3)(d)(iii):** A party may apply to Tribunal within 60 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.

- 64.(4):** Any ruling on award shall be made by a majority of members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.
- 64.(5):** Where the arbitral award is for the payment of money, no interest shall be payable on whole or any part of the money for any period till the date on which the award is made.
- 64.(6):** The cost of arbitration shall be borne by the respective parties. If all the three arbitrators are selected from the Railway Panel, the fee of the arbitrators shall be determined as per the rates fixed/revised by Railway Board from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration. However, if any of the three arbitrators is selected from the Panel of Indian Council of Arbitration (ICA), the fee of the arbitrators shall be determined as per the rates fixed/revised by the Indian Council of Arbitration from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration.

CHAPTER-6A**1.0 Stage payment on supply of steel:**

This clause will be applicable for works contract of value more than **Rs.15.00 (Fifteen)** crore with latest amendment if any. Stage payment will be applicable for steel physically brought by the contractor to the site (even before its actual use in the work), subject to the following conditions:-

- a) The material shall be strictly in accordance with the contract specifications.
- b) The tender schedule shall provide for individual NS rate to be quoted by the tenderers for steel separately.
- c) The material shall be delivered at site and properly stored under covered sheds in measurable stacks.
- d) The quantities of materials shall be brought to the site only in such instalments that would facilitate smooth progress of work and consumed in reasonable time.
- e) Proper accountal in the material register to be maintained in the prescribed format at the site for the receipt and use of the material.
- f) Ownership of such material shall be deemed to vest with the Railways for which the contractor should submit an indemnity bond in prescribed format.

Indemnity Bond Performa is available at Annexure-2 of Chapter-6

- g) Before releasing the stage payment, the contractor shall insure the material at his own cost in favour of Railways against theft, damages, fire etc.
- h) Stage payment in all such cases shall not be more than 75% of the rate of steel awarded in the contract the balance payment shall be released only after the material is actually consumed in the work. .
- i) The price variation claim for steel would continue to be governed as per extant PV clause and with reference to delivery at site.
- j) The quantity of steel to be brought to site, and for which stage payment will be admissible, shall be worked out by the contractor in consultation with the Engineer, for the first quarter, from date of issue of LOA + 15 days. Subsequent supply to site shall be done with approval of Engineer, on a quarterly basis, based on actual progress.

2.0 SAFETY MEASURE: The following measures should be adopted to ensure safety of the trains as well as work force.

- i) The contractor shall not start any work without the presence of Railway Supervisor at site.
- ii) Wherever the road vehicles and/or machinery are required to work in the close vicinity of railway line, the work shall be so carried out so that there is no infringement to the Railway's schedule of dimensions. For this purpose the area where road vehicles and/or machinery are required to ply, shall be demarcated and acknowledged by the contractor. Special care shall be taken for turning/reversal of road vehicles/machinery without infringing the running track. Barricading shall be provided wherever justified and feasible as per site conditions.
- iii) The look out and whistle caution orders shall be issued to the trains and speed restrictions imposed where considered necessary suitable flagmen/detonators shall be provided where necessary for protection of trains.

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- iv) The supervisor/workmen should be counselled about safety measures. A competency certificate to the contractor's supervisor as below shall be issued by AXEN/XEN, which will be valid only for the work for which it has been issued.

COMPETENCY CERTIFICATE

Certified that Sri.....supervisor of M/shas been examined regarding working onwork. his knowledge has been found satisfactory and he is capable of supervising the work safely.

AXEN/XEN

- v) The unloaded ballast/rails/sleepers/other P.Way materials after unloading along track should be kept clear off moving dimensions and stacked as per the specified heights and distance from the running track.
- vi) Supplementary site specific instructions, wherever considered necessary, shall be issued by the Engineer-in-charge.
- vii) Contractor's employees should wear proper protective equipment such as dust mask, helmet, safety shoes etc.
- viii) Safety of the Contractor's workmen is also the responsibility of Principal Employer viz. N.E. Railway/Construction. The Contractor should ensure to obtain a certificate that they will take all safety precautions in respect of their employees provided under the rules/laws and in case of failure on their part, the Contractor shall be responsible for injury caused to their employee and N.E. Railway/Construction.
- ix) Portable Electrical equipment should be connected properly by experienced persons only. The connections should be without any joint and have proper earthing.
- x) All equipment brought by Contractor will be checked and certified to be safe by an identified officer of the N.E. Railway/Construction.
- xi) All Safety precaution to be followed by Contractor's employees.
- xii) Payment will be made after certification from the concerned department that he has cleared the place after the work is over.
- xiii) Contractor should ensure that if A.C./ Metal Sheets are used during cutting, drilling etc. concerned man must wear mask. Scrap of items shall also be disposed in disposal pit as per ISO-14001.
- xiv) Contractor must ensure all safety measures while working welding, cutting or doing any operation to protect fire incident. In case of failure on their part, the Contractor shall be responsible for injury caused to their employee and N.E. Railway/Construction or any loss.

3.0 PAYMENT OF ROYALTY CHARGES:

- 3.1** The payment of Royalty Charges etc. to the State Government as demanded by them in connection with execution and supply of Rubble Stone/Stone ballast- Sand, River Bed Material (RBM-Blanketing) and earthwork etc. have to be borne and paid by the contractor. The respective State Government will confirm the rate of royalty charges as applicable at the time of execution of work with respect to sub- minerals. The contractor has to submit proof of payment of royalty charges as per demand of State Govt. If the relevant documents or proof of payment to the concerned revenue authority is not

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submitted along with the bill, the Railway Administration will be entitled to deduct Royalty Charges from the contractor's bills and keep in deposit such amount equal to the proportionate royalty charges from each on A/c bills. The same will be released to the contractor as and when contractors submit a receipt of payment challan/clearance certificates from the concerned authorities/revenue authorities of respective State Government and produce the same to the Engineer -in-charge. If the contractor does not produce the necessary relevant proof of payment of the required royalty charges within 45 days or at the time of submission of next on-account bill, whichever is earlier, the amount withheld will be paid to the concerned revenue authority. Once the withheld amount paid to the revenue authority, it will not be refundable. After completion of the work, if contractor fails to submit the clearance certificates regarding royalty charges, final bill will be passed after retaining an amount equal to the amount of un-paid royalty charges, as intimated by the concerned authorities/Revenue authorities/Collector or as calculated on the basis of relevant applicable rates. No interest will be paid to the contractor towards retained amount of Royalty Charges”.

3.2 FOR INTERNAL PROCESSING OF BILL:

- (i) The Executive will certify the payment/non-payment of the Royalty Charges by the contractor in each bill with documentary evidence issued from the respective revenue authority and then accordingly deduction of Royalty Charges will be made.
- (ii) The executive will also indicate the concerned district authority to whom relevant royalty charges are to be remitted so that accordingly action may be taken by the Accounts branch.

4.0 Letter of credit:

1. All works tenders or service tenders invited by Railway through IREPS, having advertised value of Rs. 10 lakh and above will have option to take payment from Railways through a letter of credit (LC) arrangement, with the following condition:
2. Following special conditions are included:-
 - (i) 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.
 - (ii) The option so exercised, shall be an integral part of the bidder's offer.
 - (iii) 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.
 - (iv) In case tenderer opts for payment through LC, following shall be the procedure to deal with 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 toward issue of LC and its operation thereof shall be borne by the contractor.
 - (c) 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

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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 contractor on the basis of expected progress of work.
- (e) The LC terms and conditions shall inter-alia indemnify and save 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.
- (f) The LC terms and conditions shall inter – alia provide that Railways will issue a Document of Authorisation (**format enclosed as Annexure- 5 of Chapter -6**) 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 downloading 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 Branches).
- (l) The contractor's bank (advising bank) shall submit the documents to the Railway's bank (Local SBI Branches).
- (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 payment 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. For opening of LC, executive department shall make a request letter to concerned Accounts Department on a format, placed as **(Annexure- 4 of Chapter-6)**.

5.0 MEASUREMENT OF WORK BY CONTRACTOR IN WORKS CONTRACT HAVING VALUE MORE THAN RS.5 CRORE OR AS PER LATEST INSTRUCTIONS.

- (i) Measurements recorded by contractor shall be checked by railway within 45 days of submission of measurements.
- (ii) While processing 75% provisional payment bill concerned executives shall ensure that supply items given by contractor are commensurate with requirement for execution of works.

2.0 Guide Line For Measurement of work by contractor is allowed as per the provisions of Engineering Code Para 1316 A mentioned below. (Advance Correction Slip No.50 circulated vide Railway Board's letter No.2016/CE-I/CT/14/ Measurement/1 dated 21.09.2017).

1316A (Applicable for contracts wherein the measurement of work by contractor is permitted): Para 1316 of Engineering Code shall not be applicable for these contracts. For such contracts, contractor shall be responsible for carrying out measurements of work executed and recording of measurements for the release of on account/final payment. In such cases, the detailed procedure for recording of measurements, provisional payment, test check and final payment shall be as follows:

Contractor's Measurement Book:

- 1 Railway shall arrange contractor's measurement book (CMB), each having sheet No, 1A to 4A (Form E 1313), followed by 100 machine number pages (Form E 1313, sheet No, 5A). On the top of each sheet of CMB, there shall be provision for recording the name of the work, agreement number, name of contractor and CMB number.
- 2 CMBs shall be printed in such a way so as to keep a clear margin of 50 mm on the left side of page, Further, the left side shall have pinhole tear line at a distance of 15 mm from edge for ease of taking out sheets from these books. The binding shall be within 15mm of the margin available between edge and pinhole tear line. This shall ensure availability of minimum 35 mm clear margin to re-bind measurement books later on.

Movement and upkeep of Contractor's Measurement Book:

3. Dy Chief Engineer in charge of contract (Dy.CE/C) shall hand over required No. of CMBs to Assistant/Executive Engineer in-charge of contract (AEN/XEN) after taking receipt of the same on sheet No. 2A (Form E.1313) for further issuance to contractor time to time as per progress of work.
4. CMB shall be registered with unique No. in the Register of Measurement Books (Form E.1314) maintained in the office of Dy. CE/C. Separate account of CMBs for each agreement shall be maintained in the office of Dy. CE/C and AEN/XEN.
5. In case of change of 'contractor's authorized engineer', fresh approval shall be taken from Dy. CE/C before recording of measurement.
6. While issuing the CMB to contractor, AEN/XEN shall take out sheet No. 2A to 4A from the CMB, take receipt of CMB from contractor on sheet No. 3A (Form E.1313), and keep the same in safe custody.
7. Similar system as for CMB, shall be followed for issuing Field Book/Level Book (E.1317/A) to contractor for recording of levels in the field book/level book.

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Measurement:

8. The contractor's authorized engineer shall record the measurements in CMB neatly in his own handwriting, without any use of eraser/overwriting, without use of any typing fluid or any such thing. All cuttings shall be initialled. No page shall be damaged /destroyed. No page shall be kept blank in between the measurements.
9. The Contractor shall communicate the date of measurement to AEN/XEN in sufficient advance' to witness any measurement. Witnessing of measurement by railways is not compulsory except for initial levels in case of earthwork and hidden measurements. Initial levels of earthwork and hidden measurements are to be recorded in the presence of railway officials and test checked as prescribed.
10. In oil account contract certificate, measurement shall be recorded for the items and quantities to be paid in the concerned on account contract certificate.
11. However, in every 4th on account contract certificate and final contract certificate, the recording of measurement for works executed shall include all the items and their quantity included in previous on account contract certificates, irrespective of whether to be paid or not in the current On Account Contract Certificate/Final Contract Certificate.
12. No payment shall be processed on Lump sum measurement taken by contractor's authorized engineer except for earthwork. For earthwork, every 4th bill shall be based on actual levels taken and detailed calculations carried out for the work done.
13. The contractor shall take out carefully from CMB the used pages of CMB with one extra blank page for processing the bill; staple them for submission to AEN/XEN along with bill, duly signing the measurements. The contractor shall keep a photocopy of the measurements with him for future reference.
14. At the time of submission of final bill, the contractor shall submit all the remaining CMBs (unused as well as partially used) with him along with bill to AEN/XEN.
15. The contractor shall submit required copies of invoice and on account contract certificate/final contract certificate (similar to form E.1337 and E.1338) to the AEN/XEN duly marking them - original or copy. Original shall be used for release of payment whereas duplicate copies shall be used for record purpose in different offices.
16. In case contractor requires provisional payment of on-account bill; the contractor shall submit his invoice and provisional on account contract certificate for 75% of amount of work done (before deduction of taxes). The contractor shall write 'For Provisional payment 'on top of such on-account contract certificate.
17. AEN/XEN while issuing receipt of stapled sheets of CMB to contractor shall clearly record the same in sheet 4 (E.1314) of concerned CMB, kept in the office of AEN/XEN.

Release of Provisional Payment:

18. Senior Section Engineer/ 'Junior Engineer with 5 year experience' (SSE/JE) and AEN/XEN shall sign & record a certificate on the original provisional 'on account contract certificate' as under:

"Certified that the payment being made is less than the amount due for the quantities of works executed by the contractor".

In case of payment of earthwork items in any contract, calculation of quantity of such items along with field book /level book must be enclosed. This shall be cross checked, as considered appropriate by SSE/JE & AEN/XEN, to ensure that no excess payment is being made. At this stage no test check of measurements by railway is required.

19. AEN/XEN shall keep a copy of contractor's invoice & provisional on account contract certificate in his office, and submit original invoice & original provisional on account

contract certificate along with required number of duplicate copies, and used sheets of CMB to the Dy CE/C unit for passing the bill and release of payment.

20. The provisional on account contract certificate shall be passed by Dy. CE/C and payment shall be released by associate based on above certification of SSE/JE and AEN/XEN. After release of payment, blank sheet of CMB (if any) shall be crossed by Dy. CE/C before sending the measurement sheets back to AEN/XEN for carrying out required test checks. At this stage measurements shall not be crossed.
21. No provisional payment shall be allowed in final contract certificate, Further, once provisional payment has been released in any on-account contract certificate, the next on account contract certificate can be raised by contractor only when accounts of previous on account certificate (Provisional as well as remaining payment) has been finalized.

Test Check

22. Necessary test checks shall be carried out by the SSE/JE and AEN/XEN for the works done before full payment of on-account contract certificate/final contract certificate, SSE/JE and AEN/XEN shall communicate the date of test checks to contractor in advance. The contractor can accompany during test check. The contractor shall provide support staff and all required tools& plants to facilitate test check by railway officials.
23. The stipulated test checks for AEN/XEN and SSE/JE Level is tabulated as under:

S. NO.	Description of works	Test Check in terms of % of value by	
		SSE/JE	AEN/XEN
(a)	Measurement of Ballast, pitching stone, Earth work and hidden items.	100%	100%
(b)	Measurement of all other items.	100%	20%
(c)	Initial and Final levels along centre line for earthwork in embankment and cutting.	100%	100%
(d)	Intermittent levels along centre line for earthwork in embankment and cutting.	100%	20%
(e)	Initial, intermittent and final levels except centre line for earth work in embankment and cutting.	100%	20%

Note: The check regarding levels of earthwork invariably shall be carried out in cross sections having heavy cross slopes.

24. Contractor's recorded measurement sheets shall be checked for any corrections/over writing during test check. All the corrections/over writing shall be initialed by SSE/JE.
25. The discrepancy noted (if any) during test check of recorded measurement shall be communicated by AEN/XEN to the contractor.
26. In case of discrepancy noticed during test check, the contractor shall submit original and required copies of fresh invoice of amount corrected for discrepancy, and in case provisional payment has been released earlier, the required copies of fresh invoice of remaining amount corrected for discrepancy (if any), along with on account/final contract certificate to AEN/XEN.

Full payment of On Account Contract Certificate/Final Contract Certificate:

27. AEN/XEN shall submit original copy of invoice and on account contract certificate of remaining amount/ Final Contract along with required number of duplicate copies and

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used sheets of CMBs (all used/blank CMBs in case of final contract certificate), duly signed by SSE/JE and AEN/XEN to the Dy. CE/C for passing the bill and release of payment.

28. Once the payment is released, Dy. CE/C shall return back the used sheets of CMB to AEN/XEN for safe custody, duly crossing of measurements by finance officer.
29. Once all used of a particular CME is received back by AEN/XEN from Dy CE/C, the AEN/XEN shall re-bind all 100 pages of CMB along with sheet No. 1A to 4A for submission of CMB to Dy CE/C office. Dy. CE/C office shall record the receipt of same in sheet No. 2A of CMB and Register of Measurement Books (Form E1314).
30. The final contract certificate shall be passed by Dy. CE/C only receipt of all CMBs (used/blank) from AEN/XEN.
31. The provisions of this pare 1316A shall be applicable to all the departments of Indian railways and to be executed through equivalent authorities of respective departments.

(Title page)

E.1313

(Sheet 2A)

Railway

CMB No.

CONTRACTOR'S MEASUREMENT BOOK

Department

Division/Construction Unit

Name of Work

Agreement No.....

Name of Agency.....

Issued to

(Name & designation)

..... on.....
(station) (date)

Received by

(Signature)

.....
(Designation) (Station)
on.....
(date)

Date of first entry

Date of last entry

Date received back in Division/Const.Unit }
office after completion of book }Certified that this Measurement Book contains 100 machine numbered pages from
.....to (both pages inclusive) which have been counted by me and
are correct.

Signature

Date

Designation

Initial () Binding Space

Re Binding () Space

Tearing line

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Tearing line

CMB No.

CONTRACTOR'S MEASUREMENT BOOK

Agreement No.

Name of Agency.....

Issued to.....

(Contractor's name)

..... on.....
(station) (date)

Certified that this Measurement Book contains 100 machine numbered pages fromto (both pages inclusive) which have been counted by me and are correct. No sheet is torn.

I understand that the measurement book is very important document and hence I shall ensure its proper upkeep and safe custody.

Received by.....

(Signature of contractor)

..... (Name) (Station) (Date)

Date of first entry.....

Date of last entry.....

Certified that this Contractor's Measurement Book pages returned by contractor have been counted by me and are correct. The details of pages received by me is as under:

S. No.	On Account Bill No.	Page No. From.....To	No. of Pages	Date of receipt in AEN/XEN office	Sign & Designation of Railway official
1					
2					
3					
4					
5					
6					
7					

CMB No.

Name of Work

Agreement No.....

Name of Agency.....

INDEX OF M.B

[illegible]

Tearing line

Railway
CMB No.
Division/Construction Unit.....

Space for Machine numbering
with six digits unique number

Name of Work

Agreement No.....

Name of Agency.....

INDEX OF M.B

[illegible]

For Chief Administrative Officer/Con

CHAPTER-6B

PROCEDURE FOR UNDERTAKING DIGGING WORK IN THE VICINITY OF SIGNALLING, ELECTRICAL AND TELICOMUNICATION CABLE.

File No. 2010/Tele/3(5)/1pt. (Computer No. 3346793)
1437235/2023/CE-I



भारत सरकार Government of India
रेल मंत्रालय Ministry of Railways
(रेलवे बोर्ड Railway Board)



No. 2023/CE-I/KDCE(G)/Misc.

New Delhi, Dated: 18.04.2023

The General Managers,
All Zonal Railways.

Subj: Instructions for incorporating the JPO, Circular etc. provisions in the Tender Document for all Works requiring digging work close to Railway signaling, telecom, electrical etc. cables

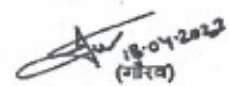
Ref: (i) No.2010/Tele/3(5)/1 Pt (3346793) New Delhi dated 29.09.22
(ii) Telecom Circular 17/2013 containing JPO for undertaking digging work in vicinity of Cables

Due to increase in cable cuts, a letter dated 29.09.22 under reference (i) above was written by Member-(Infra) to all GMs advising the following:

- Zonal Railways to take necessary steps to ensure strict compliance of JPO for undertaking any digging work in the vicinity of cables.
- Proper coordination among various departments undertaking any work near/along the track.
- Provision of utility relocation in the estimates and if the same is not existing, then the use of contingency provision for utility shifting/protection, apart from ensuring that the updated cable route plan are available and the marking of cable zone at sight is given before undertaking the work.

Further during Oral Evidence before PAC for one of the audit paras regarding recovery of penalty over SER and WCR for cable cut cases, PAC has taken a serious view of non implementation of JPO Provisions by Zonal Railways.

In view of above, it is advised that the provisions contained in circulars, JPOs regarding penalties should be included in all the Tender Documents for Works requiring digging close to Railway signaling, telecom, electrical etc. cables so as to bind them legally for ensuring recoveries from them.


निदेशक सिविल इंजी. (जो) रेलवे बोर्ड
[Rly No. 030-47598, MTNL No. 011-23047598]
e-mail address: dcsg@rb.railnet.gov.in

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No.2003/Tele/RCIL/1 Pt.IX

New Delhi dated 24.06.2013

General Managers,
All Indian Railways.

Telecom Circular No. 17/ 2013

Sub: Procedure for undertaking digging work in the vicinity of Signaling,
Electrical and Telecommunication Cable.

JPO No. 1/Sig/2004 dated 16.12.2004 issued by Board on the subject matter was reviewed in consultation with Signal, Electrical, Civil Engineering and Works Directorates of Board.

2. The same has now been finalized and a copy of the Revised Joint Procedure Order duly signed by ED/TD, EDCE/P, ED/SD, ED/W and EDEE/M is attached for compliance.

3. Please acknowledge receipt.

DA: 1 in 5 pages.

(Rakesh Ranjan)
Director(Telecom).

Copy to:-

- i) ED/TD, EDCE/P, ED/SD, ED/W and EDEE/M
- ii) CSEs, All Indian Railways
- iii) CSEs/Construction, All Indian Railways
- iv) ED/Tele, RDSO, Lucknow
- v) MD/RCIL, 143, Institutional Area, Sector 44,
Gurgaon - 122003, Haryana.



Annexure to Telecommunication Circular No. 17/2013

**JOINT PROCEDURE ORDER FOR UNDERTAKING DIGGING WORK
IN THE VICINITY OF UNDERGROUND SIGNALING, ELECTRICAL &
TELECOMMUNICATION CABLES.**

- A. A number of Engineering works in connection with gauge conversion/doubling/third line are in progress on various Railways, which require extensive digging work near the running track, in close vicinity of the working S&T cables carrying vital safety circuits as well as electrical cables feeding the power supply to cabins, ASM room, RRI Cabin, Intermediate Block Huts (IBH) etc. Similarly, S&T organisation under open line or construction units under CAO/C, are executing various Signaling and Telecom works requiring digging of earth for laying of cables or casting of foundations for the erection of signal posts etc. RailTel is also executing the work of laying of quad cable and OPC on various Railways as a part of sanctioned works for exclusive use of Railways for carrying voice and data i.e. administrative and control communication, PRS, FOIS etc. or shared by RailTel Corporation of India Ltd. On certain sections digging is also required for laying of electrical cable and casting of foundation for the erection of OHE masts by Electrical Deptt. Generally, these works are executed by contractors employed by these organisations.
- B. However, while carrying out these works in the vicinity of working signaling, telecommunication and electrical cables, at times, cable cuts take place due to JCB machines working along the track or during the digging work being done by contractors carrying out the Civil Engineering works. Similarly, such cable cuts are also resulting due to works undertaken by S&T or Electrical departments. Such cable faults results in the failure of vital signaling and telecommunication circuits & electrical installations.
- C. Henceforth, the following joint procedure shall be followed by Engineering, Electrical and S&T (and RailTel organisation, wherever such works are being done by them) officers of the respective divisions and by the construction organisation, while carrying out any digging work near to existing signaling & telecommunication and electrical cables, so that the instances of cable cut due to execution of works, can be controlled and minimized.
1. S&T department (and RailTel, where they have laid the cables) and Electrical department shall provide a detailed cable route plan showing exact location of cable at an interval of 200 m or wherever there is change in alignment so that the same is located easily by the Engineering official/contractor. In addition, S&T department and Electrical department shall also provide cable markers along the alignment of the cable. These cable route plans shall be made available to the Sr.DEN/DEN or Dy.CE/C, as the case may be, by Sr. DSTE/DSTE or Sr.DEE/DEE of the divisions or Dy. CSTE/C or Dy. CEE/C within 15 days in

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duplicate. Sr. DEN/DEN or Dy.CE/C will send copies to their field unit i.e. AEN/SE/P. Way & Works.

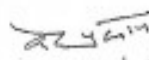
2. Before taking up any digging activity on a particular work by any agency, Sr. DSTE/DSTE or Sr.DEE/DEE of the section shall be approached in writing by the concerned Engg. or S&T or Electrical officer for permitting to undertake the work. Sr.DSTE/DSTE or Sr.DEE/DEE, after ensuring that the concerned executing agencies including the contractor have fully understood the S&T and Electrical cable route plan, shall permit the work in writing within 7 days of the request by concerned department.
3. After getting the permission from S&T or Electrical department as the case may be, the relevant portion of the cable route plan shall be attached to the letter ~~through which permission is issued to the contractor by concerned Engg. official~~ for commencement of work and ensuring that the contractors have fully understood the cable route plan and precautions to be taken to prevent damage to the underground cables. The contractor shall be asked to study the cable plan and follow it meticulously to ensure that the safety of the cable is not endangered. Such a provision, including any penalty for default, should form part of agreement also. It is advisable that a suitable post of SE/Sig or SE/Tele or SE/Electrical(TRD or G) shall be created chargeable to the estimates of doubling/gauge conversion, who can help Engg. agencies in the execution of the work. However basic responsibility will be of the department executing the work and the contractor. Creation of posts is not mandatory.
4. The SE/P.Way or SE/Works shall pass on the information to the concerned SE/Sig. or SE/Tele or SE/Electrical(TRD or G) about the works being taken up by the contractors in their sections at least 3 days in advance of the day of the work. In addition Engineering control shall also be informed by SE/P.Way or SE/Works, who in turn shall pass on the information to the test room/network operation center of RailTel/TPC/Electrical control.
5. On receiving the above information, SE/Sig or SE/Tele or SE/Electrical(TRD or G) shall visit the site on or before the date of taking up the work and issue permission to the contractor to commence the work after checking that adequate precautions have been taken to avoid the damage to the cables. The permission shall be granted within 3 days of submission of such requests.
6. The name of the contractor, his contact telephone number, the nature of the work shall be notified in the Engineering control as soon as the concerned Engineering officials issue the letter authorizing commencement of work to the contractor. Test room shall be given copies. Test room shall collect any further details from the Engineering control and shall pass it on to S&T/RailTel & Electrical officials regularly. In case the supervisors of concerned departments do not turn up on the day as advised in terms of para 4 and 5 above, the works of contractor should not be stopped on this account.

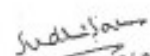

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7. In case of works being taken up by the State Government, National Highway Authority etc., the details of the permission given i.e. the nature of work, kilometer etc. be given to the Engineering control including the contact person's number so that the work can be done in a planned manner. The permission letter shall indicate the contact numbers of Test room/Network Operating Centre of RailTel/TPC/Elect. Control.
8. Where the nature of the work taken up by the Engineering department is such that the OFC or other S&T cables or Electrical cables is to be shifted and relocated, notice of minimum one week shall be given so that the Division/RailTel/Construction can plan the works properly for shifting. Such shifting works shall in addition, for security and integrity of the cables, be supervised by S&T supervisors/RailTel supervisors/Electrical supervisors.
9. The concerned SE/P.Way/SE/Works/SE/Sig/SE/Tele/ SE/Electrical(TRD or G) or RailTel supervisors supervising the work of the contractor shall ensure that the existing emergency sockets are not damaged in view of their importance in providing communication during accident/emergency.
10. In case of minor nature of works where shifting of cable is not required, in order to prevent damage to the cable, the Engineering contractor shall take out the S&T or optical fibre cable or Electrical cable carefully from the trench and place it properly alongside at a safe location before starting the earthwork under the supervision of SE/Sig. or SE/Tele or SE/Electrical(TRD or G). The cable shall be reburied soon after completion of excavation with proper care including placement of the brick over the cable under the supervision of S&T or Electrical supervisors. However, the work will be charged to the concerned engineering works. The responsibility for ensuring availability of SE (Signal), SE (Electrical) as per para 4 and 5 above lies with the respective department. The contractor will go ahead with the shifting of cables as per the program decided and he will not be held responsible for any cable cut.
11. In all the sections where major project are to be taken up/going on RailTel/S&T department shall deploy their official to take preventive/corrective action at site of work. As regards Electrical Department, the official may be deputed on need basis.
12. No new OFC or quad cable shall be laid close to the existing track. It shall be laid close to the Railway boundary on one side of the Railway track to the extent possible to avoid any interference with the future works (doubling etc.). It shall be ensured in the new works of cable laying that the cable route is properly identified with electronic or concrete markers. Wherever multiple cables are laid in a trench, RFID markers may be provided for easy identification of the cable. Henceforth, wherever cable laying is planned, before undertaking the cable laying work, the cable route plan of the same shall be prepared by the Dy.CSTE/C or Dy.CEE/C

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and shall be got approved from the concerned Sr. DSTE/DSTE or Sr. DEE/DEE and also from the concerned Dy. CE/C for new lines and from the concerned Sr.DEN for all other projects including doubling GC etc., to avoid possible damage in future. Such approval shall be granted within 15 days of the submission of the request.

13. The works of excavating the trench and laying of the cable should proceed in quick succession, leaving a minimum time between the two activities.

14. In case damage is caused to OFC/Quad cable during execution of the work, the contractor is liable to pay a penalty for damaging the cable. Penalty shall not be levied in case of the following:-

- (i) Detailed cable route plan as per clause C-1 not provided by concerned department or cable is not protected as per laid down procedures.
- (ii) The alignment of the cable does not tally with the information provided to the contractor.
- (iii) The cable depth is found to be less than 800 mm from normal ground level.
- (iv) No representative of S&T department/RailTel was available at site guarding the cables on the fixed pre determined date and time.

15. Penalty to be imposed for damages to cable shall be as under:-

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

Necessary debit in this regard shall be raised on the department undertaking the work who shall in turn levy the penalty on the defaulting contractor. S&T department shall raise the debits in case of damage to OFC or Quad or Signaling cable and Electrical department shall raise the debits in case of damage to Electrical cable.

16. Railways will not lodge FIR with RPF in cases of works being executed by authorized contractors of Railways who have been duly permitted to execute the works in accordance with this JPO. Joint note by the supervisors of the concerned department shall be prepared and the responsibility of the cable cut should be decided without involving RPF. The joint note deciding the fact whether the contractor should be penalized shall be completed in a day's time from the occurrence of cable cut.

In all other cases, when the cable is cut by an agency that was not permitted to execute any work, FIR should be lodged with RPF.

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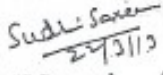
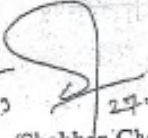
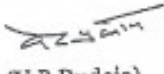

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17. While giving permission for taking up the works, concerned departments may note that earthwork by engineering contractors will normally be done by machines except in a few isolated locations where the quantity of earth work is very less.
18. Railways shall make necessary correction in their future contract so that this JPO can also be enforced contractually.
19. In case of damage to OFC, RailTel should be paid 5/6th of the penalty recovered. RailTel shall raise demands on the S&T department in this regard.
20. All types of signaling & OHE bonds i.e. rail bond, cross bond and structure bond shall be restored by the contractor with a view to keep the rail voltage low to ensure safety of personnel.
21. Above joint circular shall be applicable for construction as well as open line organisation of Engineering, S&T & Electrical.
22. S&T cable and electrical cable route plan should be prepared by the concerned S&T and Electrical officers respectively and got approved as stipulated in para C-12 before undertaking the work. The completion cable route plan should be finalized block section by block section as soon as the work is completed.
23. All cable laying works shall be executed as per laid down technical specifications, such as protection measures/protective cover, compaction of refilled material etc.

				
(Rajeev Sharma)	(S K Saxena)	(Shobhan Chaudhuri)	(V P Dudeja)	(Surinder Pal)
Exec. Dir.	Exec. Dir.	Exec. Dir.	Exec. Dir.	Exec. Dir.
Signal Devel.	Elect. Enery (M)	Telecom (Dev)	Works	Civil Engg-(P)

Annexure-4 of Chapter -6**LCDA No. (18 DIGIT IPAS GENERATED NO.)****Dated.....****DOCUMENT OF AUTHORIZATION****Reference: (i) Works Contract/Supply Contract No..... Dated.....****(ii) Inland Letter of Credit No.....Dated.....**

This document is issued again contract No.....(FROM IREPS).....dated supply/work of(DESCRIPTION OF GOODS/WORK FROM IREPSS).....

The beneficiary of the aforementioned Letter of Credit M/s(NAME AND VENDER CODE).....(Vendor Code.....as per IREPS.....) is receive aggregating INR.....(FROM ABSTRACT OF BILL PASSED).....out of a total LC amount of INR.....(FROM MASTER TABLE OF LC OPENED).....against the first/second commercial invoice No. (FROM IPAS).....dated.....FROM IPAS.....for INR (FROM IPAS).....raised against the above contract from State Bank of India.....(branch – FROM LC MASTER TABLE).....on the strength of this Certificate.

The details of payment already made to the beneficiary under this Letter of Credit are as follows:

S. No.	Invoice No.	Invoice date	Invoice Amount (INR)	LCDA No.	LCDA date	Amount paid (INR)
---------------	--------------------	---------------------	-----------------------------	-----------------	------------------	--------------------------

Total Paid**THIS PAYMENT:-_____****LC BALANCE AFTER THIS PAYMENT:-_____****(Signature of authorised Railway authority)****Name:****Designation:****Official Seal****Signature of the Tenderer(s)****For Chief Administrative Officer/Con**

Annexure-5 of Chapter -6

Request letter from Executive branch to Accounts Office for opening of LC.
Office.....
.....Railway

No. _____
Dated _____

The PFA/Sr. DFM/Dy. FA
HQ/Division/Workshop/Cost

Sub: - Opening of LC.
Ref: - Supply Order/Contract Agreement No.

It is requested to open a sight LC against the above referred Order/Agreement in favour of _____. The details of beneficiary are as under:

- (i) Name of Contractor/Supplier
- (ii) Vendor Code
- (iii) Address
- (iv) Tender No.
- (v) Contract Agreement No.
- (vi) Description of Goods/Service
- (vii) Value of Contract
- (viii) Stage of Payment
- (ix) Expected payment within 6 months (LC Amount)
- (x) Beneficiary bank details:
 - (a) Bank name
 - (b) Address
 - (c) Account No.
 - (c) IFSC Code
- (xi) Validity/Period for which LC is to be opened.

It is certified that the supplier/contract has exercised the option of taking payment due against the tender, through LC arrangement in IREPS portal at the time of bidding itself and the option has been flagged in the IREPS. This has the approval of _____

(Signature)

Name:-

Designation:

(Official Seal)

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Annexure-1 of Chapter-6

**NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]**

PROFORMA FOR PERFORMANCE BANK GUARANTEE

(Executed on non-judicial stamp paper, which should in the name of executing bank)

Name of the Bank: -----

President of India,
Acting through Chief Administrative Officer/Construction,
N.E. Railway, Gorakhpur.

Beneficiary: FA&CAO/Con/N.E. Railway, Gorakhpur

Bank Guarantee Bond No. and date -----, Valid up to-----

Amount of Bank Guarantee Bond-----,

PERFORMANCE GUARANTEE BOND

In consideration of the President of India acting through, Chief Administrative Officer/Con/N.E. Railway, Gorakhpur-273012 (hereinafter called "The Government") having agreed under the terms and conditions of contract under Acceptance Letter No.----- dated ----- made between Chief Administrative Officer/Construction, N.E. Railway, Gorakhpur and agency M/s/Shri ----- (herein after called "the said contractor(s)" for the work "-----" (here in after called "the said contract") having agreed for submission of a irrevocable Bank Guarantee Bond equivalent to 5% of the contract value as indicated in the aforesaid contract for Rs.----- (Rupees ----- only) as a performance security Guarantee Bond from the contractor (s) for compliance of his obligations in accordance with the terms & conditions in the aforesaid contract.

1. We, ----- (indicate the name of the Bank) hereinafter referred to as the Bank, under - take to pay to the Government an amount not exceeding Rs.----- (Rupees ----- only) on demand by the Government.

2. We,----- (indicate the name of the bank), further agree that and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Government through the **FA & CAO/Con/ N.E. Railway, Gorakhpur**, stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the Government by reason of any breach by the said contractor of any of the terms of conditions contained in the said contract/agreement or by reason of the contractor failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.----- (Rupees-----Only).

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

3. (a) We,----- (indicate the name of Bank) further undertake to pay to the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor(s) in any suite or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

(b) The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.

4. We,----- (indicate the name of bank) to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by contracting authority on behalf of the Government, certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharge this guarantee.

5 (a) Notwithstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Government or until (date of validity/ extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the Government within validity/extended period of validity of guarantee from the aforesaid date.

(b) Provided always that We----- (indicate the name of the Bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case may be on being called upon to do so by the Government. If the guarantee is not renewed or the period extended on demand, we ----- (indicate the name of the Bank) shall pay the Government the full amount of guarantee on demand and without demur.

6. We, ----- (indicate the name of Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without effecting in any manner out of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to the powers exercisable by the Government against the said contractor (s) and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance act or omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties for the said provision would relive us from the liability.

7. This guarantee will not be discharged by any change in the constitution of the Bank or the Contractor(s).

8. This guarantee shall be valid up to ----- (Date of Completion plus 60 days). Unless extended on demand by Government. Notwithstanding anything to the contrary contained hereinbefore, our liability under this guarantee is restricted to Rs..... (Rupees.....) unless a demand under this guarantee is

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

made on us in writing on or before..... We shall be discharged from our liabilities under this guarantee thereafter.

9. The expressions Bank and Railway herein before used shall include their respective successors and assigns.

10. 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.

11. 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

12. 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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Annexure-2 of Chapter-6**PROFORMA OF INDEMNITY BOND**

Indemnity for Safe Custody of Reinforcement steel/Structural Steel as per Special Conditions of Contract Agreement No.: _____ dated: _____ for the work “_____”

We (Name of Contractor) _____
 _____hereby undertake that we shall hold at our Workshop at _____
 for and behalf of the President of India and in trust for him the stores/articles(mentioned in annexure, details to be given for quantity for each section and grade) which may be and/or which has been made over to us, in connection with “_____” against the contract agreement No. Dated.

2. We shall be and remain absolutely responsible for the safe custody and protection of the said stores and articles against all risks, whatsoever, till those and assembled in the bridge to be fabricated against the above mentioned contract and duly delivered to the President of India or to his representative as he may direct and as such do hereby indemnify the president of India against any loss and/or damage to the said stores and articles while in our possession/custody. The said stores and articles shall however be at all times, open to the inspection by officers who may be authored on that behalf by ministry of Railways or its nominee.

3. Should however, at any time any loss or damage to as aforesaid, occurs or a refund become otherwise due to the President of India, he or his representative shall be entitled to recover from us compensation for, and in respect of such loss or damage, if any, or the amount to be so refunded without prejudice to any other remedies which may be otherwise available to the said president of India by way of deduction from any sum due to/or any sum which at any time hereafter may become due to us under this or any other contract.

In the event of any loss or damage as aforesaid, the assessment of such loss or damage and the assessment of the compensation therefore would be made by the President of India or his authorized nominee and the said assessment would be final and binding upon us.

For.

DECLARATION FORM

For receiving materials from the Railways by the Firm.

“I/We hereby solemnly declare that the(Material) obtained is required for the purpose of Manufacturing(finished product) against Contract Agreement No. dated.The(material) will not be utilized for any other purposes or other wise disposed of without the prior approval of the president of India/Railways or his nominee”

Note:- This Performa is only for guidance and may be changed/amended at any stage at the discretion of Engineer. This is to be submitted on stamp paper of appropriate value at the Contractor’s cost.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Annexure-3 of chapter -6**N.E. RAILWAY (CONSTRUCTION ORGANISATION)****CONTRACT AGREEMENT OF WORKS**

CONTRACT AGREEMENT NO. _____ DATED _____

1. ARTICLES OF AGREEMENT made this _____ day of _____ 20____ between President of India acting through the Railway Administration hereafter called the "Railway" of the one part and _____ herein after called the "Contractor" of other part.

2. WHEREAS the Contractor has agreed with the Railway for performance of the works _____ set forth in the Bill(s) of Quantities hereto annexed upon the Standard General Conditions of Contract, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Specifications of _____ updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the applicable Standard Schedule of Rates (SSOR) updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Special Conditions and Special Specifications, if any and in conformity with the drawings here-into annexed AND WHEREAS the performance of the said works is an act in which the public are interested.

3. NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways, the Contractors will duly perform the said works in the said Bill(s) of Quantities set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the Railway and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the _____ day of _____ 20____ and will maintain the said works for a period of _____ Calendar months from the certified date of their completion and will observe, fulfill and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the Railway, both hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the Railway will pay or cause to be paid to the Contractor for the said works on the final completion thereof the amount due in respect thereof at the rates specified in the Bill(s) of Quantities hereto annexed.

Contractor _____ (Signature)

Railway: Designation _____

Address _____

(For President of India)

Date _____

Date _____

Signature of **Witnesses** (to Signature of Contractor) with address:**Witnesses:**

1 _____

2 _____

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Annexure-6 of chapter -6

Reference Para 48.(3)

FINAL SUPPLEMENTARY AGREEMENT

1. Articles of agreement made this day _____ in the year _____ between the President of India, acting through the _____ Railway Administration having his office at _____ herein after called the Railway of the one part and _____ of the second part.
2. Whereas the party hereto of the second part executed an agreement with the party hereto of the first part being agreement Number _____ dated _____ for the performance _____ herein after called the 'Principal Agreement'.
3. And whereas it was agreed by and between the parties hereto that the works would be completed by the party hereto of the second part on _____ date last extended and whereas the party hereto of the second part has executed the work to the entire satisfaction of the party hereto of the first part.
4. And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ including the Final Bill bearing voucher No. _____ dated _____ of value _____ duly adjusted as per price variation clause, if applicable (the receipt of which is hereby acknowledged by the party hereto of the second part in full and final settlement of all his /its claims under the principal agreement.

And whereas the party hereto of the second part have received sum of ₹ _____ through the Final Bill bearing voucher No. _____ dated _____ duly adjusted as per price variation clause (PVC), if applicable (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part in full and final settlement of all his/its disputed claims under principal agreement.

Now, it is hereby agreed by and between the parties in the consideration of sums already paid by the party hereto of the first part to the party hereto of the second part against all outstanding dues and claims for all works done under the aforesaid principal agreement excluding the Security Deposit, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement. It is further agreed by and between the parties that the party hereto of the second part has accepted the said sums mentioned above in full and final satisfaction of all its dues and claims under the said Principal Agreement.

(Applicable in case Final Supplementary Agreement is signed after release of Final Payment)

Or

And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party hereto of the second part).

And whereas the party hereto of the second part have received sum of ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part and party hereto of the second part have accepted final measurements recorded on Page No..... to Page No.... of Measurement Book No.....and corresponding Final Bill duly adjusted as per price variation clause (PVC), if applicable, for full and final settlement of all his/its disputed claims under principal agreement.

Now, it is hereby agreed by and between the parties in the consideration of sums already paid through various On Account Bills and sums to be paid through Final Bill duly adjusted as per price variation clause (PVC), if applicable, based on accepted final

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

measurements including the Security Deposit by the party hereto of the first part to the party hereto of the second part against all outstanding dues and claims for all works done under the aforesaid principal agreement, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement.

(Applicable in case Final Supplementary Agreement is signed before release of Final Payment)

5. It is further agreed and understood by and between the parties that the arbitration clause contained in the said principal agreement shall cease to have any effect and/or shall be deemed to be non-existent for all purposes.

Signature of the Contractor/s

for and on behalf of the President of India

Witnesses

ADDRESS: _____

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

ANNEXURE - XVII

Reference Para 16.(4) Part-II of GCC

Insurance Surety Bond for Performance Security

Name of the issuer of surety bond:

President of India,

Acting through Chief Administrative Officer/Construction,

N.E. Railway, Gorakhpur.

Beneficiary : FA&CAO/Con/N.E. Railway, Gorakhpur.

Date

Surety Bond No:

Issue Date:

Amount of Bond:

Expiry Date

WHEREAS, In consideration of the President of India acting through -----
 ----- (*Designation & address of contract signing authority*), North
 Eastern, Railway, Gorakhpur (hereinafter called "The Railway") having accepted the bid of M/S
 ----- hereinafter called the contractor, for the work of -----

 -----' under invitation
 for bids No.-----dated vide Letter of Acceptance No.-----
 -----and date -----
 -----.

AND

WHEREAS, the contractor is required to furnish Performance Security for the sum of
 Rs.-----(*Rupees*-----
 ----- 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 -----
 -----contractor, agreed to give Bond for
 performance security/additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that I/We, the undersigned (insert name(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 Rs.----- (*Rupees* -----
 -----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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

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-----(*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 totaling 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.
12. 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 fulfillment 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,

- a. Our liability under this Surety Bond shall not exceed, Rs.-----(*Rupees-----*
-----Only).
- b. This Surety Bond shall be valid up to -----(*being the date of expiry*).
- c. Unless the bank is served a written claim or demand on or before-----
(*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.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Date -----the day of ----- (*month*) -----(*year*).

15. The Insurance Surety Bond shall be verified by sending mail to {customer.care@sbigenera.in}.

Place:

Bank's Seal and authorized signature(s)

*{Name in Block letters}
{Designation with Code No.}
{P/AttorneyJ No.}*

Witness:

1

2

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

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERNRAILWAY**[CONSTRUCTION ORGANISATION]****ANNEXURES –A to M**

- | | |
|-------------------------|---------------------------------------------------------------------------------------------------|
| 1. ANNEXURE – A: | HISTORY SHEET OF THE TENDERER. |
| 2. ANNEXURE - B: | DETAILS OF CONSTRUCTION MACHINERIES, TOOLS and PLANTS, VEHICLES ETC. |
| 3. ANNEXURE –C: | DETAILS OF TECHNICAL AND OTHER PERSONNELS AVAILABLE ON HAND and PROPOSED TO BE ENGAGED IN WORK. |
| 4. ANNEXURE - D: | DETAILS OF WORKS COMPLETED DURING LAST SEVEN FINANCIAL YEARS and CURRENT YEAR BY THE TENDERER[s]. |
| 5. ANNEXURE - E: | DETAILS OF WORKS ON HAND BY THE TENDERER[s]. |
| 6. ANNEXURE - F: | DECLARATION REGARDING ASSOCIATION OF RAILWAY OFFICER[S] WITH TENDERER[S]. |
| 7. ANNEXURE - G: | LIST OF COURT CASES DURING LAST 7 YEARS. |
| 8.ANNEXURE –H: | LIST OF ARBITRATION CASES DURING LAST 7 YEARS. |
| 9.ANNEXURE–I: | BROAD PLAN OF EXECUTION OF THIS WORK WITHIN THE STIPULATED COMPLETION PERIOD. |
| 10.ANNEXURE -J: | DETAILS OF OTHER CREDENTIALS/FACILITIES AVAILABLE WITH THE FIRM/CONTRACTOR. |
| 11. ANNEXURE –K: | DECLARATION REGARDING VISITING SITE OF WORK. |
| 12. ANNEXURE –L: | CONSTITUTION OF FIRM. |
| 13. ANNEXURE –M: | DETAILS OF REAL TIME GROSS SAVING (RTGS)/NATIONAL ELECTRONIC FUND TRANSFER (NEFT). |

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘A’

HISTORY SHEET OF THE TENDERER

i]	Name of the Company	:	
ii]	Address of Registered Office	:	
	Phone: Fax: e-mail ID:		
iii]	Constitution of the Company/Firm	:	
a]	Ownership particulars whether Private Ltd., Public Ltd., or Partnership firm or Proprietorship Firm or any other type duly supported by the documents such as Partnership Deed and Articles of constitution etc. as applicable.	:	
b]	Name and address of collaborator[s]	:	
c]	Nature of participation by collaborator[s] in share holding of the Company	:	
d]	Extent and nature of proposed participation by collaborator[s] in execution of this work	:	
iv]	Number of years the firm has been in operation in India under its present	:	
v]	Any other information		

Signature of tenderer
Along with Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘B’

**DETAILS OF CONSTRUCTION MACHINERIES, TOOLS and PLANTS, VEHICLES
ETC.**

AVAILABLE ON HAND AND PROPOSED TO BE UTILIZED IN WORK

Sl. No.	Description of equipments	Number available [Owned/hired]	Date of purchase	Date of manufacture	Make	How driven [i. e] Petrol/Diesel/electrical	Condition of the equipment	Where the equipment can be inspected
1	2	3	4	5	6	7	8	9

Signature of tenderer

Along with Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘C’

**DETAILS OF TECHNICAL AND OTHER PERSONNELS AVAILABLE ON HAND
and PROPOSED TO BE ENGAGED IN WORK**

Sl	N a m e	Age	Technical qualification[s]	Position with the tenderer	Commencement of present employment	Total experience	Emoluments
1	2	3	4	5	6	7	8

Signature of tenderer
Along with Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

**DETAILS OF WORKS COMPLETED DURING PREVIOUS SEVEN YEARS BY THE
TENDERER[s].**

[illegible]

Signature of Tenderer
Along with Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘E’

DETAILS OF WORKS IN HAND PROGRESS OF THE TENDERER[s]

Sl	Name of work	Total cost of contact value in Rs.	Month and year of commencement	Date of award and Completion period	Present progress of work		Full address of the authority under whom the work is being executed	Documentary proof [enclose copies of acceptance letter and proof regarding present progress etc. and indicate Annexure No. in this column]
					Total paid amount (Rs.)	Total balance amount (Rs.) (3-6)		
1	2	3	4	5	6	7	8	9

Signature of tenderer
 Along with seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘F’

**DECLARATION REGARDING ASSOCIATION OF RAILWAY OFFICER[S] WITH
TENDERER[S]**

Sl	N a m e	Status with the tenderer	If working in Rly. on the date of tendering, designation and place of posting	If retired on the date of tendering		
				Date of retirement	Status at retirement	Particulars of permission taken for associating with the tenderer
1	2	3	4	5	6	7

Signature of Tenderer

Along with Seal.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘G’

LIST OF COURT CASES DURING PREVIOUS THREE YEARS

Sl	Name of work	Value of work	Name of Client Deptt.	Name of the Court	Date of institution of case	Relief sought from Court	Brief reason of dispute	Final/Present position of the case
1	2	3	4	5	6	7	8	9

Signature of tenderer
Along with Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERNRAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘H’

LIST OF ARBITRATION CASES DURING PREVIOUS THREE YEARS.

Sl	Name of work	Value of work	Name of Client Deptt.	Amount and date of claim preferred	Claim of Deptt. if any	Brief reasons of disputes	Final/Present position of the case
1	2	3	4	5	6	7	8

Signature of Tenderer
 Alongwith Seal

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERNRAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘I’

BROAD PLAN OF EXECUTION OF THIS WORK WITHIN THE STIPULATED COMPLETION PERIOD

[illegible]

Signature of Tenderer
Along with Seal


Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERNRAILWAY
[CONSTRUCTION ORGANISATION]

ANNEXURE – ‘J’

OTHER CREDENTIALS/FACILITIES AVAILABLE EITH THE FIRM/CONTRACTOR

A large, empty rectangular box with a thin black border, intended for the tenderer to provide other credentials or facilities available with the firm or contractor.

Signature of Tenderer
Along with Seal.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

PROFORMA
DECLARATION

Annexure-K

I/We hereby solemnly declare that I/We visited the site of the work personally and have made myself/ourselves fully conversant of the conditions therein and in particular the following:-

1. Topography of area
2. Soil strata at site of work.
3. Source and availability of construction material.
4. Rates for construction of material, water electricity including all local taxes, royalties, octroi etc.
5. Availability of local labour (both skilled and unskilled) and relevant labour at sand labour laws.
6. The existing roads and approaches to the site of work and requirements for further services roads/approaches to be constructed by me/us.
7. The availability and rates of private land etc. That shall be required by me/us for various purposes.
8. Climatic conditions and availability of working days.

I/We have quoted my/our rates for various items in the schedule of items, quantities and rates taking into account all the above factors also.

Signature of the Tenderer/s

Annexure-L

Constitution of Firm

1. Full name of contractor/s construction firm and year of establishment.
2. Registered Head Office Address.
3. Branch Office in India.
4. Address on which correspondence regarding this tender should be done.
5. Constitution of firm, give full details including name of partners/ executives/power of attorney/holders etc.
6. Particulars of registrations with Government/Semi Govt. Organization, Public Sectors Undertakings and local bodies etc.

Signature of the Tenderer/s.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

ANNEXURE-M**Real Time Gross****Settlement (RTGS)/National Electronic Fund Transfer (NEFT) (Model Mandate Form)**

(Investor/customer's option to receive payments through RTGS/NEFT)

1. Investor/customer's name
2. Particular's of Bank Account:
 - A) Name of the Bank:
 - B) Name of the Branch.
Address
Telephone No.
 - C) RTGS/NEFTIFS Code.
 - D) Type of the account (S.B./
Current or Cash Credit)
With code (10/11/13).
 - E) Ledger and Ledger folio number.
 - F) Account number (as appearing on the
Chequebook) (in lieu of the bank certificate to
be obtained asunder, please attach a blank
cancelled cheque or a photocopy of a cheque
or front page of your savings bank pass book
issued by your bank for verification of the
above particulars)
3. Date of effect

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all or incomplete or incorrect information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the scheme.

Date

(.....)

Signature of the Investor/Customer

Certified that the particulars furnished above are correct as per our records.

Signature of
Bank Authority
(With seal)
Signature of the tenderer

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

CHAPTER-8

**NORTH EASTERN RAILWAY
[CONSTRUCTION ORGANISATION]**

ADDITIONAL SPECIAL CONDITIONS OF CONTRACT i.e. [Technical conditions]

1.0 ARRANGEMENT OF MATERIALS BY THE CONTRACTOR

1.1 Cement and steel, which will include M.S. Rounds, cold twisted deformed bars, structural, M.S. Flats etc. required for the work will be procured by the contractor(s) himself/themselves at his/their own cost including its transportation from the place of supply. Necessary assistance in procurement of the materials, if required, may be given by the Railway but the responsibility of the procurement shall lie entirely on the contractor(s). The steel materials shall be used in such a manner as to restrict the scrap quantity to the minimum possible extent. The length of the sections shall be cut in a judicious manner so as to consider the entire work as a whole by taking advantage through overlaps etc. No claim whatsoever for enhanced rate on this account that is due to increase in weight of cement & steel materials in handling and transporting including the additional binding wires will be entertained by the Railway.

1.2. Cement and steel required for the work shall conform to specifications laid down in Special Specification attached with this contract document or relevant IRS/ IS Code of Practice. Before placing orders for supply of these materials, approval from the Engineer shall be obtained regarding the source of supply for these materials. If desired by the engineer, the contractor shall submit manufacturer's test certificate of these materials.

1.2.1 Contractor shall also establish his own field laboratory equipped with apparatus duly manned for carrying out the following tests of Cement according to relevant IS(BIS) specification.

- 1 Compressive & tensile strength.
- 2 Initial and final setting time.
- 3 Consistency.
- 4 Soundness.
- 5 Fineness modulus

The railway reserves the right to take samples of materials supplied by the Contractor and to get the same tested in reputed laboratories at contractor cost and the results there of shall be binding on the contractor.

1.3 THE NORMAL REQUIREMENT OF CEMENT SHALL BE UP TO THE LIMITS SPECIFIED BELOW:-

(1) For Ordinary Concrete Mix		
Quantity of cement in 50 Kg. bags per		one cubic metre of concrete
M-10		4.50 bags.
M-15		6.50 bags.
M-20		8.30 bags.
(2) For controlled concrete		
M-25	}	The quantity shall be jointly determined after actual mix design and testing by the contractor and Engineer.
M-30		
M-40		

Note:- The above information is given as guidance for the contractor(s) for estimating the cement consumption. The maximum and minimum cement content for each grade of concrete shall, however, be governed by the provisions of relevant IRS/IS code of practices.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

- 1.4** Boulder (30Kg to 60Kg) and 8 SWG steel wires will be arranged as per N.E. Railway Specifications.
- 1.5** The rates quoted by the contractor shall include the cost of all transport, loading, unloading, rehandling, carriage, etc., for all lead, lift and descents. The contractor shall judiciously procure materials according to the requirement for the work. Materials, which are rendered surplus to the requirements, shall be the property of the contractor(s). The Railway shall not be responsible for any excess/shortfall of loss or damage of materials during transit from the place of delivery or at any other stage.
- 1.6** The contractor shall be liable to render full account of all materials and sources procured by him and keep proper records regarding their use, which shall be made available for inspection of the Engineer when required. If any quantity of materials is consumed in excess or wasted or damaged or lost or otherwise not satisfactorily accounted for, Railway shall not be responsible for the same.
- 1.7** The contractor shall be fully responsible for all consequences that may arise out of his failure to comply with regular supply of the materials in time.
- 1.8** The contractor shall so procure his requirement as to ensure utilization of cement not later than 60 days after the date/week of the manufacture thereof. Cement older than this period or stored through any part of the monsoon season shall not be used on the work except with the permission of the Engineer and after satisfactorily passing such test, which he may specify.
- 1.9** The contractor shall be fully responsible for any damage or deterioration of the materials procured by him/them and while in his/their custody.
- 1.10** The procurement shall, as far as practicable, be kept commensurate with the actual need. If, however, at any time any of the steel items procured by the contractor(s) are found to become surplus owing to any change in the design considered necessary by the Railways during or after the approval of designs, Railways shall not be responsible for the same and no claim whatsoever shall be entertained for such excess procurement.
- 1.11** All the materials procured by the contractor for use or fixing in the work (including preparatory work) if found surplus and remaining unused on completion of the works shall be the propriety of the contractor(s). However, no claims in this regard whatsoever shall be entertained by the Railways.
- 1.12** If there is any delay on the part of the contractor(s) in supplying the materials and if as a result thereof, the completion of the work is delayed, the Railway will not consider any request by the contractor, for granting of extension of completion date for such loss of time. The Railway will also not entertain any claim from the contractor in this regard due to any loss suffered by him on account of his labour or idling of machinery or any other account as a result of delay in supplying the materials.
- 1.13** For stacking cement, the contractor(s) shall, at his own cost, build suitable damp- proof godown at the site of work and make all satisfactory storing arrangement to see that the strength of cement is not deteriorated.

2.0 SPECIAL SPECIFICATIONS OF WORKS

2(a) GENERAL:-

2.1 The entire work is to be carried out as per relevant Railway's Specifications. These Specifications shall apply to all such works as are required to be executed under the contract or otherwise directed by the Engineer. In every case the work shall be carried out to the satisfaction of the Engineer and conform to the location, lines, grades and cross sections shown on the drawing or as indicated by the Engineer. The quality of work and materials shall comply with the requirements set forth in the referred drawings. Where the drawings and specifications described a portion of the work in only general terms and not in complete details, it shall be understood that only the best general practice is to prevail, materials and workmanship of the best quality are to be employed and the instructions of the Engineer are to be fully complied with and shall be binding on the contractor.

2.2 In the event of any provision not being covered by IRS specification and N.E.Railway Specifications, reference may be made to relevant IS, BS & ASTM specifications in that order. Wherever these are silent, the design and construction shall conform to sound Engineering practice and in case of any dispute arising out of the interpretation of above, decision of the Engineer shall be final and binding on the contractor.

2.3 Whenever a reference is made to any of the Standard Specification and Code of practices, it shall be taken as a reference to the latest version/revision of the same and shall include all the errata/corrections made in the same from time to time.

2.4 In case of any contradiction between provision in the special specifications laid down here and in the specifications and codes which have been referred to, the former shall prevail and that in all cases the decision of the Engineer shall be final & binding on the contractor.

2.5 All measurements and computations unless otherwise indicated, shall be carried nearest to the following limits.

i)	Length and breadth	-	0.01 m
ii)	Height depth or thickness of structural members etc.	-	0.005 m
iii)	Area	-	0.01 Sqm.
iv)	Cubic contents	-	0.01 Cum.
v)	Weights	-	0.001 Tonnes.

In recording dimensions of work the sequence of length, width and height or depth or thickness shall be followed.

2.6 MATERIALS FOR STRUCTURES

All materials to be used in the works shall be in conformity with the requirements laid down as below. If the special material not covered here is required to be used shall conform to relevant IS, BS, ASTM specifications (if there are any) in that order to the requirements specified by the Engineer.

3.0 BINDING WIRE

Binding wire to be used for the reinforcement bars/rods shall be arranged by the contractor at his own cost and shall be approved soft annealed mild steel wire not less than 1 mm (18 SWG) size and conforming to IS 280 1978. The binding wire should be GI or treated by CECRI coating Corroded-binding wires are not permitted.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

3.1 HIGH TENSILE STEEL FOR PRESTRESSING

The prestressing steel conforms to any of the following:-

- (a) Plain hard drawn steel wire conforming to IS: 1785(Part-1)-1983 and IS: 1785(Part-II)-1983.
- (b) Cold drawn indented wire conforming to IS: 6003-1983.
- (c) Unquoted stress relieved strand conforming to IS: 6006-1983.

3.1.1 The contractor will be required to furnish type of prestressing steel and the same of the firm from which the supply is intended to be procured and also the necessary test certificates regarding both chemical as well as physical properties of the prestressing steel proposed to be prestressing cables. The contractor will have to make their own arrangements for procuring full quantity of prestressing strands of required design and quality.

3.1.2 All prestressing steel shall be procured in coils not less than 2440 mm diameter and shall be straightened and degreased (if present) by an approved method before use.

3.1.3 All prestressing steel shall be provided with protective coating immediately after procurement during storage, after threading and ultimately in position. Such protective coatings shall not be deleterious and detrimental to the ultimate use of prestressing cables nor shall it interfere with the designee qualities required during services.

3.1.4 All prestressing steel shall be free from all deleterious materials such as grease, oil, wax, dirt, paint, loose rust, or any other similar contaminates that would reduced bond between the steel and concrete.

Prestressing steel shall not be contaminated with form release agents used on forms or beds.

All prestressing steel shall be stored under proper cover to minimize corrosion. Prestressing steel having deeply etched or pitted surfaces shall not be permitted for use in the prestressed concrete work. To avoid rapid destructive corrosion, Care shall be taken in the storage of prestressing steel to prevent galvanic or battery action, which can occur when two dissimilar metals are adjacent to an ionized contaminated once shall be clean with an effective solvent.

3.2 UNTENSIONED REINFORCING STEEL

All reinforcement to be used as un tensioned steel in the permanent structures shall be arranged by the contractor's and shall be any of the following:-

- (a) Mild steel and medium tensile steel bars conforming to IS: 432(Part-1)-1982.
- (b) Hot rolled deformed bars conforming to IS:1139-1966.
- © Cold twisted deformed bars conforming to IS:1786-1985.

3.3 SHEATHINGS

3.3.1 The sheathing material shall be of Cold Rolled Cold Annealed (CRCA) Mild Steel intended for mechanical treatment and surface refining but not for quench hardening or tempering.

3.3.2 The sheathings shall be bright furnished. However, galvanized or lead coated mild steel strips can be used. The metal must be such that destructive galvanized action between duct and tendon does not occur.

3.3.3 The sheathings shall be machined made and shall also be strong enough so that they do not get dented or deformed during handling and concreting. The thickness of the strip shall not be less than 0.30mm. The sheathing shall conform to the requirements as per tests specified in Appendix-I of IRC:18-1985 and the contractor shall have to furnish the manufacturer's test certificate.

3.4 ANCHORAGES

3.4.1 The tenderer(s) must clearly note that only Freyssinet Method or similar type of prestressing shall be approved. The guide cones, bearing plates and grips for anchorage shall be of superior quality cast steel material. The anchorage materials like guide cones, bearing plates, grips etc. shall be procured from Freyssiner Prestressing Company, Bombay or similar other firm of repute as decided by the Engineer. Before being used in the structure, a few anchorages shall be got tested by the contractor at his own cost as directed by the Engineer.

3.4.2 All bearing surface of the anchorages shall be cleaned prior to concreting and tensioning.

3.4.3 Adequate provisions shall be made for protection of the anchorages against corrosion.

3.5 TIMBER

The timber used for structural purposes whether permanent/semi-permanent or temporary works shall conform to IS: 883-1970.

3.6 CEMENT

Cement will be procured by the contractor. In general for all cement concrete and reinforced concrete only. Ordinary Portland Cement Grade 33 conforming to IS:269: 1976 or 43 Grade conforming to IS:8112 shall be used. However, Railway reserves the right to ask the contractor at any time for using other varieties of Standard cement complying with the relevant IS codes or any other standard specifications and the contractor shall have to use the same without any additional claims whatsoever on this account. Cement shall be procured from approved main producers/their authorized dealers or stockyard. In any case, before placing order the contractor shall take written permission from the Engineer regarding source of supply. Test report of cement will be made available before use by the contractor to the Engineer.

3.7 ADMIXTURES

Any admixture to be used in concrete as a super-plasticizer and/or as a retarder in the concrete to achieve well compacted and dense concrete of desired workability shall conform to IS: 9103-1979 and shall be free from chloride and sulphate content and shall be procured from well reputed firms after obtaining approval from the Engineer. The cost of using admixture including its supply shall be borne by the contractor. The chemical composition of these admixtures shall be got tested from time to time from National Test House, Calcutta or such other laboratories as desired by the Engineer and the cost of all such testing shall be borne by the contractor. The contractor shall also produce at his own cost manufacturer's test certificate for each consignment.

3.8 AGGREGATES FOR CONCRETE

3.8.1 All aggregates (Coarse, fine and all in) to be used in concrete shall comply in all respects with IS 383 1970 and shall be obtained from a source having prior approval of the Engineer.

3.8.2 Natural coarse aggregates having round surfaces may be used for concrete only after prior approval of site Engineer in all structures except for grade of concrete higher than M 25 in which case broken aggregates of suitable grading shall have to be used.

3.8.3 Aggregates, which are not clean are required to be washed to the satisfaction of the Engineer or his representative in water of quality as described in clause 2.7. If the Engineer so desires, the contractor shall provide and operate a washing plant of capacity suitable to produce adequate supply of clean

aggregates within the approved grading limits. All such washed aggregates shall be stored and drained for least 24 hours before being used for concreting.

3.8.4 The coarse aggregate, unless otherwise specified by the Engineer, shall be delivered to the site and shall consist of approved stone free from flaky or elongated pieces.

3.8.5 The contractor(s) shall have adequate stock of all the aggregates at site for at least one month's consumption and these shall be protected from dust contamination by methods approved by and to the satisfaction of the Engineer's representative.

3.8.6 The fine and coarse aggregates shall be measured separately by weight and mixed in the proportions specified or permitted for the various qualities of concrete except where volume batching has been permitted by the Engineer. The individual and combined grading shall be to the satisfaction of the Engineer.

4.0 WATER FOR CONCRETE AND MORTAR

Water to be used in any concrete and mortar shall be clean and free from injurious amount of deleterious materials. Normally potable water from an approved source may be considered satisfactory for washing, mixing and curing concrete. Water shall comply with the recommendations of B.S. 3148. The following concentrations represent the maximum permissible value of deleterious materials.

- (a) Not more than 2 ml. of 0.1 normal Na OH required neutralizing 200 ml. of the sample.
- (b) Not more than 10 ml. of 0.1 normal HCL shall be required to neutralize 200 ml of sample.
- (c) Percentage of solids when tested in accordance with IS 3025: 1964 shall not exceed the following:

Organic matters	-	0.02%
Inorganic matters	-	0.3%
Sulphates	-	0.05%
Chlorides	-	0.1%
Suspended matters	-	0.2%

- (d) pH value of water shall not be less than 6.

5.0 MIXING CONCRETE

5.1 All concrete shall be mixed in specified proportions in a drum type mechanical mixer in first class working condition. Mixing shall be continued till the ingredients are uniformly distributed and an uniform colour of the entire mass is obtained and each individual particle of the coarse aggregate shows complete coating of cement mortar. The mixing time shall depend on the type of mixer used, but in no case less than 2 minutes after all the ingredients have been put into the mixer.

5.2 Mixer that has been out of use for more than 30 minutes shall be thoroughly cleaned before putting in new batch. The mixing plant shall be thoroughly cleaned before and after use. A stand by mixing plant, equivalent to that in use, shall be provided, maintained and kept ready for immediate use at the time and location of each concreting to take care of eventualities like breakdown of the mixer in operation.

5.3 The contractor shall provide a competent person, who shall always be present at site to supervise all stages of production of concrete. The Engineer and his representative shall have the right to inspect and check the mixing plant.

6.0 TESTS AND STANDARD OF ACCEPTANCE

6.1 PRELIMINARY TESTS FOR CONTROLLED CONCRETE

6.1.1 The design of the mix shall be carried out by the contractor and shall be furnished well in advance to the Engineer for his approval.

6.1.2 Number of trial mixes shall be made for each grade of concrete in presence of the Engineer's representative using samples of the aggregates cement and water typical of those to be actually used in the work. Preparation of these trial mixes and their testing shall be done in the contractor's own field laboratory by an experienced and qualified personnel to be provided by the contractor. The approval of the design mix by the Engineer shall be based on these test result. However the Engineer, if he desires can carry out the preparation and testing of trial mixes independently at any other laboratory at his discretion.

6.1.3 Should the strength shown by the trial mix to be below the desired strength for the particular grade of concrete specified in the table under clause 3.2.4 the proportions of the ingredients shall be so changed as may be required to bring the concrete up to the desired strength workability, etc. keeping in view of the codal provisions regarding maximum & minimum cement content and other requirements.

6.1.4 Wherever, a particular mix has been approved by the Engineer, no variation shall be made in the proportions of ingredients, the original source of cement and aggregates or in the type, size and grading zone of the latter including water/cement ratio without the consent to the Engineer who may require further tests to be done. Whenever there is likely to be any change in the source of cement and aggregates the contractor shall inform the same to the Engineer well in advance and a fresh mix design shall have to be prepared. The contractor shall have to bear all the cost for preparing fresh mix design and shall not claim for any delay in finalizing the revised mix design.

6.1.5 For controlled concrete, the concrete mix shall be so designed as to achieve a design target mean strength of at least 33 percent higher than the required strength on work strength.

6.2 WORK CUBE STRENGTH

6.2.1 The contractor shall be held responsible for ensuring that the crushing strength of the concrete as placed is not less than the designed strength as per approved plans.

6.2.2 Work strength tests shall be made in accordance with relevant IS codes. Each test shall be conducted on at least six specimens, three of which shall be tested for seven days strength and the remaining five for 28 days strength. The samples of concrete shall be taken on each day of concreting from each mixing plant and each grade of concrete and cubes shall be made at the rate of six cubes for every 5 cubic metre of concrete or a part thereof or as directed by the Engineer. Similar test shall be carried but whenever the quality and grading of materials is changed irrespective of the quantities of concrete poured.

6.2.3 The contractor shall provide at his own cost all necessary labour materials including cube moulds equipment for sampling and all other ancillaries required in preparing specimens etc., as given in clause. above and arrange to carry and test these specimens in his own field laboratory, including cement used for making the work test cubes and preliminary test cubes described in above clauses respectively. The contractor shall test these specimens in persons of the representative of the Engineer. Test results shall be maintained in duplicate under the joint signature of the representative of the contractor and the

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Engineer. One set of the test results shall be kept with the contractor and the other with Engineer's representative.

6.2.4 All works shall be carried out under the supervision of a qualified and competent person of the contractor who shall supervise proportioning, mixing, placing, compacting and finishing of concrete and preparing and testing of specimen at all stages.

6.2.5 The Engineer reserves the right to take samples of concrete and prepare cubes to carry out tests independently at his own discretion. The contractor shall provide all facilities at his own expenses in taking such samples and making concrete cubes such labour materials including cube moulds equipment for sampling and all other ancillaries required in their preparation. The contractor shall also arrange to transport these specimens to the Railways laboratory at his own cost. The contractor shall depute his representative during testing and sign the test result as a token of the contractor's acceptance.

7.0 ACCEPTANCE CRITERIA

7.1 The concrete shall be deemed to comply with the strength requirements if:-

(a) Every sample taken on that particular day has a test strength not less than the specified work cube strength.

or

(a) The strength of one or more samples taken on particular day though less than the specified works cube strength is in each case not less than the greater of:

(i) The specified strength minus 1.35 times the standard deviation. The standard deviation to be estimated as under:

$$S = \sqrt{\{\Sigma \Delta^2 / (n-1)\}}$$

Where,

S= estimated standard deviation,

Δ = deviation of the individual test strength from the average of n number of samples,

and

n= number of sample test results.

(ii) 0.85 times the specified strength, and the average strength of all the samples taken on that particular day is not less than the specified works cube strength plus.

[1.65 – $\frac{1.65}{\sqrt{\text{number of samples}}}$] times the standard deviation as above

7.2 The concrete shall be deemed not to comply with strength requirements if:

(a) The strength of any sample taken on a particular day is less than the greater of:

(1) The specified strength minus 1.35 times the standard deviation as specified above, and

2) 0.85 times the specified strength, or

(b) The average strength of all the samples taken on that particular day is less than the specified works cube strength plus.

[1.65 – $\frac{3}{\sqrt{\text{number of samples}}}$] times the standard deviation.

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7.3 Concrete that does not meet the strength requirements as specified in clause as above but has a strength greater than that required by clause as above may at the discretion of the Engineer, be accepted as being structurally adequate without further testing.

7.4 If the concrete fails to comply to clause as above the structural adequacy of the parts affected shall be investigated and any consequential action as needed shall be taken at the cost of the contractor including the cost of cement and steel required, if any. The decision of the Engineer in this regard shall be final and the contractor shall have no claim whatsoever regarding delay in completion of the work due to delay in finalizing the consequential actions arising out of structurally inadequate concreting.

7.5 Concrete shall be rejected if it has been poured without prior approval of the Engineer or his representative, if it is porous or honey-combed, its placing has been interrupted without providing a proper construction joint, the reinforcements cable ducts has been displaced beyond the specified tolerances or the dimensional tolerances of the concrete section have not been met with.

8.0 CONCRETING UNDER WATER

8.1 The methods, equipment, materials and proportions of the mix to be used shall be got approved by the Engineer-in-charge or his representative before concreting under water. 10 percent extra cement shall be added per mix of concrete over that required by the grade specified. Greatest care shall be taken to prevent the cement being washed out and the concrete shall be deposited by means of a tremie or using the skip boxes system. Pumping shall always be kept as nearly as possible to prevent formation of seams. The deposition of concrete shall run continuously until it has been brought to the required height. The top surface shall always be kept as nearly level as possible to prevent formation of seams.

9.0 SETTING UP OF FIELD LABORATORY BY THE CONTRACTOR

9.1 The contractor shall set up a field laboratory of his own at the work site, which shall be open for use and inspection by the Railway at any time. The laboratory shall be fully equipped with all facilities for testing of cement, aggregates and concrete. All pressure gauges and other machines, equipment and measuring instruments of the laboratory shall be got checked and calibrated regularly as directed by the Engineer by an independent agency and the adjustment certificate shall be furnished to the Engineer. The contractor shall render all reasonable assistance and help in making such checks and tests etc. the cost of all checks and calibrations shall be borne by the contracts. The cost of tests for materials and cubes shall be borne by the contractor.

9.2 The contractor shall setup a field laboratory of his own at work site which shall have minimum machines (IS standard) as mentioned below:-

- i) Compression strength testing machine.
- ii) Sieve set for fine and coarse aggregates.
- i) Electronic balance (accuracy 1 milligram).
- iv) Physical balance up to 5.00 Kg.
- v) Electric Oven,
- vi) Modified Proctor Density Apparatus
- vii) Concrete Cubes Moulds.
- viii.) Pressure gauges.
- ix) Equipment for permeability test of concrete, Air entertainment in fresh concrete, abrasion test of coarse aggregate silt content of fine aggregate and any other equipment desired by the Engineer in charge.

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All the pressure gauges and other machines, equipment's and measuring instruments of the laboratory shall be got checked and calibrated regularly as directed by the Engineer-in-charge or his representative by an independent agency and the adjustment certificates shall be furnished to the Engineer-in-charge or his representative. The Contractor shall render all reasonable assistance and help in making such checks and tests etc. The cost of all checks and calibrations shall be borne by the Contractor. The cost of all tests for materials and cubes shall be borne by the contractor.

10.0 FORM WORK

10.1 The term formwork includes all temporary or permanent forms essential for forming the concrete, together with all temporary construction props, bracing and ties required for the support. The entire cost of form work, including all materials, labour, plant and equipment for making, erecting, positioning, etc. to achieve concrete of desired cross section including removal of form work after concreting shall have to be borne by the contractor and the rates quoted for various concreting items shall be deemed to include the cost of form work required to complete the work as per specifications and drawings to the satisfactions of the Engineer. In general the erection and removal of formwork shall be in accordance with the provisions given under IRS Concrete Bridge Code and IRC 21.

10.2 CONSTRUCTION AND PREPARATION OF FORM WORK BEFORE CONCRETING

10.2.1 Forms for concrete shall be made of either metal or timber suitably lined and will be of substantial and rigid construction type to shape alignment and dimensions as shown on the approved drawing. They shall be made mortar tight and sufficiently strong by using ties and bracing to prevent any displacement deflection or movement of any kind and shall be able to withstand the weight of the construction, all pressure due to ramming and vibration and all incidental loads associated with it including movements of persons, materials and plants during and after placing of concrete. Special measures shall be taken to ensure that the formwork does not hinder to shrinkage of concrete because without these the cracking could occur before the formwork is removed. Wherever applicable, arrangement shall be made to ensure that the formwork does not restrain the shorting or hogging of the girders or slabs during tensioning of the tendons. The formwork shall take due account of the calculated amount of positive or negative camber so as to ensure correct profile of the structure having regard to the deformation of the false work scaffolding or propping.

10.2.2 The contractor shall submit, well in advance, detailed working drawings along with calculations for all the form works proposed to be used in the works for approval of the Engineer. Any formwork, for which approval from the Engineer has not been obtained, shall not be permitted to be used at site. However, such approval shall not relieve the contractor of his responsibility for safety of man, machinery and materials and for final result obtained.

10.2.3 When the forms are ready for concreting, contractor shall inform the Engineer or his representative to inspect and accept the false work and forms as to their strength, alignment and general fitness. Being satisfied with the formwork and other aspects in all respects the Engineer shall allow the contractor for pouring concrete. But such inspection and permission shall not relieve the contractor of his responsibility for safety of man, machinery and materials and for final result obtained.

10.2.4 If at any time during placing of concrete the form work is found defective or after concreting the final work is found to be not within permissible tolerance such concrete shall be removed by the contractor at his own cost at the instructions of the Engineer including the cost of cement used in concrete thus dismantled.

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10.3 REMOVAL OF FORMWORK

10.3.1 Forms shall be so constructed and fitted as to be removable without damaging the surface of the concrete. The forms shall be removed only after setting of concrete has taken place and for this purpose due care shall be given to the local conditions, the weather, climate, temperature and other conditions that influence the setting up of concrete.

10.3.2 The consent of the Engineer or his representative shall be obtained in all cases before removing any formwork, but such permission shall not relieve the contractor of his responsibility in respect of any injury or damage to the concrete work arising from such premature or otherwise removal of the forms.

10.3.3 The forms shall be cleaned made good and oiled to the satisfaction of the Engineer before reuse. The cost of all the formwork including materials fixing and removing shall be deemed to have been included in the rate for concrete items of works and shall not be paid separately.

10.3.4 The side forms shall be released as early as possible after 12 hrs. Soffit forms shall not permit any restraint deformation of the member.

10.3.5 Where internal materials are used they shall be extracted or cut leaving adequate cover without causing damage to the concrete and the remaining hole shall be filled with suitable mortar. No permanently embedded metal shall have less than specified cover to the finished concrete surface. The contractor shall make good at his own expenses any injury or damage caused to the concrete work at the time of removal and striking of forms and supports.

11.0 TRANSPORT, PLACING AND COMPACTION OF CONCRETE

11.1 The method of transporting and placing of concrete shall be as approved by the Engineer or his authorized representative. All concrete shall be so transported and placed that no contamination, segregation or loss of its ingredients takes place.

11.2 All formwork shall be cleaned, properly oiled and made free from standing water, dust or any other foreign materials immediately before pouring of concrete. No concrete shall be placed on any part of the structure until the approval of the Engineer, or his representative has been obtained. Concrete shall be compacted in its final position within 30 minutes of its discharge from the mixer. Concrete when deposited shall have a temperature of not less than 4.5 degree centigrade and not more than 38 degree centigrade.

11.3 All concrete shall be so compacted with the help of vibrators, except in case of under water concreting as to produce a dense homogeneous mass. Sufficient vibrators in serviceable condition shall be kept at site so that spare equipment is always available in the event of breakdown. Immersion type vibrators shall be capable of producing not less than 10,000 cycles per minute and the external/surface vibrators not less than 3000 cycle per minute. Vibrations shall not be applied through reinforcements, and where immersion type Vibrators are being used, contact with reinforcements, sheaths and all other inserts shall be avoided as far as possible. To ensure thorough and properly compacted concrete the contractor shall carry out necessary compacting factor tests at his own cost at such frequency and at the value of compacting factor to be maintained as decided by the Engineer. The Engineer, however reserves the right to carry out such tests independently at his own discretion.

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12.0 RATES FOR REINFORCEMENT WORK

12.1 The unit rate for reinforcement work shall be quoted so as to include its cost, transportation from place of supply, handling/rehandling, storing at contractor's work site, cutting, bending, fixing and binding in position by the contractors own labours and equipment's as per approved drawings and as directed by the Engineer. It shall also include the cost of annealed binding wire, all other tools and equipment's, and including wastage of M.S. rounds/HYSD bars in cutting, providing spacers, separators and hangers etc.

13.0 TEMPORARY STRUCTURES

The contractor will not be required any design /drawings for approval of the Engineer for such temporary structures which are not connected with the permanent work.

14.0 EXCAVATION FOR STRUCTURES

14.1 Pits and trenches for foundations for bridges, culvert walls and other structures shall be taken out to the levels and dimensions shown on the approved Drawings or to such other levels and dimensions as the Engineer-in-Charge or his representative may direct. The bottoms of all excavations shall be carefully levelled and stepped or benched as directed by the Engineer-in-charge or his representative. Any pocket of soft or loose materials and fissures in the bottom of pits and trenches shall be removed and the cavities so formed shall be filled or grouted with concrete as directed by the Engineer-in-charge or his representative. When any excavation has been taken out and trimmed to the required levels and dimensions, the Engineer-in-charge or his representative shall be informed accordingly so that he may inspect the complete pit or trench and no excavation shall be filled in and covered with concrete until it has been so inspected and until the contractor has been authorized to proceed with the work. All surplus excavated materials from such excavations not required for refilling shall be deposited in embankments, or otherwise disposed of as directed. The work shall include all necessary sheeting, shoring, bracing, draining and pumping, the removal of all logs, stumps, Stubs and other deleterious matter, obstructions necessary for placing the foundations.

When required by the Engineer-in-charge or his representative, material in the last 300 mm of depth of the excavations shall not be removed until immediately before the concrete is to be placed.

All excavation for structures shall generally be as small as practicable consistent with the proper construction of the works. Any excavation taken out to a greater depth than the required shall be backfilled with concrete of the foundation grade at the cost of the contractor.

Where water is met with the excavation due to stream flow, seepage, springs, rain or other reasons, the contractor shall take adequate measures such as bailing, pumping, constructing diversion channel, drainage channels, bunds and other necessary works to keep the foundation trenches dry when so required and to protect the green concrete against damage by erosion or sudden rising of water level. Approval of the Engineer –in-charge or his representative to any method adopted in this regard shall, however, not relieve the contractor of the responsibility for the adequacy of dewatering and protection arrangements and for the quality and safety of the works.

Refilling of foundation pits and trenches shall be carried out only after the foundation and structural works within the excavations have been inspected and approved by the Engineer-in-charge or his representative. Unless otherwise directed by the Engineer-in-charge or his representative all fillings shall consist of approved materials. All space between foundation concrete and the sides of excavation shall be refilled to the original surface, using approved plant, in single layers not exceeding 250 mm loose thickness, which shall be watered and compacted to a dry density not less than that of the adjoining soil strata. Timber sheeting and other excavation supports shall be carefully removed to the filling proceeds but the removal of such supports will not relieve the contractor of his responsibility for the stability of the works.

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14.2 MEASUREMENT FOR PAYMENT

Excavation for structures shall be measured in cubic metres, limited to the dimensions shown on the approved drawings or as directed by the Engineer-in-charge or his representative keeping in view practical necessity for proper execution of the work.

Foundation sealing, dewatering including pumping shall be deemed to be incidental to the work and no extra payment shall be payable.

14.3 RATES

The Contract unit rate for the items of earthwork in excavation for structures shall be paid in full for carrying out the following operations:

- a) Setting out including all ancillary work like pegging and supply of pegs etc.
- b) Construction of necessary sheeting, shoring and bracing and their subsequent removal.
- c) Removal of all logs, stumps grubs and other deleterious matter and obstructions for placing the foundations including trimming of bottom of excavations
- d) Foundation seating de-watering including pumping.
- e) Back filling up to the top of foundation, clearing up the Site and disposal of all surplus material within leads up to 400 meters inclusive of all leads and lifts, descents etc.
- f) All labour, materials, tools, construction plants, safeguards and incidentals necessary to complete the work to the specification.

15.0 SPECIAL SPECIFICATIONS FOR EARTHWORK

15.1 Earthwork will be done as per N.E. Railway Standard Specification 1981 Edition RDSO guidelines for earth work in Railway Projects & Engg. code of Railway with up to date correction slips. Wherever specifications of the Railway are not available, relevant IS specification/IRC specification shall be complied with.

15.2 In addition to the provisions given in special condition, the following special specifications shall hold good in case of conflict the following shall prevail & in case of ambiguity, decision of the Engineer in charge shall be final and binding.

15.3 All bushes, trees, shrubs, roots, heavy grass etc. should be cleared up to the toe on proposed bank where earth work is to be done.

15.4 The rate for earth work also includes cleaning the site for works including cutting of all trees up to 300 mm girth measured at a height of 1 meter above ground level all types of other forest growth viz. Bamboos, bushes etc. irrespective of height and girth.

15.5 After site clearance all pockets and depressions left in the soil if any, shall be made good and compacted.

15.6 Before starting work toe of bank should be marked on either side with 20mm wide x 15 mm deep furrow. A reference line 50 cm. outside the above two line should also be furrowed.

15.7 Before the commencement of work, the cross section of the ground will be taken in presence of the contractor or his authorized agent and plotted by the Engineer's representative and recorded in the level book. The contractor or his authorized agent will be required to sign both, the level books and profile sheet. The level entered in level book duly signed by both the parties will form the basis of payment.

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15.8 Bank profile shall be set out where cross section has been taken or at every 30 meter on straight and 15 meter on curves sharper than 600 meter radii.

15.9 Earth brought from private land should be appropriate classification for Railway embankment. Organic class, organic silts, peat chinks, depressive soils, poorly graded gravel and sand with uniformity efficient less than 2 and days and soil of high plasticity (CH & CI) shall not be used for Railway embankment.

15.10 Trolley refuge shall be provided such that there is either a trolley refuge or level crossing at each 500 meter. In sharp/curve or where visibility is not very clear such distance will be 300 meter. Length of trolley refuge shall be 3.0 meter & width of bank on trolley refuge side from the centre of track shall be 5.5 meter. Trolley refuge shall be at rail level.

15.11 COMPACTION OF EARTHWORK

15.11.1 Earth work shall be done in layers not exceeding 300 mm thick in the loose state and compacted with vibratory rollers to obtain the specified density. The number of passes of rollers and the optimum thickness of each layer will be fixed after carrying out field trial with the rollers proposed to be used from time to time and from location to location as per IS: 10379-1982 uniformly. The main criteria being to obtain maximum density achievable.

15.11.2 Cohesion less soils shall be compacted to get a minimum density index (relative density) of 70% as obtained in accordance with IS: 2720 (Pt. XIV)-1983.

15.11.3 All other types of soil when compacted shall obtain at least 98% of the maximum dry density as determined using heavy compaction in accordance with IS: 2720 (Pt.VIII) -1983 followed by field trials as per IS 10379-1982.

15.11.4 If the soil is dry, water shall be sprinkled over the spread layer as convenient in order to obtain workable moisture content before rolling is commenced. Where the natural moisture content of borrows soil is high, compaction at higher moisture contents can be allowed by the permission of Engineer in charge.

15.11.5 Each layer shall be compacted to the specified density over its entire width commencing from the tow sides, before another layer is started.

15.11.6 While compacting it shall be ensured that there is a minimum overlap of 150 mm between each run of the rollers.

15.11.7 Care should be taken during the compaction operation to slope the surface of the bank to facilitate the shedding and to minimize the absorption of rainwater, particular attention being to the prevention of pounding.

15.11.8 The density of each layer of compacted soil shall be ascertained by testing on adequate number of soil samples, collected mostly on either side of the centre line interval of 10 m or so with a few taken as random near sides.

15.11.9 The quantity of work shall be determined by considering the mean density of the samples in each layer. The mean dry density shall be equal to or exceed the minimum specified density. In no individual case shall be the density be less than the minimum value specified by more than 2 percent other wise further rolling shall be done at the appropriate location.

15.11.10 The contractor shall be allowed to lay a further layer of soil only after compaction of a particular layer has been found satisfactory.

15.11.11 Extra width of 50 cm shall be rolled on either side, which after finishing the bank up to final height shall be dressed by removing the loose earth on account of roller not being able to compact the soil at the edge of the formation width.

15.11.12 The top of formation shall be finished to a slope of 1 in 40 away from the centre.

15.11.13 All clods shall be broken while forming the new bank.

15.11.14 In case of mechanical compaction of earthwork as per specification laid above no deduction for shrinkage will be made on the quantity mechanically compacted. However in case of failure to achieve compaction as per specification, deduction for shrinkage will be made as per provisions of standard specifications of N.E. Railway, 1981 edition.

15.12 MEASUREMENT OF EARTHWORK:

15.12.1 The final measurement will be taken by cross section measurements of bank and cutting and will be recorded in the level book in presence of contractor or his authorized representative and again plotted on the original profile sheets. Contractor and his authorized representative will be required to sign both level book and profile sheet.

15.12.2 The volumes in cutting and banks will be calculated by the average area method given as under:-

If $A_0, A_1, A_2, A_3, \dots, A_n$ are the areas of the different sections at a distance D apart and V is the volume-

Then $V = D (A_0/2 + A_1 + A_2 + A_3 + \dots + A_n/2)$.

16.0 PILE FOUNDATION 16.1 GENERAL

16.1.1 Before the work is started, the whole of the work site shall be cleared by the contractor at his own cost.

16.1.2 The contractor shall set out the work according to the plan and as directed by the Engineer or his representative. Reference pegs shall be made permanent and kept clear of all obstructions. It is the responsibility of the contractor with any extra payment to fix the center line and position of the piles during the course of the work. A base line will be fixed by the contractor at his own cost and the contractor shall make use of this base line to fix the position of the piles. If required the contractor shall make, at his own cost, subsidiary base lines during the execution of the work. The contractor shall obtain in writing approval of the Engineer for the correctness of the setting out and the reference marks, before commencing actual execution of the work. However such approval shall not relieve the contractor of his responsibility regarding correct setting out of work.

16.1.3 The total length of piles mentioned in the schedule of quantities is based on the tentative founding levels fixed on the basis of generalized soil profile. The final founding levels for individual groups of piles shall be decided by the Engineer on the basis of actual boring data obtained during the execution of work. The contractor shall be bound to execute the entire piling work as per the final founding levels and no claim shall be admissible on this account. However, the payment shall be made for the actual work done as per schedule of rates.

16.2. PILE CAPS AND TIE BEAMS

16.2.1 Pile caps shall be of reinforced cement concrete of specified grade and shall be constructed as per approved drawings.

16.2.2 The pile heads shall be properly chipped off either manually or pneumatically up to proper level. The pile reinforcement shall be cleaned properly by wire brush before reinforcement for pile cap is placed.

16.2.3 A leveling course of 1:3:6 nominal mix cement concrete shall be provided below the base of pile cap. 16.2.4 The tie beams shall be of reinforced concrete cast monolithically with the pile caps. The grade of concrete in tie beams shall be same as that of pile caps. Tie beams shall be provided only in those foundations where these are shown in the approved drawings.

16.3 CAST- IN SITU R.C.C. BORED PILE:

16.3.1 The execution of pile foundation shall conform to IS: 2911 (part I to IV)-1979 with latest amendments. All the piles shall be of the same type and shall be built to carry the heaviest load.

16.3.2 The specifications for safe allowable load, test load, total settlement, total deformations, net settlements, would be as per IS: 2911 (part I/Section 2).

16.4 FOUNDING OF PILES:

16.4.1 The founding levels of piles have been tentatively shown on the drawings. However depending on the actual conditions met at site during pile boring operations, the Engineer will decide the exact founding levels, which shall be final and binding on the Contractor. Page 170 of 235

16.5 BORING:

16.5.1 The ground level shall be taken at the location of each pile before commencement of boring operations.

16.5.2 Boring may be done by either rotary or percussion equipment or grabbing equipment using reverse or direct mud circulation method. In case of unstable soils, the boring tools used should be such that suction efforts are minimized. Stabilization of the sides of the borehole shall be done by the use of bentonite slurry or casing. The size of cutting tool shall not be less than the diameter of the pile

16.5.3 Removal of obstruction if any met with during pile driving or boring shall also be done by the contractor. No extra payment will be made for this work.

16.5.4 The spoils arising out of boring shall be disposed off as directed by the Engineer within the quoted rates.

16.6 DRILLING MUD:

16.6.1 Use of drilling mud (Bentonite) in stabilizing the sides of the boreholes is permitted wherever necessary. The properties of drilling mud shall comply with those given in Appendix-A of IS: 2911 (Part-I/Sec 2). The Bentonite suspension used for piling work shall satisfy the following requirements: 16.6.1.1 The liquid limit of Bentonite when tested in accordance with IS: 2720 (part V) shall be more than 300 percent and less than 450 percent.

16.6.1.2 The sand content of the Bentonite powder shall not be greater than seven percent. Note: The purpose of limiting the sand content is mainly to reduce the wear and tear of the pumping equipment. 16.6.2 Bentonite solution should be made by mixing it with fresh water using pump for circulation. The specific gravity of the Bentonite solution should be about 1.12.

16.6.3 The Marsh viscosity when tested by Marsh cone should be about 37 seconds.

16.6.4 The swelling index as measured by the swelled volume after 12 hours in abundant quantity of water shall be at least 2 times its dry volume.

16.6.5 The PH value of the Bentonite suspension shall be less than 11.5.

16.6.6 The Contractor will not be entitled to any extra payment on account of the use of Bentonite for piling.

16.6.7 Drilling mud shall be kept at least for a height of one meter above subsoil water and the hole shall be always kept almost full with fluid, which should preferably be kept in motion. The specific gravity and composition of the fluid shall be such as to suit the requirements of the ground condition and to maintain the fine materials from the boring in suspension. A five percent bentonite suspension would be generally suitable.

16.7 CLEANING OF BOREHOLE BOTTOM:

16.7.1 The bottom of the hole shall be cleaned very carefully before concreting work is taken up. The cleaning of the hole shall be ensured by careful operation either by flushing with fresh drilling mud through the bottom of the hole on by airlifting process. To lift the spoil at founding level before concreting, borehole shall be agitated by jetting with fresh drilling mud with relatively higher pressure than that used during boring or air through tremie pipe. While boring by use of drilling mud, the specific gravity of the mud suspension in the vicinity of the bottom of borehole shall be determined at suitable intervals and recorded. Consistency of the drilling mud suspension shall be controlled throughout the boring as well as concreting operation in order to keep the hole stabilized as well as to avoid suspension of the mud.

16.8 CASING:

16.8.1 In case of boring with casing, the casing shall be used from the working ground level. The casing shall be of sufficient thickness and strength to hold its original bore and show no harmful distortion.

16.8.2 Where the soil is loose and liable to flow, the bottom of the casing shall be kept enough in advance of the boring tool to prevent the entry of the soil into the casing, thus preventing the formation of cavities and settlements in the adjoining ground. Page 171 of 235

16.8.3 The water level in the tube shall be maintained at the natural ground water level till the tube is sealed so that no boiling of the bottom of the hole occurs due to difference in hydrostatic head.

16.9 CONCRETING:

16.9.1 The pile shall be RCC bored cast-in – situ type with concrete of grade as specified in the approved drawing.

16.9.2 The quantity of concrete required for the depth of the particular pile shall be calculated on the spot and checked with the actual quantity of concrete used. The quantity of concrete used in each pile should also be recorded and signed by the contractor and the Engineer's representative, and this record will form the basis for calculating the cement actually used. The concrete will be machine mixed and weigh batched.

16.9.3 The minimum cement content should be 400 kg/cum of concrete. Under water concreting shall be done as per para. 13.2 of IS 456-1978. Concrete is to be placed in the pile only by tremie method ensuring that tip of the tremie is at least 500mm below the top of concrete at any time.

The top of concrete in the pile shall be brought above the cutoff level to permit removal of all laitance and weak concrete before capping and to ensure good concrete of the specified grade at the cut-off level for proper embedment into the capping structural elements. The cement required for providing overflow concrete or scum concrete beyond cut-off level will be accounted in the same manner as that of the pile concrete.

16.9.4 Concreting of boreholes shall start as soon as possible after its completion and in any case should not be longer than four hours. If a borehole is left unconcreted for more than two hours, it shall be cleaned thoroughly as directed by the Engineer before placing concrete. Concreting under water shall be done in one operation. It shall however, be ensured that concrete entering the tremie pipe does not get mixed up with the slurry.

16.9.5 In the circumstances where cut-off level is below ground water level, the need to maintain a pressure on the concrete equal to or greater than water pressure shall be observed and accordingly length of extra concrete above cut of level shall be determined and allowed in works.

16.10 SEQUENCE OF PILING:

16.10.1 During installation of piles, the sequence of construction shall be as directed by the Engineer.

16.10.2 Where the piles are to be provided on the existing embankment lines and structures etc. Care shall be taken to avoid damage to existing structures.

16.11 DEFECTIVE PILES:

16.11.1 In case, defective piles are formed, they shall be removed or left in place as directed by the Engineer depending on how they affect the performance of the adjacent piles or the group as a whole. Additional piles shall be provided without any cost whatsoever to the employer and in this regard Engineer's decision shall be binding on the Contractor.

16.11.2 Any deviation from the designed location, alignment or load capacity of any pile shall be noted and adequate measures shall be taken before the concreting of the pile cap if the deviations are beyond the permissible limits.

16.11.3 After concreting the actual quantity of concrete shall be compared with the average obtained from field observations made in the case of a few piles initially cast. If the actual quantity is found to be considerably less, special investigations shall be conducted and appropriate measures taken.

16.12 CONTROL OF ALIGNMENT:

16.12.1 The control of alignment of piles should be as per para. 7 of IS: 2911 (Part I/Section 2) with latest amendments.

16.12.2 Piles shall be installed as accurately as possible as or the designs and drawings. The piles shall not deviate the than 75mm from its designed positions at the cut off Leal and tilt not exceeding 1.5 percent from vertical.

16.12.3 In case of piles deviating beyond these limits, and to such an extent that the resulting eccentricity cannot be taken care of by a redesign, piles shall be replaced or supplemented by one or more additional piles by the Page 172 of 235 Contractor at his own cost and any additional concrete in the capping structures necessitated on account of such additional piles,

with shuttering and reinforcement shall also be to the Contractor's cost. The decision taken by the Engineer regarding the need for such additional piles, their location and other details, the increased in the size of supported structures necessary because of additional piles etc, shall be final and binding on the Contractor.

16.12.4 Leave marks shall be put accurately on each pile immediately after it is installed. If any pile shows subsequently a tendency to heave up due to installation of other piles late or due to any other reason. The same shall be reinstalled firms in a suitable manner as approved by the Engineer.

16.13 CHIPPING OF PILE HEAD:

16.13.1 Manual chipping shall be permitted after three days of pile casting. Pneumatic chipping shall not be started before 7 days.

16.14 PROVIDING M.S. LINERS:

16.14.1 This item is for supply and fixing permanent M.S. Liners for the piles from cut off level up to the required depth as may be decided by the Engineer.

16.14.2 The Contractor shall fabricate the liners from M.S. Sheets to suit the diameter of the pile as directed. The required length of the M.S. Liners will be made up by welding each unit at site by the Contractor. M.S. sheets required for manufacture of the liners shall be supplied by the Railways.

16.14.3 The length of the liner above the cut- off level shall be cut to facilitate chipping the top portion of the pile and for interlacing its reinforcement bars into the casting slab.

16.14.4 The payable depth of the liner shall be measured from the cut- off level to the depth up to which the liner is actually provided, though the liner might have been provided right from the level of the working platform from practical considerations.

16.15 REINFORCEMENT:

16.15.1 When the tube or bore has reached its final dooth, it shall be free from any foreign matter before the placing of the reinforcement. The reinforcement for the pile shall be carefully placed in position and concreting then started.

16.15.2 The reinforcement shall be made into cages by suitable spot welding of the lateral ties or spiral binding on the longitudinal bars so as to be able to withstand handling of the cages without damage or distortion. The reinforcement shall be extended to a sufficient distance to permit it to be adequately bent into the capping structural elements. Care shall be taken to preserve the correct cover and alignment of reinforcement throughout the whole operation of placing the concrete.

16.16 RECORDING OF DATA:

16.16.1 During installation of piles, a complete site record shall be made by the Contractor, as per IS 2911 (Part /Section 2) along with any other data as directed by the Engineer. The record shall be submitted to the Engineer in triplicate on completion of installation of each pile.

16.17 CONCRETE STRENGTH TEST:

16.17.1 Concrete strength test shall be carried out at regular interval or as directed by the Engineer. Sampling, testing and interpretation of results shall be done as per relevant clause of these specifications. The cost of these tests shall be borne by the Contractor.

16.18 MEASUREMENT AND PAYMENT:

16.18.1 In case of piles, payment for piles shall be made for the length of pile measured from actual founding level to the bottom of pile cap and in no case payment for extra concrete consumed shall be allowed. The rates quoted for the relevant item in the schedule shall be deemed to be inclusive of such excess consumption if any. However the actual quantity of cement consumed will be entertained. The rates shall also be deemed to be Page 173 of 235 inclusive of cost of all labour, material, tools and equipment and other work involved in making the pile complete as shown in the drawing, cutting and removing of pile heads to correct levels etc. No payment for empty boring will be made.

16.18.2 No payment shall be made for temporary casing permanent liner provided if and where required above bottom of pile cap up to working platform level, which is to be removed up to bottom of pile cap will not be paid for. 16.18.3 Payment for liners shall be made on the basis of weight of liner calculated on the basis of unit weight of plates used for issue of states, Theoretical diameter and the actual length of liner plate provided measured from the cut off level to the depth to which the liner has been provided. The rate for the item shall cover the cost of all materials, cost of fabrication of liner by welding or any other means including all consumables, fixing of liner in position and to the depth as decided by the Engineer, cutting of the liner up to cut off level, wastages in the liner plate, and all other work of any description involved in the provision of liner plate.

16.19 LOAD TEST ON PILES:

16.19.1 The test shall be carried out on test pile and selected representative working piles as directed by the Engineer and are to be carried out only after the lapse of sufficient time to permit adjustment of the soil conditions following disturbance resulting from the method of installation. The period between installation of the test pile and any other piles in the vicinity and the test loading of the pile shall be minimum 28 days or otherwise specified by the Engineer. The test pile shall be installed following specifications as indicated in preceding clauses and test shall be carried out in accordance with IS 2911(Part IV).

16.19.2 The Contractor shall so adjust and/ or phase out the programme of construction so as to allow for time required in conducting routine tests. Minimum number of routine tests shall be two percent of total number of piles. Routine tests shall be carried out for vertical load (compression) and lateral load.

16.19.3 The number of routine tests on piles shall be as indicated in schedule of quantities and these may be varied as tracked by the Engineer depending on site conditions. Routine tests shall be carried out on piles selected by the Engineer.

16.20 VERTICAL LOAD TEST:

16.20.1 METHOD:

16.20.1.1 The test load shall be applied by jacking against Kent ledge or any other structure approved by the Engineer. No working pile shall be used for any loading for load test on pile.

16.20.1.2 Any Kent ledge used shall be adequately supported to prevent instability particularly in the event of a sudden change in the load reaction from the pile. The reaction from Kent ledge to be made available for the test shall be 25% more than the final test load proposed to be applied. The test shall be carried out at cut-off level or at such depth below ground level as directed by the Engineer.

16.20.1.3 Where anchor piles are used to sustain the loaded platform for the test, the center to centre distance between test pile and anchor pile shall be minimum 5 times the test pile diameter and there shall be minimum two anchor piles at two ends of the test pile. Details regarding test set up shall be submitted to the Engineer well in advance for approval. Permanent working piles shall not be permitted to be used as anchor piles and anchor piles, if used, shall be entirely at Contractor's cost.

16.21 LOAD:

16.21.1 The jack is to be hydraulically operated. The hydraulic power being supplied from a power driven pump having a discharge which can be varied to suit the required rate of loading. The load being applied to the pile shall be recorded either by a gauge in the hydraulic system or a proving ring with fresh calibration from an approved laboratory. The reading limit of the recording device shall not exceed 1.5% of the full load. Test load shall be applied in equal increments of about one fifth of the estimated safe load and reduced to smaller increments at final stages or to direct. Alternate loading and unloading of each load increment shall be performed and elastic and plastic settlements recorded. Page 174 of 235 16.21.2 A test certificate and fresh calibration chart from an approved laboratory for jack and pump is to be produced to the Engineer well in advance before the same is used for any load testing on pile.

16.22 DEFLECTION MEASUREMENTS:

16.22.1 The settlement of the pile shall be recorded by three dial/ gauge recording to 0.02mm and placed at equal distance around test pile. The dial gauges shall be fixed to datum bars whose ends rest upon non movable supports. The supporters for datum bars with reference to which the settlement of the pile would be measured shall be at least "5 d" away clear from the test piles (where "d" is the diameter of the circular pile) subject to a minimum of 2m for good sandy soil and 5 m for loose soil.

16.23 CAPACITY OF TESTING EQUIPMENT:

16.23.1 The testing equipment shall be capable of loading a pile to twice the design loading.

16.24 PREPARATION OF PILE HEAD:

16.24.1 The pile head shall be chipped off carefully till sound concrete is met. The projecting reinforcement shall be bent suitably and the top finished smooth and level with plaster of Paris, when required or as directed by the Engineer.

16.25 METHOD OF LOADING AND ASSESSMENT OF SAFE LOAD:

16.25.1 The Contractor shall perform routine load test on working piles as directed and selected by the Engineer and results must satisfy requirements of the test as indicated hereafter.

16.26 ROUTINE TEST:

16.26.1 Routine test and assessment of safe load carrying capacity of pile shall be carried out as per IS: 2911 (Part-IV). Loading shall be not less than one and a half times the estimated safe load carrying capacity of the pile. The loading procedure shall be as follows.

16.26.2 The test shall be carried out by applying load in equal increments of about one fifth of the estimated safe load and reduced to smaller increments at the final stages, or otherwise as directed by the Engineer. Each stage of loading or unloading shall be maintained till the rate of movement of pile top is not more than 0.02 mm per hour in case of clayey soils and 0.10 mm per hour for soils or a maximum of 2 hours. For this purpose, the types of soil met at pile shall be considered. The estimated safe load may be maintained for 24 hours and settlements should be observed every hour during this period.

16.26.3 For each increment, application of 'load' shall be smooth as far as possible. Time and settlement observations shall be made at the commencement and completion of each increment. Settlement observations shall be continued when each increment load is kept constant at about 15 minute intervals.

16.26.4 Safe load on single pile shall be as given in IS: 2911 (Part IV) under Vertical load test – C1.4.2.3.9.

16.27 RECORDING OF DATA AND PRESENTATION:

16.27.1 All pile test data, i.e. load, displacement and time shall be recorded in a suitable form along with the information about the pile as approved by the Engineer. 16.27.2 The data shall also be presented by curves drawn between load displacements and displacement time and safe load shall be indicated on the graphs.

16.28 LATERAL LOAD TEST:

16.28.1 The test shall be conducted as far as possible at the cut-off level of piles. The test may be carried out by introducing a hydraulic jack gauge between piles or the reaction may be suitably obtained otherwise. These tests may also be done by applying lateral pull by at suitable set-up. Page 175 of 235

16.28.2 If the test is conducted by jack located between two piles, the full load imposed by the jack shall be taken as the lateral resistance of each pile. The loading shall be applied in increments of 20% of the estimated safe load.

16.28.3 The next increment shall be applied after the rate of displacement is about 0.05mm per/hour in sandy soils and 0.02 mm per hour in clayey soils or 2 hours whichever is earlier.

16.28.4 The displacement shall be read by using at least two dial gauges spaced at 30 cm and kept horizontally one above the other on the test pile. Where is not possible to locate one of the dial gauges in the line of jack axes, then the two dial gauges may be kept at a distance of 30 cms at a suitable height and the displacement interpolated at load point from similar triangles.

16.28.5 The safe lateral load on the pile shall be as stated in Cl. 4.3.5 of IS: 2911 (Part. IV).

16.28.6 A test certificate and fresh calibration chart from an approved laboratory for jack and pump is to be produced to the Engineer well in advance before the same is used for any load testing on pile.

16.29 MEASUREMENT FOR PAYMENT:

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16.29.1 Payment for routine load tests shall be on the basis of numbers of pile tested as per specifications, with the proviso that tests which do not show satisfactory results shall not be paid for.

16.30 RATES FOR TESTING:

16.30.1 Payment for testing shall be made on the number of tests carried out provided the test is successful and results are satisfactory and pile acceptable as per codal provisions.

16.30.2 Rates for lateral load tests and routine load test for vertical load on working piles already driven shall cover, earth excavation, supplying and transporting all equipment and kent ledge etc. all necessary work for making arrangements for loading, supplying and fixing of testing instruments, recording the results, and making all arrangements for unloading, dismantling and clearing the site. The rates shall also cover all materials and labour necessary for all connected work and submission of test results as specified, and all other work or any other description connected with the test.

16.30.3 Payment for testing of piles shall be made to the Contractor only when the test is found to be satisfactory. For tests which are found unsatisfactory no payment shall be made to the Contractor. The pile will then be considered defective and will not be paid for. No payment shall be made for test which is incomplete for any reason whatsoever. Additional tests required by the Engineer shall be carried out at the same quoted rates.

16.30.4 The Contractor shall also indemnify the employer against any claim or obligations arising out of any damage to structure or out of any injury to any person / persons due to piling work done by him.

16.31 VARIATION TO THE ANTICIPATED DEPTH:

16.31.1 Any additional length of pile over the approximate length shown in the drawings or mentioned elsewhere shall be carried out at the rate quoted against the items of work for piles.

16.31.2 The Contractor shall carry out the work at the accepted rate without any variation limit in case of any increase or decrease in the number of piles. SPECIAL CONDITIONS OF CONTRACT FOR CONSTRUCTION OF LHS (BY PUSHING METHOD)

A. For Development and approval of structural design and drawings.

1. The contractor is required to get the structural designs and drawings developed for RCC Box with suitable junction arrangements, jacking points, pushing methodology etc. based on the Railway's General Arrangement Drawing (GAD).
2. The contractor shall get the design and drawing proof checked by any reputed government institute e.g. IIT, NIT etc.
3. The above design and drawing duly proof checked shall be submitted to the railway for approval within one month from the date of issue of LOA. Page 176 of 235
4. Approval of design and drawing shall be the responsibility of Railway. However the contractor will also associate himself with the approval process and will take prompt action to furnish clarifications, additional information compliance to observations etc. as per direction of Engineer-in-charge.
5. Initially the contractor shall submit 03 copies of drawings (01 on good quality tracing paper and 02 ammonia prints) along with the complete design to the Railways for scrutiny.

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6. After scrutiny Railway may suggest certain modifications and the contractor shall submit final copy of drawing (on good quality tracing paper) and design duly incorporating all the corrections/modifications suggested by Railways.
7. On receipt of finally approved drawing the contractor shall submit to the Railway 01 RTF print and 12 ammonia prints along with original tracing of the approved drawing. Similarly he will also submit 03 copies of the approved design.
8. The cost of development, proof checking, copying/printing etc. with all other associated works is included in the rates quoted by the contractor and no extra payment shall be made on this account.
9. The contractor shall submit the GAD of the casting-cum-thrust bed along with the casting scheme of boxes for approval to the Railways within 15 days from the date of issue of LOA. On receipt of approved GAD the contractor shall make immediate arrangements for development of structural design of casting-cum- thrust bed as per approved GAD and take up the work of preparation of casting- cum-thrust bed. Structural design of the castingcum-thrust bed as per approved GAD and scheme is the sole responsibility of the contractor. The cost of which is included in the rates quoted by the contractor.
10. Contractor shall arrange for development of designs and drawings for providing suitable architectural effects on both the faces of the box and parapet. The cost of these designs and drawings are included in the quoted rates and nothing extra shall be paid on this account.
11. Railways shall have full ownership and copyright of all the designs and drawings developed in connection with the subject work.

B. Casting of RCC Boxes.

1. RCC Box is to be cast in number of segments as indicated in approved GAD in consultation with the Engineer – in – charge.
2. Detail technical specification of concreting, steel, cement, curing, shuttering, aggregate, design mix etc. are enclosed with the document.
3. The centre line of the proposed span of RCC box will be initially set out by the Engineer or his representative. The contractor shall be responsible for accuracy of the lines, levels and dimensions of work in accordance with the drawings, further drawings, directions or instructions supplied time to time to him and every facility shall be given to the Engineer for inspection of the same. The contractor shall also alter or amend any error in the dimensions, lines or levels or work set out or constructed by him to the specifications of the Engineer.
4. Junction arrangements between the box segments shall be ensured as per approved GAD and structural drawings.

C. BOX PUSHING.

5. The RCC Box segments after attaining full design strength (M-35) shall be pushed through the existing embankment to form an opening for passage of road traffic under railway tracks.
6. Box pushing shall be carried out using hydraulic jacks of suitable capacity. Multiple numbers of jacks shall be applied on the pre-decided jacking points. Contractor has to provide M.S. sheet of suitable thickness at the end, around the box & junction of first and successive boxes to avoid infiltration of soil/slurry, sagging of earth by the side of RCC box.

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7. During the pushing operation the alignment & levels of the box shall be watched continuously and at no time the alignment will be allowed to deviate beyond permissible limits both in horizontal as well as vertical directions.
8. Box pushing operation shall be carried out during day time only and must be completed at least one hour before the sunset.
9. Box pushing shall only be carried out in presence of Railway's P.Way Supervisor and with the prior consent of Railway's authorized site representative.
10. The rate of box pushing shall be kept such so as not to disturb the Railway track beyond permissible limits.
11. Box pushing shall only be carried out under proper speed restriction and full track protection as per IRPWM. Necessary speed restriction for the work shall be arranged by the Railways. Man-power for track protection shall be provided by Railways. However the contractor will provide equivalent number of man-days in the form of P.Way Gang to the SSE(P.Way) in-charge. Page 177 of 235
12. During the entire period of box pushing maintenance and rectification of track geometry just above and on both approaches of box shall be the sole responsibility of the contractor. He will arrange adequate number of P.Way labour with necessary tools & plants to maintain the track, during and after box pushing. The length of track required to be attended, number of labours to be deployed, tools & plants required for maintenance of track will be decided by the Engineer-in-charge or his authorized representative at site whose decision shall be final & binding in this regard. The rate of item of relevant schedule is inclusive of maintenance and rectification of track during box pushing operation. However for making up of final level and alignment after completion of box pushing the contractor will have to impart two/three round of packing for which payment shall not be made.
13. In case the contractor fails to deploy adequate number of trained P.Way labourers and/or necessary tools Railway, at its discretion, may deploy its own man-power with necessary tools for maintaining the track during box pushing. In this case an amount @ Rs. 500/- (Rs. Five Hundred) per man-day shall be recovered from contractor's dues. This recovery shall be without prejudice to any other right or remedy available in the contract.
14. During the execution of this work speed restriction will have to be imposed on all lines hence the contractor will have to supply 03 sets of standard speed restriction boards as per approved specification & design (each set consisting of 01 caution indicator, 01 speed indicator, 01 T/P and 01 T/G board).
15. The gaps created at the intermediate jacking points should be grouted with approved quality of materials having adequate structural strength immediately after completion of pushing operation so that no leakage occur from the joints during the service of the bridge.
16. C.C. wearing coat of suitable thickness, camber and longitudinal drainage arrangement as per approved drawings shall be provided inside the box.
17. Drag sheet shall be provided by the contractor to minimize drag and disturbance of the soil cushion on the boxes during box pushing operations. Maximum number of drag sheets as directed by Engineer-in-charge shall be provided based on structural safety of box during pushing and all arrangements required in connection with drag sheet shall be provided free of

cost and nothing extra will be paid. The contractor will be at liberty to utilize modern methods, of reducing skin friction, with approval of the Engineer-in-charge. Drag sheet will remain as the property of the contractor after completion of work.

18. During the execution of work if any sub-soil/rain water is met with, the contractor will make their own arrangements to bail out/pump out such water from the site, free of cost.

E . ASSOCIATED MISCELLANEOUS WORKS

1. The subject work is mainly for casting and pushing of RCC Box for provision of Road Under Bridge to facilitate movement of road traffic. To make the RUB fully functional and to ensure safety of Railway & Road traffic some associated works like retaining wall, height gauge, provision of connecting road, drain, pitching, etc. are also to be carried out.

2. Execution of associated works should be planned in parallel to the casting and pushing of box so as to complete them simultaneously with the RUB.

3. The height gauge shall be fabricated and erected as per Railway's approved drawings. Detailed specifications for fabrication & erection of height gauge are furnished with the document.

4. Open excavation done for foundations may be executed with sloping sides with or without timbering or may be excavated with vertical sides properly timbered and shored from ground level up to the bottom of the excavation and the work should be efficiently carried out in such a way so as to ensure its own stability as well as the safety of adjoin lands, structures, moving rail/road traffic and labour working thereon and also in such a way as will prevent them from being in any way detrimentally effected. However temporary shoring with timbering is to be provided if necessary to protect the track and road embankment from slipping for which the contractor will have to use his timbers. No extra rate will be paid for and the rates quoted for excavation will include the same.

5. The excavation must also be kept free from water at all times during the progress of the work by means of bailing or pumping out, leading water away from the excavation as well as diversion of water to prevent its increase in the foundations, or otherwise till the work below water level is completed in all respects. No extra rate will be paid for and the rates quoted for excavation will include the same.

6. The excavated soil should not be left out in heaps causing obstruction after the work is completed in all respects. All excavated soil should be lead out to the places indicated by the Engineer with a maximum lead of 1 KM. Page 178 of 235

F. SITE OF WORK

1. The works covered under this tender are to be executed in connection with the Construction of Full Height Subway/Road Under Bridge/Limited Height Subway (By Box pushing method)

2. Any unforeseen, under lying cables, pipelines etc., if met with during execution, care should be taken to either safeguard or divert the same with the approval of departments concerned. All necessary administrative help will be given in this matter, however, Escalation over the original agreement rates will not be entertained on account of delays in such clearances.

3. The site of construction is adjacent to existing Road and land available by the sides of the track is limited. The contractors are advised to acquaint themselves well with the site conditions before quoting the rates.

4. Limited land is available for the project. The same can be used for construction of site offices etc., by the contractor subject to availability and approval by the Engineer- in-charge. However contractor should make his own arrangements for Private land for requirements in excess of the above for his workshops, construction equipment stacking yards and camps. No claim on this account shall be entertained by the Railways.

1.0 SPECIAL CONDITIONS FOR TRACK LINKING, DISMANTLING ETC.

1.0 GENERAL

1.1 Before quoting the rate, the tenderer should inspect the site of work and actuate himself with the location of work, availability of labour, camping facilities, height of banks, depths of cuttings, tracks to be crossed, lead, lift ascend, descend etc. and also other factors, which may have bearing on the work. The tendered rate shall include all such charges. No extra charge whatsoever shall be payable unless otherwise stated.

1.2 The P. Way materials required for the work will be supplied by the Railway free of cost.

1.3 As far as possible rails and PSC sleepers will be made available near the site of the work. Other P.Way materials will be supplied from the nearest crossing station from the store of the P.W.I. from where contractor shall have to carry the materials to the site with his own means and cost.

1.4 Switches, crossings, rails, sleepers and fittings required for linking of points and crossings shall be carried to the site of linking from the stacks in the yard by the contractor at his own cost.

1.5 Contractors will make his own arrangements for machineries, tools plants, consumable and labour required for the job. He will also make arrangements of transporting his labour, materials, machines tools and plants etc. at sites and nothing extra will be paid.

1.6 No claim whatsoever on account of loss, detention or interruption caused to contractor's work on account of railway working shall be entertained.

1.7 Work will be done under direction of Railway's authorized representative and to his full satisfaction.

1.8 Contractor will have to engage retired senior PWIs. Supervisors so employed shall be approved by Railway for day-to-day supervision of the work and for taking instructions at site for advance planning.

1.9 No compensation for any accident occurring out of or during the execution of the work or damage to contractor's property or injury to contractor's staff will be paid by the railway.

1.10 Where road vehicles of contractor are permitted to ply adjacent to running line, an experienced gang man shall be posted by Railway as Flagman to prevent accidents and contractor will ply his vehicles adjacent to track only with specific approval by Engineer-in-charge.

1.11 Work may be started from any one or more locations of the zone as directed by Engineer-in-charge. Contractor shall be bound to execute work accordingly.

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- 1.12 Contractor shall be responsible to ensure safety of railway traffic and of his workman and tools during execution of the work and passage of trains from site of work. Nothing should be left infringing railway track.
- 1.13 In the event of any accident at the work site the departmental enquiry will be held and in case it is found that accident had occurred due to negligence of contractor or his men or his omission commission, all losses suffered by Railway as decided by the departmental enquiry committee and costs thereof shall be recoverable from contractor besides taking other action as per extent rules.
- 1.14 P. Way materials issued by contractor will be accounted for against those put in track. Any discrepancy or loss of materials will be contractor's liability and cost will be recovered on the basis of twice the prevailing procurement cost at the time of issue i.e. 2 purchase price +5 freight.
- 1.15 Technical specification for track work shall conform to the P.Way manual and Railway's Publications/drawing in addition to other drawings that will be supplied by Railway to the contractor.
- 1.16 If the Engineer feels that the work is not likely to be completed in time he may order the contractor to carry out the work at night without conforming any right on contractor for claiming any extra payment. The arrangement for light etc. shall be made by the contractor at his own.
- 1.17 In the event of any accident or failure arising out of or in connection with execution/completion of the works, which in the opinion of the Engineer requires immediate attention and the contractor is not in a position to do so in time, the Rly. may employ/bring its own workman or other agency to execute full/part of the work and recover the extra cost thereof from the contractor.
- 1.18 No work on the track, involving safety of trains, shall be commenced without the permission of the Engineer. Contractor will keep a site order book at site with all the pages initiated by the Engineer to take orders from the Engineer.
- 1.19 Time is the essence of the contract. If the contractor fails to complete the work, including dismantling, linking BG track, boxing and making track fit for 50 kmph speed, within 20 days, time from the commencement of the block/work Rs.10,000/- shall be recovered from him for each additional day or part thereof for the period of delay.
- 1.20 Contractor shall employ sufficient skilled and unskilled labour and will give daily output of each item of work as decided by the Engineer-in charge so that the linking of track including boxing of ballast etc. is completed within 20 days from the date on which line is blocked. Linking of track standard. Program for each item will be collected by contractor from Engineer-in charge.
- 1.21 To, ensure that the work is completed within 20 days of block period, following time schedule shall be served strictly:-
- 1.21.1 The BG points & Crossing shall be pre-assembled either at the final location or near the site depending on the location and availability of space.
- 1.21.2 In case of CST-9 sleepers they shall be pre-assembled and kept along the track.
- 1.21.3 In the yards where more than one loop is to be provided, lying of 2nd loop shall be completed in advance. This work shall be started when the loop has been blocked and written intimation has been given to the Engineer to commence the work.
- 1.21.4 All the work of the station yards which can be done in advance without obstructing train working such as laying dead ends, over shoots etc. shall be completed before commencement of the block.

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- 1.21.5 Minimum of 1.0 km main line track length shall be linked, packed and boxed every day.
- 1.21.6 Separate teams shall be deployed for the yards, block sections bridges and level crossings.

2.0 WORKS TO BE DONE PRIOR TO COMMENCEMENT OF BLOCK.

- 2.1 All BG fish bolts shall be oiled.
- 2.2 Making 1mm thick centreline with red paint on the top face of concrete sleepers exactly at the centre of the gauge.
- 2.3 Painting tie bar and making centreline on the tie bars.
- 2.4 Making check rails for the level crossings and guardrails for bridges and carting them to site.
- 2.5 Making lead rails for the points & crossings and drilling holes where pre-assembly of points & crossings is not possible.
- 2.6 Cutting high cess in block section particularly near level crossings and bridges and yards as per requirement.
- 2.7 Preparing sufficient number of expansion bits of different sizes as directed by Engineer-in charge.
- 2.8 Counting and checking PSC sleepers, CST-9 sleepers, Tie bars and rails lying at site to ensure their complete availability.
- 2.9 Arranging sufficient number of suitable tools, plants, templates & equipment's for handling PSC sleepers and rails, raking ballast, digging formation and linking track with PSC/CST-9/Wooden sleepers to the satisfaction of Engineer.
- 2.10 Arranging specified brand of grease, graphite and paint etc.
- 2.11 Carting BG fittings, wooden blocks and other required materials from PWT's stores to the site and stacking required quantity in each T.P.

3.0 FIXING CENTRE LINE PEGS.

- 3.1 The centreline pegs shall be fixed only two to three days before dismantling of the track to avoid theft of the peg.
- 3.2 The pegs shall be fixed at 25 metre intervals at the centre of the proposed BG track. The centreline of the track shall be marked with 1 mm thick paint line on the top of the pegs.
- 3.3 The pegs should not be project more than 25mm above rail level.

4.0 DISMANTELING OF TRACK AND POINTS & CROSSING.

- 4.1 Dismantling work shall be taken up only after line has been blocked by Engineer In charge and he has given notice in writing to the contractor to start the work.
- 4.2 Track shall be dismantled in a systematic way by opening fish bolts, removing fish plates unfastening the sleepers, removing rails and sleepers.

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4.3 Dismantled materials shall be properly stacked and will remain in custody of contractor till handed over to the Engineer-in charge.

4.4 Dismantled rails and sleepers shall be removed with care so that levels pegs are not disturbed.

4.5 To prevent loss, small fittings shall be collected in baskets simultaneously with the release and stacked at a suitable place.

4.6 Nuts shall be immediately be placed on the bolts after removal from the track.

4.7 All the dog spikes, rail screws, bearing plates etc. shall be removed from the wooden sleepers and cotters and tie bars from CST-9 pots before handing over the release materials at the PWI's store.

5.0 PREPARING BALLAST BED FOR PSC SLEEPER TRACK

5.1 Hard core of B.G. ballast bed shall be thoroughly broken up to 100mm depth between the bottom of the BG sleepers including separations of ballast by wire claws removing and throwing away dusty rubbish before spreading fresh ballast over it.

5.2 Where ballast is put from the tracks, available along the track, it should be spread uniformly and not more than the required quantity should be put at any place.

5.3 The ballast bed shall be made 3.3 mtr wide uniform exactly to the level marked on the level pegs and as directed by Engineer.

5.4 The ballast bed then is lightly tamped with wooden rammer /Dhurmut.

5.5 Adequate number of Sal wood planks of 2.75m X 250mm x75mm size with steel handles at both ends shall be prepared for consolidation of ballast bed.

5.6 Stretches like station yards, approaches of bridges level crossings and points & crossings etc. where formation level is required to be lowered for providing adequate ballast cushion, shall be identified in advance.

5.7 For lowering the formation level, the ballast shall be removed and screened after dismantling track; the formation digged and then the clean ballast shall be put in.

5.8 The earth so digged shall be used for widening the bank or filling up the pits as directed by Engineer-in charge. No extra payment shall be made for this.

6.0 PLACING PSC SLEEPERS.

6.1 The PSC sleepers shall be lifted with the help of proper lifting tools and placed on the ballast formation gently at the correct spacing and alignment.

6.2 Spacing of sleepers shall be checked with the help of templates shown in the enclosed drawing and corrected if required.

6.3 The sleepers shall be made central to a tolerance of ± 1 mm accuracy by stretching nylon fishing chord between the pegs.

- 6.4 The sleepers shall not be dragged or pushed on the ballast bed. Where required, shall be shifted by lifting with tools.
- 6.5 The sleeper spacing shall be that at LWR (M+7) density with wooden block at joints as per spacing shown in the enclosed table in the main line and (M+4) in the loops.
- 6.6 PSC sleepers are to be laid in running loops; the sleeper density will be (M+4) with 20 cms ballast cushion.

7.0 LINKING BG TRACK WITH PSC SLEEPER

- 7.1 The 3 rail panels/single rails shall be put on the sleepers by lifting and not dragging, with the help of sufficient rail tongues so that the sleepers are not disturbed.
- 7.2 Rail thermometers shall be kept at each site of linking.
- 7.3 Rail ends and fishplates shall be cleaned with wire brush before applying grease & graphite.
- 7.4 The linking of rail with the sleepers shall be started only when the fish bolts of the rear end or the rail have been tightened using correct size of expansion but providing gaps given in the enclosed chart.
- 7.5 The linking of rail shall be done in the direction of progress of the work. At no stage there shall be any unlinked portion between the linked lengths.
- 7.6 The GFN-66 liners shall be used in the yards at the locations, which are to be track circuited. At non-track circuited lengths metal liners shall be used.
- 7.7 It shall be ensured that the liners are housed correctly between rail and the insert before fixing elastic rail clips.
- 7.8 The grease & graphite shall be applied on the elastic rail clip ends and MC inserts holes before fixing elastic rail clips.
- 7.9 For linking PSC sleepers at joints, the width of liners shall be reduced by cutting so that it does not infringe with the fishplates. The elastic rail clips shall be fixed in the reverse direction at the joints.
- 7.10 The kinkily rail, if any shall be straightened by Jim crowing before putting in the track.
- 7.11 The squarances of rail joint shall be checked at every joint and corrected if required.
- 7.12 Where required, the inner rail of the curve shall be cut suitable to make the joints squares as directed by the Engineer.
- 7.13 ERC should be drive with the help of approved driving tools only.

8.0 LINKING OF TRACK WITH CST-9 SLEEPERS

- 8.1 CST-9 sleepers are to be laid in the sidings with sleeper density of 142.
- 8.2 The steel trough sleepers, CST-9 pots, tie bars, keys, loose jaws etc. shall be issued to the contractor from PWI's store from where he shall carry the materials to the site with his own means. No extra payment shall be made for carting of these materials when issued at any of the block station on either side of block section where these are to be used.

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- 8.3 All the tie-bars shall be painted with black bituminous paint before use.
- 8.4 After dismantling MG track, the ballast shall be digged& made even. Extra ballast shall be put in where required and formation brought to the desired level. The pre-assembled CST-9 sleepers shall then be placed over the formation. Alignment and spacing corrected with the help of log line and centre pegs.
- 8.5 In the case of pre-assembly, the cotters shall initially be only half splitted to prevent falling. Final splitting shall be done after linking and gauging.
- 8.6 The cotters shall be splitted with the help of cotter splitting tools and as shown in the sketch attached.
- 8.7 Wherever required, the oversize two-way keys shall be used in place of ordinary keys with the S.H.CST-9 plates.
- 8.8 The direction of opposite steel keys on a sleeper shall be same and reverse on the adjacent sleepers as shown in the sketch attached.
- 8.9 Direction of steel key shall be marked on the rails with chalk/paint before linking the track.
- 8.10 The sleepers must be brought to the exactly corrected alignment and spacing before linking the rails.
- 8.11 Direction of steel keys at the joint shall be from the middle towards the free end.
- 8.12 Alignment & spacing of the sleepers shall be rechecked and corrected for packing and boxing.

9.0 LINKING OF TRACK AT LEVEL CROSSINGS.

- 9.1 Dismantling and linking of track in the level crossings shall be so planned that the blocking of road traffic is minimum.
- 9.2 The level crossings shall be digged up to the depth below the proposed surface in order to provide full ballast cushion of 200mm.
- 9.3 Running rails and the check rails in the level xing shall be painted with the anti-corrosive paint before linking.
- 9.4 The length of the checkrail shall be minimum 2 metre more than the width of the gate.
- 9.5 The checkrail clearance shall be between 51 to 57 mm.
- 9.6 The track in the level crossing shall be thoroughly packed and alignment corrected before filling up. If required more than one packing shall be given.
- 9.7 After completing the work, the road surface shall be made even and lightly tamped to make surface fit for the passage of the road traffic as directed by Engineer.
- 9.8 The top level of the check rail shall be exactly same as that of the running rail.
- 9.9 If required the dismantling and linking of track at the busy level crossings shall have to be done at night. For this contractor will make his own arrangement of light for which no extra payment shall be made.

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10.0 LINKING POINTS AND CROSSINGS.

10.1 It shall be ensured that complete set of switches, crossing, check rails, tie-plates, stretcher bars, blocks, bolts, bearing plates, fittings and sleepers of correct size and drawing have been collected before taking up linking work.

10.2 The lead rails shall be cut exactly to the correct size. Where joints are to be welded, the length shall be adjusted to make 24mm gap at the joint, otherwise 6mm gap shall be provided.

10.3 Proper bend shall be given in the stock rail ahead of toe of switch before linking as shown in the layout drawing.

10.4 The curvature of the curved switches shall be checked and if required, the curvature shall be corrected before linking.

(For correcting the curvature of the tongue/stock rail, it shall be spiked with the wooden sleepers to the correct curvature and kept in the position for one night and then released).

10.5 The sleepers spacing shall be correctly marked on the rails before linking. The sleepers shall be laid in shape as shown in the layout drawing.

10.6 The off-sets shall be correctly measured to 1mm accuracy.

10.7 In case of wooden lay out, bearing plates of correct drawing number shall be provided on all the sleepers.

10.8 Complete plate screw/rail screws shall be provided on all the sleepers before opening of the track for traffic.

10.9 Where points & crossings are pre-assembled, proper levelled platform shall be made to facilitate correct linking and easy slewing to the final location.

11.0 ALIGNING AND LEVELLING OF TRACK.

11.1 If needed the alignment shall be corrected before packing and boxing. The square ness and spacing of the sleepers shall also be corrected before boxing if required.

11.2 In case of CST-9 sleepers, the pots shall be filled with ballast by tamping from all the directions.

11.3 For packing PSC sleepers manually, track shall be lifted levelled and continuously packed so that sleepers are not damaged with beaters.

11.4 In case of concrete sleepers track, lifting shall be done with the help of track jacks.

11.5 It shall be ensured that no PSC sleeper is centre bound.

11.6 Boxing shall be done on the same day when linking is done.

11.7 The curves shall be slewed and version's corrected if required.

11.8 The sleeper spacing shall be correctly provided as directed by the Engineer.

11.9 The gauge & tightness of the fittings shall be re-checked & corrected if required.

11.10 After completing the boxing and dressing, the cess shall be cleaned and brought to the correct level. In yards the side and cross drains shall be provided as directed by the Engineer.

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12.0 CARTING AND STACKING RELEASED MATERIALS.

12.1 The released rails, sleepers and fittings shall be carted to the nearest PWI's store.

12.2 Dip-lorries may be provided by the railway for carrying rails. The dip-lorry shall work under the control and supervision of railway's authorized representative and under block protection as per extant rules for working of dip-lorries. Necessary flagmen shall be provided by the railway. No claim shall be entertained for non-availability of sufficient block.

12.3 Contractor will keep sufficient men for loading and unloading of rails. The rails may have to be unloaded in the way for the passage of the train if required. No extra payment shall be made for this.

12.4 Serviceable and un-serviceable rails shall be stacked separately in the manner as directed by the Engineer. Rails of different sections shall be stacked separately.

12.5 The sleepers and fittings shall be carted by the contractor by his own means to the PWI's stores. Serviceable and un-serviceable materials shall be sorted out and stacked separately as directed by the Engineer.

12.6 Accountal of the released materials shall be done by tallying with the inventory of materials made prior to the execution of the work. For loss of any materials, contractor shall have to pay the cost at the prevailing rate plus incidental charges.

13.0 MISCELLANEOUS.

13.1 Distance pieces shall be provided between the platform wall and the adjacent track in the station yards.

13.2 Before completing the work, it shall be ensured that 100% fittings have been provided and fitted correctly. A certificate of zero missing fitting shall be signed by contractor and submitted to the Engineer.

13.3 Correct size of drill bits shall be used for drilling holes in rails. All the holes shall be chamfered after drilling. The centre of hole shall be marked correctly with the help of templates.

13.4 The rails shall be cut exactly square and vertical with the help of hexa blades/cutting machine. Cutting by gas or breaking with Jim Crow is not permitted.

13.5 Where required, the rails shall be cut to adjust the length at the approaches of bridges, level crossings and points and crossings before linking.

13.6 No fishplate joint shall fall within 3m of the Level Xing and abutment of bridges in case of single rails and 6m in case of SWR.

13.7 The ballast shall be dressed to the profile as shown in sketch for SWR depending on the availability of the ballast and as directed by the Engineer.

13.8 No hammer mark, chisel mark or punch mark shall be made on the rails.

13.9 Correct expansion gap shall be provided at the rail joints according to the temperature at the time of laying as per table given.

13.10 After, the track geometry shall be jointly measured by the contractor and Engineer-in charge and shall conform to the standards as given in Annexure.

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13.11 Concrete sleepers shall be laid in all turn in curves in the running loops at 600m spacing and with 150mm extra shoulder or width of ballast out side the curves.

13.12 The curvature of the turn in curves should not be sharper than that of the turnout curve.

13.13 Ballast retainers shall be provided at the approaches of major/important bridges for one rail length from abutment to check slipping of ballast and ensure full ballast section.

13.14 Final rail level shall be provided at the level crossing and approaches of bridges at the time of linking. There shall not be any dip near the abutments.

13.15 Joints of all the points and crossings, falling in the running lines, shall be welded as shown in the lay-out plans.

13.16 Stock joints of all the points, leading from main line to the running loop, shall be welded.

ENCLOSURE TO SPECIAL CONDITIONS FOR TRACK LINKING

The following laying statements of track Geometry measured in floating condition after completion, linking initial packing and boxing should be achieved.

(a) Gauge Sleeper to Sleeper variation. $\pm 2\text{mm}$

(b) Expansion gap Over average gaps working $\pm 2\text{mm}$

out by recording 20 successive gaps.

© Spacing of sleepers. With respect to Theoretical spacing. $\pm 80\text{mm}$

(d) Cross level To be recorded on every 4th sleepers. $\pm 8\text{mm}$

(e) Alignment On straight on 10m chord. $\pm 2\text{mm}$

On curves of radius more than 600m 5 mm

On 20m chord. Variation over Theoretical versines.

On curves of radius less than 600m 10 mm

On 20m chord. Variation over Theoretical versines.

(f) Longitudinal level Variation in longitudinal level with 50 mm

reference to approved longitudinal section.

SLEEPER SPACING

(1) **FOR SWR TRACK JOINT**

Sleeper density	Type of sleepers	Type of weld.	Sleeper spacing in mm.			
			X	Y	Z	S
M+4 (for Main line)	PSC	FB	150	643	750	780
		AT	150	655	780	780
	METAL	FB	190	620	733	780
		AT	190	635	760	780

Note:- Above spacing are for 3x13m. Panels, spacing shall be adjusted in shoulder and in intermediate sleepers.

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(ii) **FOR SINGLE RAILS OF 13 M. LENGTH.**

Sleeper density	Type of sleepers	Sleeper spacing in mm.			
		X	Y	Z	S
M+4	METAL	190	640	750	820
M+2	METAL	190	690	780	880

Note:- For shorter rails spacing shall be adjusted in shoulder and intermediate sleepers.

(iii) **FOR LWR TRACK**

Spacing of sleepers= 65cm center to center.

EXPANSION GAP FOR SWR AND SINGLE RAILS

$T_m = 81^\circ\text{C}$

TEMP.= ZONE-III

Rail length	Temperature range in centigrade		Gap	Remarks
3 rail panel	8.5* C	13.4* C	12mm	As per IRPWM Para 503
	13.5* C	18.4* C	10mm	
	18.5* C	23.4* C	08mm	
	23.5* C	20.5* C	06mm	
	28.6* C	33.5* C	04mm	
	33.6* C	38.5* C	02mm	
Single rail	0 to 10* C		10mm	IRPWM Para 315
	10 to 25* C		08mm	
	25 to 40* C		06mm	
	40 to 55* C		04mm	
	55 to 70* C		02mm	
	Above 70* C		Zero	

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2.0 SPECIFICATION FOR TRACK BALLAST (JUNE-2016)

(Embodying all correction slips up to June-04 with correction slip No.2 of June-2016)

1. **SCOPE:** These specifications will be applicable for stone ballast to be used for all types of sleepers on normal track, turnouts, tunnels and deck slabs etc. on all routes.

2. DETAILED SPECIFICATIONS:**2.1 GENERAL:**

2.1.1 **Basic Quality:** Ballast should be hard, durable and as far as possible angular along edges/corners free from weathered portions of parent rock, organic impurities and inorganic residues.

2.1.2: **Particle Shape:** Ballast should be cubical in shape as far as possible. Individual pieces should not be flaky and should have generally flat faces with not more than two rounded/sub-rounded faces.

2.1.3: **Mode of Manufacture:** Ballast for all B.G. main lines and running lines, except on 'E' routes but including 'E' special routes, shall be machine crushed. For other B.G. lines and MG/NG routes planned/sanctioned for conversion, the ballast shall preferably be machine crushed. Hand broken ballast can be used in exceptional cases with prior approval of Chief Track Engineer/CAO/C. Such approval shall be obtained prior to invitation of tenders.

On other MG and NG routes not planned/sanctioned for conversion hand broken ballast can be used for which non approval shall be required.

2.2 PHYSICAL PROPERTIES:

2.2.1 Ballast sample should satisfy the following physical properties in accordance with IS:2386 Pt.IV-1963 when tested as per the procedure given in Annexure I & II.

BG, MG & NG (Planned/sanctioned for conversion)	NG& MG (other than those planned for conversion)	
Aggregate Abrasion Value	30% max.*	35% max.
Aggregate impact value	20%max.*	30% max.

* In exceptional cases, on technical and/or economical grounds relaxable upto 35% and 25% respectively by CTE in open line and CAO/C for construction projects. The relaxation in Abrasion and Impact values shall be given prior to invitation of tender and should be incorporated in the Tender document.

2.2.2 To carry out Impact Test on ballast, a test sample of ballast pieces (about 5 kg in weight) of size 10mm to 12.5mm will be required. Appropriate care should be taken by the railways that ballast selected for breaking down to 10mm to 12.5mm size for Impact Test should be random from the ballast supply to avoid any subjectivity in selection of test sample. Alternatively, the test sample in the recommended range of size be got manufactured along with the ballast in sufficient quantity required for the test.

2.2.3 The "**Water Absorption**" tested as per IS 2386 Pt.III-1963 following the procedure given in Annexure-III should not be more than 1%. This test however, is to be prescribed at the discretion of CE/CTE in open line and CAO/Con. for construction projects.

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2.3 SIZE AND GRADATION:

2.3.1 Ballast should satisfy the following size and gradation:

- a) Retained on 65mm sq. mesh sieve 5% maximum
- b) Retained on 40mm sq. mesh sieve* 40%-60%
- c) Retained on 20mm sq. mesh sieve***

***Not less than 98% for machine crushed

Not less than 95% for hand broken

*For machine crushed ballast only.

2.3.1.1 In exceptional cases, where it is considered necessary on technical consideration, to reduce the maximum size of ballast for NG lines, CTE may modify the size & gradation of the ballast as defined above. In case of such modifications, provision given in para 2.3.2 to 2.3.4 below shall also be suitably modified. This will be finalized before invitation of tenders.

2.3.2 Oversize Ballast:

- i) Retention on 65mm square mesh sieve.

A maximum of 5% ballast retained on 65mm sieve shall be allowed without deduction in payment.

In case ballast retained on 65mm sieve exceeds 5% but does not exceed 10%, Payment at 5% reduction in contracted rate shall be made for the full stack. Stacks having more than 10% retention of ballast on 65mm sieve shall be rejected.

(ii) In case ballast retained on 40mm square mesh sieve (machine crushed case only) exceeds 60% limit prescribed in 2.3.1(b) above, payment at the following reduced rates shall be made for the full stack in addition to the reduction worked out at (i) above.

- * 5% reduction in contracted rates if retention on 40 mm sq. mesh sieve is between 60% (excluding) and 65% (including)
- * 10% reduction in contracted rates if retention on 40 mm Sqm mesh sieve is between 65% (excluding) and 70% (including).

iii) In case retention on 40mm square mesh sieve exceeds 70%, the stack shall be rejected.

iv) In case of hand broken ballast supply, 40mm sieve analysis may not be carried out. The executive may however ensure that the ballast is well graded between 65mm and 20mm size.

2.3.3 Under Size Ballast: The ballast shall be treated as undersize and shall be rejected if:-

- i) Retention on 40mm sq. mesh sieve is less than 40%
- ii) Retention on 20mm square mesh sieve is less than 98% (for machine crushed) or 95% (for hand broken).

2.3.4 Sieve Analysis of Ballast:

2.3.4.1 The test sieves used for sieve analysis shall conform to the specifications given in Annexure-IV

2.3.4.2 While carrying out sieve analysis, the screen shall not be kept inclined, but held horizontally and shaken vigorously. The pieces of ballast retained on the screen can be turned with hand to see if they pass through but should not be pushed through the sieve.

2.3.4.3 The percentage passing through or retained on the sieve shall be determined by weight. The weighting equipment used shall NOT have least count more than 100grams.

3. CONDITIONS FOR SUBMISSION OF TENDER:

3.1 Each tenderer at the time of tendering shall submit the test report of impact value. Abrasion value, Water absorption value from approved laboratories and the list of these laboratories shall be mentioned in the tender documents.

3.2 The tenderer shall also furnish an undertaking as incorporated in the tender document that the ballast supply at all times will conform to Specification for track ballast as specified by Railway.

4. METHOD OF MEASUREMENT:

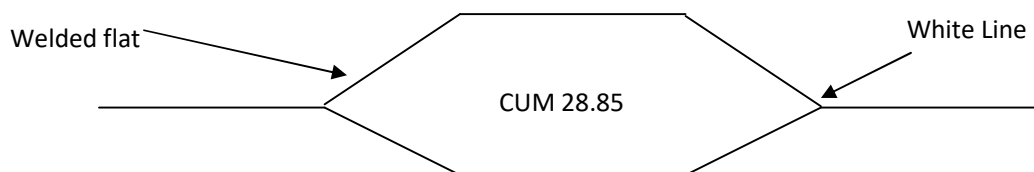
4.1 STACK MEASUREMENT:

Stacking shall be done on a neat, plane and firm ground with good drainage. The height of stack shall not be less than 1m except in hilly areas where it may be 0.5m. The height shall not be more than 2.0m. Top width of stack shall not be less than 1.0m. Top of stack shall be kept parallel to the ground plane. The side slopes of stack should not be flatter than 1.5:1 (horizontal: vertical). Cubical content of each stack shall normally be not less than 30 cum in plane areas and 15 cum in hilly areas.

4.2 WAGON MEASUREMENT:

4.2.1 In case of ballast supply taken by direct loading into wagons a continuous white line should be painted inside the wagon to indicate the level to which ballast should be loaded the cubical content in cubic meter corresponding to white line should also be painted on both sides outside the wagon.

4.2.2 In addition to the painted line, mentioned in Para 4.2.1 short pieces of flats (cut pieces of tie bars or otherwise) with cubical contents punched shall be welded at the centre of all the four sides as permanent reference. In case the supply is taken in general service wagon, actual measurement will be taken.



4.3 SHRINKAGE ALLOWANCE

Payment shall be made for the gross measurements either in stacks or in wagons without any deduction for shrinkage/voids. However, when ballast supply is made in wagons, shrinkage up to 8% shall be permitted at destination while verifying the booked quantities by the consignee.

5.0 SAMPLING AND TESTING:

5.1 General

5.1.1 The samples shall be drawn with due diligence and adequate precaution so that they represent the true nature and condition of the ballast.

5.1.2 Being a heterogeneous material, the gradation of ballast loaded in wagons and/or dumped/inserted in the track may not remain same as that initially checked in stacks, due to lifting, loading, transportation, unloading etc. Similarly in case of direct loading into wagons, the gradation of ballast at destination may not remain same as that at source, due to loading, transportation etc. Therefore,

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the samples from wagons and track are not representative samples as far as gradation is concerned. Even in the same stack, results of two checks may not be same.

5.1.3 The samples from a stack taken after lapse of a long period of stacking are not representative samples of the ballast initially supplied in the stack, due to settling down of smaller size particles in voids underneath, dirt/dust getting accumulated in the stack, rains etc.

5.2 Sampling Frequency

5.3 In order to ensure supply of uniform quality of ballast, the following norms shall be followed in respect of sampling, testing and acceptance.

5.2.1 On supply of the first 100 cum. the test for size gradation, Abrasion value, Impact value and water absorption (if prescribed) shall be carried out by the Railway. Further supply shall be accepted only after this ballast satisfies the specifications for these tests. Railway reserves the right to terminate the contract as per GCC at this stage itself in case the ballast supply fails to conform with any of these specifications.

5.2.2 Subsequent tests shall be carried out as follows:

	Supply in stacks	Supply in wagons
a) Size and Gradation tests	One for each 100 cum or part thereof in any stack	One for each 100 cum or part thereof for quantity to be loaded in wagons
b) Abrasion value, Impact value and Water Absorption value (*)	One test for every 2000 cum.	

* These tests shall be done for the purpose of monitoring quality during supply. In case of the test results not being as per the prescribed specifications at any stage, further supplies shall be suspended till suitable corrective action is taken and supplies ensured as per specifications.

The above test may be carried out more frequently if warranted at the discretion of the Railway.

5.2.3 All tests for Abrasion value, Impact value and Water absorption should be got done through approved laboratories or Railway's own laboratories (list of these laboratories shall be mentioned in the tender document). These test, subsequently to award of contract shall be done at Railway's cost.

5.3.4 To carry out impact test on ballast, a test sample of ballast pieces (about 5 kg. in weight) of size 10mm to 12.5mm will be required. Appropriate care should be taken by the Railways that ballast selected for breaking down to 10mm to 12.5mm size for impact test should be random from the ballast supply to avoid any subjectively in selection of test sample. Alternatively, the test sample in the recommended range of size to be got manufactured along with the ballast in sufficient quantity required for this test.

5.3 Supply of ballast in stacks

5.3.1 Sampling Procedure

- (i) At the time of formation of stacks, sufficient care should be taken to ensure that there is sufficient space around the stack to facilitate movement of JCB/Power Equipments. The length and width of each stack shall be kept in such a way that every part of the stack is accessible to the JCB of Power Equipment, to be deployed for drawing "Samples".

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- (ii) In case of ballast supply in stacks, three “Samples” each of 0.3-0.5 cum volume, one sample each from two sides and one sample from top after removing outer layer (150-200mm) should be collected from stack for every 100 cum or part thereof, by JCB or other suitable Power Equipment.
- (iii) The location (in plan) and depths of sampling points shall be varied for different “Samples” and different stacks in a lot.
- (iv) “Gross Sample” should be prepared by thoroughly mixing the three “Samples” collected as in (ii) above, using JCB bucket or any other suitable Power Equipment, on a clean, flat and hard surface.

Note : In exceptional cases of site specification constraints, approval of Competent Authority (Engineer-in-charge) shall be taken prior to invitation of tender, for using manual means for collection and mixing of “Samples”, and this should be incorporated in the Tender Document.

- (v) A “Test Sample” of volume 0.027 cum shall be drawn from each of the “Gross Sample”, by the method described in Para 5.3.1 (vi), for carrying out Size & Gradation tests.
- (vi) Method for drawing “Test Sample” : The ballast in “Gross Sample” shall be scooped into a cone shaped pile by taking care to drop each scoopful exactly over the same spot. After the cone is formed, it shall be flattened by pressing the top of cone with a smooth surface. Then it is cut into quarters by two lines which intersect at right angle at the centre of the cone. The bulk of the sample is reduced by rejecting any two diagonally opposite quarters. The remaining ballast shall be mixed and “test sample” shall be drawn for testing. After drawing “test sample”, the left over ballast of “Gross Sample” shall be dumped back in the stack.
- (vii) In case clean, flat and hard surface is not available then a tarpaulin or any other suitable sheet may be used on a flat surface for mixing, drawing and sieve analysis of samples.

5.3.2 In case of stacks of volume more than 100 cum, more than one “Test Samples” will be tested for Size & Gradation. In such cases, the sieve analysis results of all the “Test Samples” shall individually conform to following gradation, for acceptance/rejection of the whole stack:

- (i) Retention of 20mm Sq. Mesh Sieve shall not be less than 98% for machine crushed ballast (not less than 95% for hand broken ballast).
- (ii) Retention of 40mm Sq. Mesh Sieve shall be between 40 to 70%.
- (iii) Retention of 65mm Sq. Mesh Sieve shall not be more than 10%.

The full payment /reduced payment for the whole stack, as given in Para 2.3, shall be decided based on the average of the sieve analysis results of all the “Test Samples” for a stack.

5.4 Supply of ballast in Heaps for loading directly in Wagons

5.4.1 Sampling Procedure

Samples of ballast shall be collected from heaps of ballast proposed to be loaded into the wagons. For this, the contractor shall inform ADEN in-charge in writing sufficiently in advance before placement of rake, about the locations of ballast heaps from where it is to be loaded into wagons. ADEN in-charge shall decide the location of heaps from which sampling is to be done, judiciously covering the entire quantity of ballast to be loaded in the rake.

5.4.2 Based on the approx. Quantity of ballast to be loaded in the rake, methodology for sampling of ballast to be followed shall be the same as in Para 5.3.1 and 5.3.2 above.

**Aggregate Abrasion Value
(Based on IS 2386 part IV-1963)**

1. Apparatus

- 1.1 The abrasion test for the track ballast shall be carried out using **loss-Angles machine as per fig-I**
- 1.2 The **abrasive charge** shall consists of 12 nos. cast iron or steel spheres approx. 48 mm dia and each weighing between 390 & 445 gm ensuring total weight of charge as $5,000 \pm 25$ gm.
- 1.3 **IS sieve** of sizes 50 mm, 40 mm, 25 mm and 1.70 mm
- 1.4 **Drying Oven**

2. Test Sample

- 2.1 The test sample of 10,000 gm shall consist of clean ballast conforming to the following grading.
- | | | |
|----|------------------------------------------------------------------------------------------------|------------|
| [] | Passing 50 mm and retained on
40 mm square mesh sieve | 5,000 gm @ |
| [] | Passing 40 mm and retained on
25 mm square mesh sieve
@ Tolerance of $\pm 2\%$ permitted | 5,000 gm @ |
- 2.2 The sample shall be dried in oven at 100-110°C to a constant weight and weighed (weight 'A')

3 Test Procedure

The test sample and the abrasive charge shall be placed in the Loss- Angles abrasion testing machine and the machine rotated at a speed of 20-33 revolutions/minute for 1000 revolutions. At the completion of test, the material shall be discharged and sieved through 1.70 mm IS sieve.

4 Analysis and reporting of the result

- 4.1 The material coarser than 1.70 mm IS sieve shall be washed, dried in oven at 100 –110 °C to a constant weight and weighed (weight 'B').
- 4.2 The proportion of loss between Weight "A" and Weight "B" of the test sample shall be expressed as a percentage of the original weight of the test sample. This value shall be reported as:

$$\text{Aggregate abrasion Value} = \frac{A-B}{A} \times 100$$

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

AGGREGATE IMPACT VALUE (Based on IS 2386 part IV-1963)

1. Apparatus

The apparatus shall consist of the following

- a) **Impact testing machine** conforming to IS 2386 part IV- 1963 as per fig.-2
- b) **IS Sieves** of sizes 12.5mm, 10mm and 2.36mm
- c) **A cylindrical metal measure** of 75mm dia& 50mm depth.
- d) **A tamping rod** 10mm circular cross section and 230mm length, rounded at one end
- e) **Drying Oven.**

2. Test Sample

- 2.1 The test sample shall be prepared out of track ballast so as to conform to following grading.

- Passing 12.5mm IS sieve	100%
- Retention 10mm IS sieve	100%

- 2.2 The sample shall be oven dried for four Hours at a temperature of 100-110 C* and cooled.

- 2.3 The measure shall be filled about one third full with the prepared aggregate and tamped with 25 strokes of the tamping rod. A further similar quantity of aggregate shall be added and a further tamping of 25 strokes given. The measure shall finally be filled to overflowing, tamped of 25 times and the surplus aggregate struck off, using and tamping rod as a straight edge. The net weight of the aggregate in the measure shall be determined to the nearest gm.(weight 'A')

3. Test Procedure

- 3.1 The cup of impact testing machine shall be fixed finally in the position on the base of the machine and the whole of the test sample placed in it and compacted by 25 strokes of the tamping rod.
- 3.2 The hammer shall be raised 380 mm above the upper surface of the aggregate in the cup and allowed to fall freely on to the aggregate .The test sample shall be subjected to a total of 15 such blows, each being delivered at an interval of not less than one second.

4. Analysis and Reporting of the result.

- 4.1 The sample shall be removed and sieved through 2.36mm IS sieve. The fraction passing through shall be weighed (weight "B"). The fraction retained on the sieve shall also be weighed (weight "C") and if the total weight (B+C) is less than the initial weight (weight "A") by more than one gm, the result shall be discarded and a fresh test made.

- 4.2 The ratio of the weight of the fines formed to the total sample weight shall be expressed as a percentage.

$$\text{Aggregate Impact Value} = (B/A) \times 100$$

- 4.3 Two such tests shall be carried out and the mean of the results shall be reported to the nearest whole number as the Aggregate Impact Value of the tested material.

Water Absorption

(Based on IS 2386 part III 1963)

1. Apparatus

The apparatus shall consist of the following

- a) **Wire Basket-** Perforated, electroplated or plastic coated, with wire hangers for suspending it from the balance.
- b) **Water tight** container for suspending the basket.
- c) **Dry soft Absorbent cloth** 75 x 45 cm size 2 nos.
- d) **Shallow Tray** of minimum 650 square cm area.
- e) **Air tight container** of capacity similar to basket.
- f) **Drying Oven**

2. Test Sample

A sample of not less than 2000 gm shall be used

3. Test procedure

3.1 The sample shall be thoroughly washed to remove finer particle and dust, drained and then placed in the wire basket and immersed in distilled water at a temperature between 22 -32°C.

3.2 After immersion the entrapped air shall be removed by lifting the basket and allowing it to drop 25 times in 25 seconds. The basket and sample shall remain immersed for a period of $24 \pm \frac{1}{2}$ hours afterwards.

3.3 The basket and aggregate shall then be removed from the water, allowed to drain for few minutes after which the aggregate shall be gently emptied from the basket on to one of dry clothes and gently surface dried with the cloth transferring it to second dry cloth when the first will remove no further moisture. The stone aggregate shall be spread on the second cloth and exposed to atmosphere (away from direct sunlight) until it appears to be completely surface dry. The aggregate then shall be weighed (weight "A").

3.4 The aggregate shall then be placed in an oven at a temperature of 100-110°C for 24 hours. It shall then be removed from oven cooled and weighed (weight "B").

4. Analysis and Reporting of the Result

Water absorption = $\{(A-B)/ B\} \times 100$

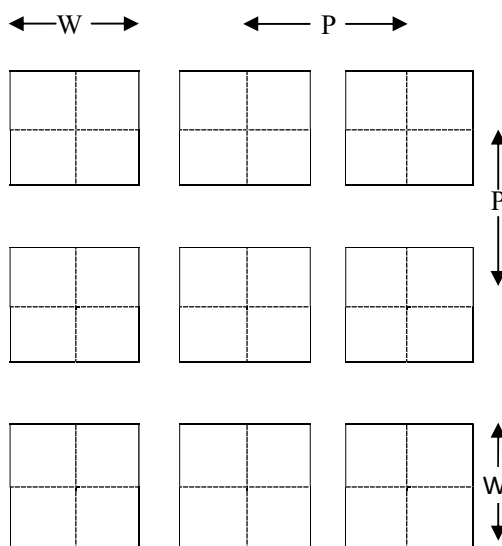
4.1 Two such tests shall be made and individual and mean results shall be reported.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

Specification of Test Sieves used for Sieve Analysis of Ballast

- The test sieves shall be perforated plate sieve type with square holes/apertures, mounted on a frame. The test sieves are designated by the nominal size of holes/apertures.
- Material of Perforated Plate :** The perforated plate for test sieves shall be manufactured from Brass Sheet or Steel Sheet or Stainless Steel Sheet or Galvanized Steel Sheet or Electroplated Steel Sheet.
- Plate Thickness :** The thickness of plate used for making test sieve and the tolerance permitted for this shall be as following:
 For 65mm Square Mesh Sieve – 3mm (Plus 1.0mm Minus 0.5mm)
 For 40mm Square Mesh Sieve – 2mm (Plus Minus 0.5mm)
 For 20mm Square Mesh Sieve – 2mm (Plus Minus 0.5mm)
- Arrangement of Holes/Apertures :** The square holes/apertures of size “W” in the perforated plate shall be arranged at Pitch “P” as per the sketch given below:



- Sieve Opening Size, Pitch of Openings and tolerances :** The nominal size of individual hole/aperture at mind-section (W), the Pitch of holes/apertures (P) and permissible tolerance for them shall be as under:

Test Sieve of Square Mesh Size	W		P	
	Nominal Size	Tolerance	Distance	Tolerance
65 mm	65 mm	(±) 1.5mm	80 mm	(+) 12.0 mm (-) 8.0 mm
40 mm	40 mm	(±) 1.5mm	50 mm	(+) 7.5 mm (-) 5.0 mm
20 mm	20 mm	₁₄ (±) 1.0mm	25 mm	(+) 4.0 mm (-) 2.5 mm

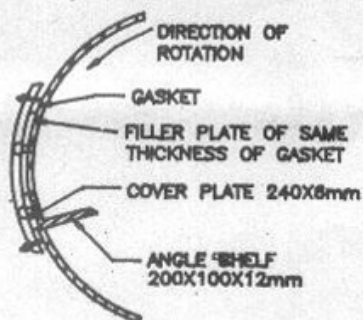
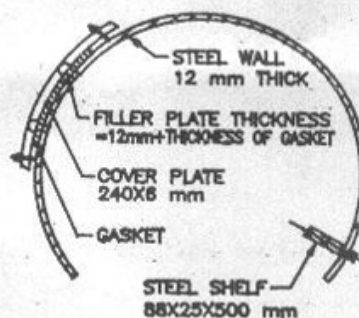
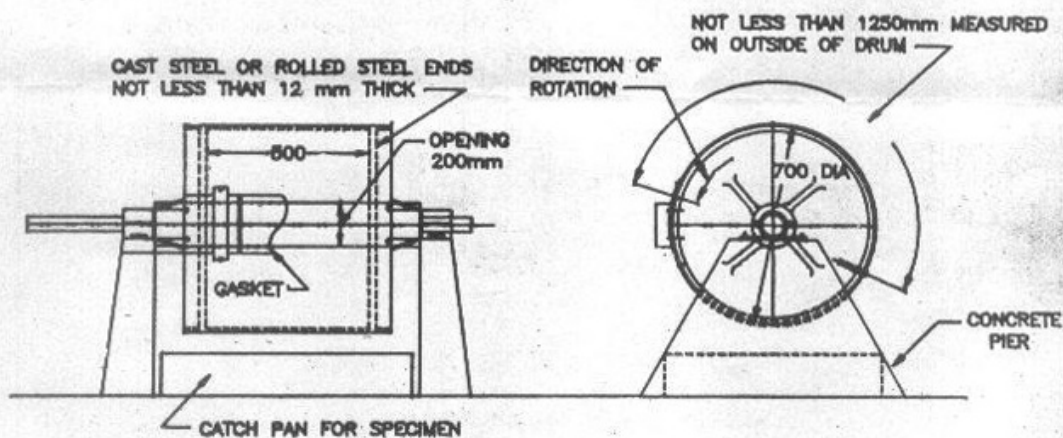
- Sieve Frame :** The frame of test sieves shall be manufactured from Hardwood or Steel sheet or Brass sheet. The internal size of the frame (i.e. clear size of perforated plate mounted on frame) shall not be less than 100cm in length, 70cm in breadth and 10cm in height on sides.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

7. **Marking of test sieves :** A label shall be fixed to the frame of each sieve, legibly marked with following information:
- (i) Nominal Aperture Size,
 - (ii) Material of perforated plate,
 - (iii) Material of sieve frame,
 - (iv) Maker's Name of Trademark, and
 - (v) An Identification Number for the sieve.

FIG.-1

ALTERNATIVE DESIGN
OF ANGLE SHELFPREFERRED DESIGN OF
PLATE SHELF AND COVER

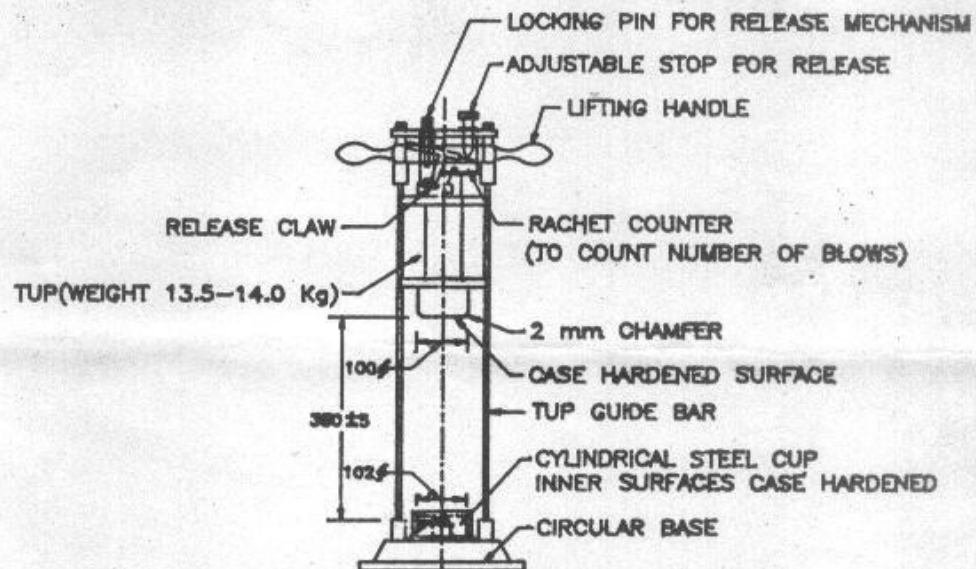
NOTE 1 - SHAFT BEARING WILL BE MOUNTED ON CONCRETE PIERS OR OTHER RIGID SUPPORTS.

NOTE 2 - SUGGESTED HORSE POWER FOR MOTOR IS NOT LESS THAN ONE.

ALL DIMENSIONS ARE IN MILLIMETRES.

LOS ANGELES ABRASION TESTING MACHINE

FIG.- 2



ALL DIMENSIONS ARE IN MILLIMETRES.

AGGREGATE IMPACT TEST MACHINE.

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

NORTH EASTERN RAILWAY
[Construction Organisation]

E-Tender No. DYCE-CON-HQ-GKP-04-2026

Name of Work:- Leftover miscellaneous work for phase I & II (Gorakhpur Cantt (incl) to Kaptanganj (incl)) in connection with Gorakhpur Cantt - Valmikinagar doubling project in Varanasi division of N. E. Railway

Schedule of items [Rates to be quoted in this rate sheet only]

S. N.	Description of items	Value of schedules (Rs.)	% above/at par/below	
			In figure	In words
	ANNEXURE - A			
1	Any other item of works not included in above Schedule but based on DSR-2021 with all corrections upto-date as per Annexure-A	13908155.00		
	ANNEXURE - B			
1	Any other item of works not included in above Schedule but based on NER/USSOR/2021 with all corrections upto-date as per Annexure-B	6643200.00		
	ANNEXURE - C			
1	Any other item of works not included in above Schedule but based on DSR/2021 with all corrections upto-date as per Annexure-C	3500000.00	.	

Notes: -

1. Rates shall have to be quoted as percentage above or below or at par for each schedule separately. Tenderers must not quote item wise rates. In case any tenderer quotes unified percentage for each schedule and also quotes item wise rates against individual items, no cognizance would be given for the item wise rates quoted by the tenderer. However, railways reserves the right to cancel any tender wherein item wise rates has been quoted.
2. Offer rate will be treated as over & above, below or at par the advertised value.

Witness: -

1.

Signature of tenderer

2.

Dated: _____

Signature of the Tenderer(s)

For Chief Administrative Officer/Con

SCHEDULE OF ITEMS

Sr. No.	Description of Item	Unit	Qty	Rate	Amount (In Rs.)
SCHEDULE-A (Items based on USSOR-2021)					
1	De-stressing of LWR/CWR track of any density under traffic line block with contractor's labours, tools, equipments and consumables inclusive of all lead & lift. Activities include cutting of LWR/CWR into convenient panels of specified length, removal of ERCs, liners, greasing of ERCs and liner contact area, lifting rails and keeping them on rollers provided at every 15 sleepers, working out elongation of rail ends depending on prevailing site conditions, pulling rails with the help of Hydraulic Tensor to achieve the desired elongation, cutting rails, as required, removing rollers and placing rail in position, re-fixing ERCs & liners and adjustment of gap at SEJs : Note: (1) Welding of rail joints will be paid separately. (2) Rail cutting and Hole drilling shall be paid separately. (3) Opening and closing of LC if required will be paid separately. (4) As per procedure prescribed in latest edition of IRPWM & CE's Circulars for destressing of LWR/CWR, if any. With Contractor's Hydraulic Rail tensor. USSOR-2021 Item No: '135010	TRM	20000.00	54.29	1085800.00
2	One Gang comprising of 20 physically fit labours plus 1 Mate. Note : In case, contractor provides less no. of Labour /Mate, payment will be deducted for each such labour @10% of the accepted item rate. USSOR-2021 Item No: 136042	Gang Day	650.00	15420.50	10023325.00
3	Providing Assistant to Patrol man for patrolling during cold/hot weather on track for protecting track as per IRPWM. Note: 1.The person deployed for patrolling must have the following items: • Valid certificate of competency issued by Railways. • Fit for A-3 medical category - certificate issued by registered medical practitioner 2.Necessary equipments prescribed shall be supplied by Railways for each patrolman and same to be handed over back to Railways in good condition. 3.The following equipment to be arranged by contractor for each patrol man: H.S. Flags Green 0-1 No (Standard size), H.S Flags Red-2 Nos. (Standard size), Torch light 3 cell - 1 no., Staff for flags-1 no., Whistle Thunder-1no, Protective clothing to withstand climate, Gum boots, Haver sack. For duration of 8 hrs. USSOR-2021 Item No: 136130	Each	3250	861.24	2799030.00
Total of Sch-A					13908155.00
SCHEDULE-B					
1	Any other items based on NER/USSOR/2021 as Schedule-B	Lump Sump	6000000.00	10.72%	6643200.00
Total of Sch-B					6643200.00
SCHEDULE-C DSR-2021					
1	Any other items based on NER/DSR/2021 as Schedule-C	Lump Sump	3500000.00		3500000.00
Total of Sch-C					3500000.00

End of Tender Document

Signature of the Tenderer(s)

For Chief Administrative Officer/Con