TENDER DOCUMENT

TENDER No: NERO/CON/IRCON/364 Dated: 14.11.2019

FOR

TENDER FOR TURNKEY LABOUR/PETTY CONTRACT FOR THE PROJECT WORK “CONSTRUCTION OF ROADS CONSISTING OF EARTHWORK IN FILLING IN EMBANKMENT, GSB, W BM, BITUMINOUS WORK AND OTHER ANCILLARY WORKS IN TRANSSHIPMENT YARD INCLUDING APPROACH ROAD OF PASSENGER AND CARGO SIDE, IN BETWEEN STRETCH FROM KM 2+400 (AGARTALA) TO KM 5+100 (INDIA- BANGLADESH BORDER FENCING) IN CONNECTION WITH AGARTALA-AKHAURA NEW RAIL LINK PROJECT”

VOLUME–II

NOTICE INVITING e-TENDER

ADDITIONAL CONDITIONS OF CONTRACT

CLIENT’S CONDITION OF CONTRACT

TECHNICAL SPECIFICATIONS

DRAWINGS
SHORT NOTICE INVITING e-TENDER (NIT)

Tender for Turnkey Labour/Petty contract for the project work “Construction of Roads consisting of Earthwork in filling in embankment, GSB, W BM, Bituminous work and other ancillary works in Transshipment yard including approach road of Passenger and Cargo side, in between stretch from Km 2+400 (Agartala) to km 5+100 (India-Bangladesh Border fencing) in connection with Agartala- Akhaura New Rail Link project”

EPI invites E-Tender on Percentage Rate basis for the following work:-

<table>
<thead>
<tr>
<th>NAME OF WORK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnkey Labour/Petty contract for the project work “Construction of Roads consisting of Earthwork in filling in embankment, GSB, W BM, Bituminous work and other ancillary works in Transshipment yard including approach road of Passenger and Cargo side, in between stretch from Km 2+400 (Agartala) to km 5+100 (India-Bangladesh Border fencing) in connection with Agartala- Akhaura New Rail Link project”</td>
</tr>
<tr>
<td>ESTIMATED COST</td>
</tr>
<tr>
<td>EARNEST MONEY DEPOSIT (EMD)</td>
</tr>
<tr>
<td>TENDER FEE</td>
</tr>
<tr>
<td>COMPLETION PERIOD</td>
</tr>
</tbody>
</table>

The work of “Construction of Roads consisting of Earthwork in filling in embankment, GSB, WBM, Bituminous work and other ancillary works in Transshipment yard including approach road of Passenger and Cargo side, in between stretch from Km 2+400 (Agartala) to km 5+100 (India- Bangladesh Border fencing) in connection with Agartala- Akhaura New Rail Link project” shall be carried out on Tunkey Labour/Petty Contract Basis as per the scope and conditions mentioned in the tender documents.

The brief scope of work in this tender shall include (but not limited to) providing labour along with all other components, Services, tools, Plants, Materials except those which are specifically mentioned to be Excluded elsewhere in the tender document, of Turnkey Concept required in connection with construction of Roads and allied works as mentioned in the tender documents. Apart from above, any other services not covered above but required as per direction of EPI are deemed to be included in the scope of work. The Detailed scope is given in the tender documents.
Time schedule of Tender activities:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date &amp; Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Date &amp; Time for Downloading of tender documents:</td>
<td>28.11.2019 upto 11:00 am.</td>
</tr>
<tr>
<td>Last Date &amp; Time of submission of Tenders (online</td>
<td>28.11.2019 upto 11:00 am.</td>
</tr>
<tr>
<td>and physical documents):</td>
<td></td>
</tr>
<tr>
<td>Date &amp; Time of online opening of tenders (Techno-</td>
<td>28.11.2019 at 03:00 pm.</td>
</tr>
<tr>
<td>Commercial Bid):</td>
<td></td>
</tr>
<tr>
<td>Pre-Bid Meeting (Offline)</td>
<td>21.11.2019 at 11.00 am.</td>
</tr>
<tr>
<td>4th Floor, Hindustan Tower Block-A, Jawahar Nagar,</td>
<td></td>
</tr>
<tr>
<td>N.H.37, Guwahati-781022 Assam</td>
<td></td>
</tr>
</tbody>
</table>

The tenderers shall submit his query for the pre-bid meeting on or before 21.11.2019 by 10.00 hours to nerocontracts@gmail.com or by post to the address given at sl. No. 14 below.

Contractors who fulfill the following requirements are eligible to participate in this tender. The joint ventures/Consortium are not accepted.

a) **The bidder** must have experience of having satisfactorily completed following “similar works” during the last 7(seven) years ending last day of month previous to the one in which applications are invited.

   Three similar works each costing minimum **40%** of the estimated cost put to tender
   OR
   Two similar works each costing minimum **60%** of the estimated cost put to tender
   OR
   One similar work costing minimum **80%** of the estimated cost put to tender

i. The “similar works” shall mean “Construction of Asphalt Road Not below the standard of District Road”

ii. The cost of free issue materials shall not be included in the completion cost of works.

iii. For evaluation purpose, the completion cost of works mentioned in the completion certificate shall be enhanced by 7% per annum till the end of month prior to date of NIT.

iv. The experience certificates issued by Government Organizations/Semi Government Organizations/State Government / Public Works Department / Central Government/Public Sector Undertakings/ Autonomous Bodies/Municipal Bodies/Public Limited Companies listed on BSE/NSE shall only be accepted for assessing the eligibility of the tenderer. However, the certificates issued by Public Limited Company/ Private Limited Company or Non-Govt. Organization can be considered only if they are supported by TDS certificates(Form 16A/26AS) in support of value of work done by the tenderer. TDS certificate for full contract value as mentioned in the work order must match failing which the same shall not be considered.

v. The Certificates of Experience should be submitted alongwith respective Letter of Award by the issued by concerned client(s) as mentioned above.

b) Should have had average annual financial turnover of at least **50%** of the estimated cost put to tender during the immediate last three consecutive financial years ending on **31.03.2019** duly supported by annual financial report (i.e. audited copies of balance sheet and profit and loss statement) or certified by Chartered Accountant along with Income Tax return for last 03 financial years. Turnover means income from construction works only.
c) Should not have incurred any loss in more than two years during the immediate last five consecutive financial years, ending 31.03.2019, Copies of balance sheet / Certificate from Chartered Accountant duly self attested by the tenderer shall be submitted.

d) Should have a Solvency of 40% of the estimated cost issued by his bankers in the name of the bidder. The Solvency Certificate should not have been issued earlier than Six Months of last date of submission of the tender.

e) Should have valid Permanent Account Number of Income Tax and GST registration certificate.

f) Should have valid PF Registration number. In case the bidder does not have this registration number, he shall remain bound to obtain them within one month from the date of LOI or before release of 1st R/A bill whichever is earlier.

g) Bid Capacity: The bidding capacity of the tenderer should be equal to or more than the estimated cost of the work put to Tender.

The Bidding capacity shall be worked out by the following formula:

\[
\text{Bidding Capacity} = [A \times N \times 2] - B
\]

Where,

A = Maximum value of construction works executed in any one year during the last five years taking into account the Completed as well as works in progress ending last day of the month previous to the one in which applications invited.

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

B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited. The Tenderer is requested to furnish the existing commitments of works under execution along with stipulated period for completion of remaining for each of the work should be furnished in an affidavit on non-judicial stamp paper of value of Rs. 100/- duly certified that the particulars furnished are correct as per the Performa in Annexure-A.

h) Site visit for the subject tender is mandatory. The bidders shall visit the site to Study/assess the tendered work and also acquaint themselves of the prevailing local conditions & detail requirement of the project work before submitting their bid. Bidder has to enclose a certificate counter signed by EPI official or furnish undertaking for having visited the site.

i) Bidders who intend to get exemption from submission of Tender fee and EMD shall submit confirmation letter whether they are registered under MSME Act or not and if yes, then relevant copies of the registration letter (Registered under single point registration scheme of NSIC, Govt. of India, Ministry of MSME, New Delhi) vide Gazette Notification dated 26.03.2012 along with the form of Memorandum-2 (with the concerned DIC) certificate in the appropriate category and limit as applicable under the present tender to be enclosed in Technical Bid and a request letter for exemption from submission of Tender fee and EMD.

j) Even though an applicant may satisfy the eligibility criteria, EPI reserves the right for not accepting the tender if he has record of poor performance such as abandoning work, not properly completing the work, delay in execution of work, poor quality of work, financial failure / weakness etc.
k) Selection of the Sub-Contractor shall be subject to thorough verification of their credential and inspection of similar works (if required) carried out / in progress by them, through a Technical Committee of experts.

l) Completion certificates from the client shall be in the name of the company who is submitting the tender. The contractor has to produce original documents for their verification as and when demanded by EPI. The tender of any tenderer shall be rejected if on detailed scrutiny; documents submitted along with the tender are found to be unsatisfactory / forged and action shall be taken by EPI. The decision of EPI in this regard shall be final and the binding on the tenderer.

m) Relevant experience certificates and other documents as mentioned above fulfilling the qualifying criteria duly self-attested by the tenderer shall be uploaded. Completion Certificates from clients shall be in the name of the Company who is submitting the tender. The bidder has to produce original documents for verification at the time of opening of tender or as and when demanded. The Tender of any tenderer shall be rejected if on detailed scrutiny, documents submitted along with the tender are found to be unsatisfactory. The decision of EPI in this regard shall be final and binding on the tenderer.

n) The tenderers may note that they are liable to be disqualified and not considered for the opening of Price Bid if:-

a) Representation in the forms, statements and attachments submitted in the pre-qualification document are proved to be incorrect, false and misleading.
b) They have record of poor performance during the past 10 (ten) years such as abandoning the work, rescinding of contract for which the reasons are attributable to the non-performance of the contractor, inordinate delay in completion, consistent history of litigation / arbitration awarded against the contractor or any of its constituents or financial failures due to bankruptcy etc. in their ongoing / past projects.
c) They have submitted incompletely filled in formats without attaching certified supporting documents and credentials to establish their eligibility to participate in the Tender.
d) If the tenderers attempt to influence any member of the selection committee.

EPI reserves its right to take appropriate action including disqualification of tenderer(s) as may be deemed fit and proper by EPI at any time without giving any notice to the contractor in this regard. The decision of EPI in the matter of disqualification shall be final and binding on the Tenderers. The Bidder Should submit an Affidavit in Form-A in this regard on Non-Judicial Stamp Paper of Rupees One Hundred Only.

The credentials of the Bidders shall be verified and inspection of the works, if required, to be carried out by EPI. If not found satisfactory, their bid will be considered non-responsive.

2.0 Tender documents comprising of the following are available on the website of EPI: www.engineeringprojects.com, CPP-Portal: www.eprocure.gov.in and as well as on MSTC portal https://www.mstcecommerce.com/eprochome/EPIL.
Interested bidders have to necessarily register themselves on the portal http://www.mstcecommerce.com/eprochome/EPIL through M/s MSTC Ltd., Kolkata to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get themselves registered at the aforesaid portal for which they are required to contact M/s MSTC Ltd., Kolkata at following address to complete the registration formalities:

M/s MSTC Limited,
30 / 31A, 1st Floor, Jeevan Vikas Bhawan,
Asaf Ali Rd, New Delhi,
Delhi-110006
Contact No.: 033-22901004, 011-23212357, 011-23215163, 011-23217850

Availability: 10 AM to 5:30 PM on all working days.

Email-ID: mstcnro@mstcindia.co.in

They may obtain further information regarding this tender from DGM (Contracts) at the address given at Clause No. 14.0 below from 10:00 hours to 17:00 hours on all working days till the last date of online submission of Bidding Documents.

For proper uploading of the bids on the portal namely:

http://www.mstcecommerce.com/eprochome/EPIL (hereinafter referred to as the ‘portal’), it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed at the portal as well as by contacting M/s MSTC Ltd., directly, as and when required, for which contact details are mentioned above. The EPI in no case shall be responsible for any issues related to timely or properly uploading/submission of the bid in accordance with the relevant provisions of Section Instruction to Bidders of the Bidding Documents.

4.0 Bidders can download the bid document from the portal without paying document fees in advance; however, interested bidders have to pay tender fees for participating in the tendering and submitting the bid. For this purpose the interested bidders shall be required to pay Rs 23,600/- (Rupees Twenty Three Thousand Six Hundred only) (GST @ 18% included), the GSTIN of EPI for Assam is 18AAACE0061C1ZC as non-refundable document fees in the form of Demand Draft in favour of “Engineering Projects (India) Ltd.” payable at Guwahati. The fees to be paid to MSTC are separate.
6.0 E-Bids must be submitted/uploaded along with scanned copies of relevant documents as mentioned at “Addendum to Instructions to Tenderers” on the MSTC portal on or before last date & time of online bid submission. Late bids will not be accepted.

The bid must be accompanied by Earnest Money Deposit (EMD) of Rs. 21,73,500.00 (Rupees Twenty One Lakhs Seventy Three Thousand and Five Hundred Only). This can be either in the form of Crossed Demand Draft or Pay Order (in CTS form) of any Nationalized Bank/Scheduled Bank for the full amount of EMD favouring “Engineering Projects (India) Ltd.”, payable at Guwahati or in the form of Bank guarantee of any Nationalized Bank/Scheduled Banks, in accordance with the prescribed Performa of EPI, favouring “Engineering Projects (India) Ltd”. The EMD shall be valid for minimum period of 150 days (one hundred fifty days) from the last day of submission of tender. Tenders submitted without EMD or inadequate amount of EMD shall be rejected. The bid shall be valid for 90 days from date of opening of Price Bid.

Tender fee, EMD (in original), Power of Attorney, NSIC/MSME (Registered under single point registration scheme of NSIC, Govt. of India, Ministry of MSME, New Delhi vide Gazette Notification dated 26.03.2012 along with the form of Memorandum-2 with the concerned DIC) certificate as per Clause No.1 (i) if bidder is claiming EMD/Tender fee exemption must be submitted in physical form at the address given at Clause No. 14.0 below as stipulated under Time Schedule of Tender Activities. If the above documents are not received in time then their offer shall not be considered and EPI shall not be responsible for any postal delay in respect of submission of hard copy part of the bids.

7.0 The Terms & Conditions contained in the NIT and tender document shall be applicable.

8.0 The tenderers should note that the credentials such as value and volume of works completed, as submitted by the tenderers along with their offers shall be forwarded by EPI to Client for his opinion. The offer of tenderers against whom client does not give satisfactory remarks shall be rejected by EPI.

9.0 The corrigendum or addendum, extension, cancellation of this NIT, if any, shall be hosted on the EPI’s website/CPP portal as well as on MSTC portal https://www.mstcecommerce.com/eprochome/EPIL the bidders are required to check these websites regularly for this purpose, to take into account before uploading/submission of tender. All Corrigendum and addendum are to be uploaded duly signed & stamped with tender documents as bid Annexure.

10.0 The tenderers should note that the credential such as value and volume of works completed as submitted by the tenderers along with their offers may be forwarded by EPI to the owner, DGAR for his opinion. The offer of the tenderers against whom the Owner does not give satisfactory remarks shall be rejected by EPI.

11.0 The price bid of those bidders whose bid has been technically accepted on the basis of documents submitted shall be opened with prior intimation to them. However, it is made clear that the offer of the L-1 bidder shall be accepted subject to the confirmation of the authenticity of the PQ documents/BG/Solvency from the concerned department/Bank.

Hence the intending bidders must furnish their e-mail id and contact phone number along with the techno-commercial part. In case the PQ documents such as work experience certificate, bank solvency certificate etc. submitted by a bidder is found to be...
fake the EMD submitted by him shall be forfeited by EPI without making any reference to
him. Further such a tenderer shall be at a risk of losing his right to participate in any tender
called by EPI for a minimum period of one year.

12.0 EPI reserves the right to accept any tender or reject any or all tenders or split the work of
tender or annul this tendering process without assigning any reason and liability
whatsoever and to re-invite tender at its sole discretion.

13.0 In case of tie-tender, where two firms are bidding lowest, EPI reserves the right to split
the work among these bidders and / or EPI will reserve the right to award the tender to
any one of such bidder.

14.0 Tender documents shall be issued by and submitted to:

General Manager
Engineering Projects (India) Ltd.
North Eastern Regional Office
4th Floor, Hindustan Tower,
Jawahar Nagar, National Highway No.37,
Guwahati (Assam) -781022
(Tel No. 8486653300)

15.0 Contact details for only site/project related quarries:

Shri S P Roy
Mobile No: 8974002171

For more information on EPI, visit our website at: http://www.engineeringprojects.com
For more information on the e-tender, visit website of M/s MSTC LTD:
https://www.mstcecommerce.com/eprochome/EPIL

General Manager
(NERO)
Bid Capacity: The bidding capacity of the contractor should be equal to or more than the estimated cost of the work put to Tender. The bidding capacity shall be worked out by the following formula:

\[ \text{Bidding Capacity} = A \times N \times 2 - B \]

Where,

- \( A \) = Maximum value of construction works executed in any one year during the last five years taking into account the completed as well as works in progress
- \( N \) = Number of years prescribed for completion of work for which bids have been invited
- \( B \) = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited (Format enclosed)
I/We ....................................... aged .............. years son of ....................................... do hereby solemnly affirm and declare as follows for and on behalf of the Firm:

LIST OF EXISTING COMMITMENT AND ONGOING WORKS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Works</th>
<th>Client Name &amp; Address</th>
<th>Work Order Value (in Rs)</th>
<th>Work Executed till Date (Rs)</th>
<th>Balance Amount of work to be completed (Rs)</th>
<th>Balance period to complete the works (Total months)</th>
<th>Work to be completed in 10 months (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Balance Commitments during 10 months as per NIT Rs.

It is certified that the above particulars furnished are true and correct. If any information given is found to be concealed at a later date, the Contract will be terminated forthwith without prejudice to the rights thereon consequent on termination and the bidder will be blacklisted. I/We agree for debarring tendering for one year if any facts are suppressed.

SIGN AND STAMP OF BIDDER
ADDITIONAL CONDITIONS OF CONTRACT (ACC) of EPI

1.0 The following Additional Conditions of Contract shall be read in conjunction with General Conditions of Contract (GCC) of EPI and other conditions of the tender documents. If there are any provisions in these Additional Conditions of Contract, which are at variance with the provisions of GCC and other conditions of the tender documents, the provisions in these Additional Conditions of Contract shall take precedence. Following shall be the order of Precedence of Documents:-
   1.1 Notice Inviting Tender, Instruction to tenderers including Addendum/Corrigendum if any
   1.2 Additional Conditions of Contract (ACC) of EPI
   1.3 General Conditions of Contract(GCC) of EPI
   1.4 Clients Contract Documents:- Client’s Conditions, Scope, Specifications, Drawings
   1.5 Price Bid/Bill of Quantity

2.0 Subsequent on becoming Lowest Eligible bidder in open tender invited by IRCON INTERNATIONAL LIMITED, Engineering Projects (India) Limited (EPI) is expecting award of the work of “Construction of Roads consisting of Earthwork in filling in embankment, GSB, W BM, Bituminous work and other ancillary works in Transshipment yard including approach road of Passenger and Cargo side, in between stretch from Km 2+400 (Agartala) to km 5+100 (India- Bangladesh Border fencing) in connection with Agartala- Akhaura New Rail Link project” from IRCON INTERNATIONAL LIMITED who is the employer for the project and Northeast Frontier Railway is the Owner of the project.

3.0 The work is related to the project work of Agartala-Akhaura New Rail Link project in between stretch from Km 2+400 (Agartala) to km 5+100 (India- Bangladesh Border fencing).

4.0 The word “Contractor” appearing anywhere in the GCC and the other tender document shall mean the ‘sub-contractor’ i.e. the successful tenderer on whom the work under the present tender is awarded by EPI.

   GCC will refer to EPI-GCC and Client’s GCC will refer to Railway GCC, September’2019. Wherever Proforma in EPI GCC or ACC is mentioned, will mean EPI’s Proforma.

   Notwithstanding anything contained in EPI ACC or GCC, the liability which may arise out of client’s invoking any clause contained in Client’s Conditions, the same shall be passed onto the Sub-Contractor and EPI’s decision in this regard shall be final and binding on Sub-Contractor.

5.0 Clause no 3.0 of GCC shall stand amended as below:

   The items of work given in the tender documents are for general guidance of the contractors and the works shall be carried out by the contractor on percentage rate basis in conformity with the detailed drawing, scope of work, technical specifications, additional conditions of contract (including any addition/modification/ alteration/deletion made from time to time therein found essential for completion of works). The contractor shall be deemed to have satisfied himself before tendering as to the sufficiency and correctness of his tender for the works and of the rates and prices quoted in the brief specifications, drawings, scope of work and payment (billing) schedule, which rates and prices shall, except as otherwise provided, cover all obligations under the contract and all matters and things found necessary for proper completion and maintenance of the works. It shall be responsibility of the contractor to incorporate the changes that may be in the scope of work envisaged at the time of tendering and as actually required to be executed. The contractor has quoted his rates after clearly studying the scope of work given in Tender Documents availed by him by downloading from the website at the tendering stage itself and getting fully satisfied with the various items and technical intricacies involved in the work under his scope of work as envisaged in the tender.
EPI shall not entertain any claim of the contractor on account of error or omission by him in this respect except what is admitted by the client.

6.0 MOBILIZATION ADVANCE AND RECOVERY:

Clause 8 and its sub clauses of GCC Shall stand replaced with Client’s Special Conditions of Contract Clause no:7 and its sub clauses with following modifications wherever applicable:-

Interest Bearing Mobilization advance up to maximum of amount as mentioned in the “Memorandum” to the “Form of Tender” shall be paid to the Contractor on:-

Submission of Requisite Performance Guarantee in EPI's Format as mentioned in the Tender Document, Signing of Agreement with EPI and submission of non-revocable and unconditional Bank Guarantee for an amount equal to 110% of the Mobilization Advance from a Nationalized Bank / Scheduled Bank as per EPI’s proforma enclosed.

The Mobilization advance shall be paid to the sub-contractor only if the corresponding advance is received by EPI from Client(IRCON).

7.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE & RELEASE THEREOF:

Clause no 9.0 of GCC shall stand amended as below:

In case, the time for completion of work gets extended, the contractor shall get the validity of P.G. extended to the extent of the extended time to cover the period of 90 Days after the Defect Liability period. The value of Performance Guarantee to be submitted by the contractor will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (Five Percent) for the excess value over the original contract value should be deposited by the contractor. On the other hand, if the value of the contract is reduced by more than 25 % of the original contract value, original Performance Bank Guarantee (PBG) shall be returned to the contractor as per his request after submission of PBG amounting to 5 % of the reduced contract value.

The successful bidder shall have to submit the Performance Guarantee within 21 (Twenty One) days from the date of issue of Letter of Intent (LOI), but before signing of the contract agreement. Extension of time for submission of Performance Guarantee beyond 21(Twenty One) days and up to 60 days from the date of issue of LOI may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% (on the Performance Guarantee Value to be computed on per day of delay basis) per annum shall be charged for the delay beyond 21 (Twenty One)days, i.e. from 22nd day after the date of issue of LOI. Further, if the 60 day happens to be a declared holiday in the concerned office, 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 a contract is terminated EPI shall be entitled to forfeit Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as an MSME/Startup recognized be department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP or MSME as the case may be shall be informed to this effect.

No payment under the contract shall be made to Contractor before receipt of performance security.

Performance Guarantee will be released after the end of Defect Liability period subject to the issue of Completion Certificate by the Engineer in accordance with contract conditions and the Contractor has duly performed the contractual obligations and liabilities, to make good any failures, defects, imperfections, shrinkages, or faults that may be detected during the defect liability period specified in the Contract.
8.0 RETENTION MONEY & RELEASE THEREOF:

The clause no. 10.0 of GCC shall stand amended as below:-
Recovery of Retention Money shall be made as per Clause no: 20.3(i), 20.3(II) of Client’s Special Conditions of Contract.

The Retention Money shall be refunded to the Contractor after expiry of defects liability period (referred to in Clause No.74) or on payment of the amount of the final bill whichever is later and subject to issuance of Defect Liability Certificate by Client/IRCON at the end of Defect Liability period.

The Retention Money deduction in cash can be refunded to Contractor in line with Clause no: 20.5.ii(a) or (b) of Client’s Special Conditions of Contract as applicable and allowed by the client(IRCON) against submission of Bank Guarantee of equivalent amount from a Nationalized bank /Scheduled Bank in the prescribed proforma of Performance Guarantee of EPI.

9.0 The following shall stand added to clause no. 11.0 of GCC:

Following materials of ‘approved make’ shall be provided by EPI on ‘cost recoverable’ basis to the petty contractor:
- reinforcement steel
- cement
- structural steel
- Bitumen

However, the petty contractor shall at all times remain bound to give his requirement of above materials to EPI well in advance (no less than 45 days before the date he intends to bring them into use with a tentative schedule of consumption of the materials) to enable to arrange these materials. The petty contractor may associate him or a person duly authorized by him on his behalf with EPI in procurement of the materials. The petty contractor shall also remain bound to construct and maintain proper storage arrangement for safe and proper custody of these materials including their unloading and local handling, keeping watch and ward and proper inventory of such materials. The petty contractor shall also carry out one or more coats of cement wash on the reinforcement steel as decided by the EIC at his cost.

The petty contractor shall make the yard for storage of reinforcement steel and cement at site at his cost and remain bound to follow the CPWD specifications for storage of reinforcement steel and cement at site.

He shall at all times allow free access to EPI personnel for physical verification of the materials. The petty contractor shall have to furnish an indemnity bond on hundred rupees non-judicial stamp paper, as per approved proforma of EPI and duly notarized, for the total value of the materials in his custody failing which no payment shall be released to him. In case the petty contractor is a proprietary concern, such indemnity bond will be signed by the petty contractor himself. In case of a partnership firm the person holding the power of attorney issued by any of the partners authorized to do so and in case of a company the person holding the power of attorney issued by the competent authority of the said company shall furnish the indemnity bond duly signed by him. In all the cases the power of attorney shall be duly notarized.

The basis of cost to be recovered from the payments due to the petty contractor on account of providing the materials stated above to him shall be the landed cost of materials at the work site. The amount of recovery shall be proportionate to the consumption of materials including all wastages as per CPWD/MORTH/TPWD norms. In case of quantity consumed beyond the theoretical consumption the rate of recovery shall be at double the landed cost towards providing the materials by EPI. The petty contractor shall have no claim,
whatsoever, in case there is delay in supply of the materials by EPI and it shall be the responsibility of the petty contractor to give his requirement of the materials to EPI well in advance. For this the petty contractor shall make close co-ordination with EPI officials till material is received at site. Non-issue of material by EPI shall not be the reason for extension of time.

Consumption of materials shall be calculated as per the provision of agreement/CPWD/MORTH/TPWD norms/relevant specifications and the petty contractor shall be responsible for any additional or less consumption of materials. In case material is consumed less than that calculated as per the agreement/CPWD/MORTH/TPWD norms/relevant specification the petty contractor shall identify the portion of work/whole work where material consumed is less than that specified above and dismantle such work and dismantle such work and redo the same at his own cost. EPI shall neither entertain any claim of the petty contractor nor bear any expenses on account of lapse of the petty contractor.

In case the petty contractor fails to identify the work where material has been consumed less than that specified in the agreement/CPWD/MORTH/TPWD /relevant specification EPI shall have the liberty to take decision to identify the portion of work/whole work and it shall be the binding on the petty contractor to dismantle and redo the work as identified by EPI. Should the petty contractor fail to take action in this regard EPI shall be at liberty to take the actions to dismantle such work and redo the same at the risk and cost of the petty contractor.

In case it is felt by EPI that some work related to the project shall be got executed by other agencies, the petty contractor shall at all times remain bound to co-ordinate with the agencies, deployed by EPI for the above works, including providing free access and making required provisions for them in execution of works pertaining to their portion of works. He shall also remain bound to ensure uninterrupted progress of work by these agencies in a peaceful and smooth manner. He shall also remain bound to make the required changes/additions/alterations in the works done by him to accommodate the items under the scope of work of such other agencies deployed by EPI or the client. The petty contractor is deemed to have made the estimated allowances in this respect while quoting his rates at the tendering stage.

Even though EPI has taken all care to attach all the drawings as issued by the client it shall be the responsibility of the petty contractor to interpret the drawings for completion of the works under this tender. EPI shall not give any design or bill of quantities except what are being provided with the tender documents.

The list of minimum tools, plant and machinery to be provided by the petty contractor within the period mentioned against the respective item is given at Annexure-A.

10.0 The following shall also be read with clause number 13 & 14 of the GCC of EPI:

a) The bidder/contractor must be registered with GST and should have valid GSTIN number

b) The bidder/contractor must submit as an compliance under GST Act, the invoices in GST complaint format failing which the GST amount shall be recovered/adjusted without any prior notice from the next invoices or available dues with EPI.

c) The bidder/contractor are required to update/upload the GST/Taxes data periodically so as to avail ITC credit by EPI failing which it shall be recovered/adjusted by EPI without any prior intimation

d) The rates quoted by the contractor shall be “inclusive of all taxes and duties, cess including GST” which shall be reimbursed to him subject to raising of tax invoice and filing of return and payment of tax as per GST law, failing which EPI shall not be able to honour his claims for any
payment. The contractor has quoted his rates knowing fully well that submission of return and display of the same on GSTN portal is mandatory.

e) Incase of any reduction in rate of GST or other taxes in future or the project getting exemption status prior to the last date of Bid submission or afterwards, the subcontractor shall pass on the benefit to EPIL immediately, failing which EPIL shall have the right to recover the differential amount from the amounts due to the subcontractor. Further in case of any increase in rate of GST or other taxes in future or the project losing exemption status prior to last date of bid submission or afterwards, the said increase of taxes shall be paid /reimbursed to the subcontractors, subject to the condition that the client reimburses the said increased taxes to EPIL.

f) All the above reimbursements shall be admitted to the extent these are admitted by the Owner.

g) If the bidder quotes abnormally low rate/s compared to estimated cost put to tender, in such cases the rate/s of the lowest bidder if found in rate/s of the item/s are abnormally low, then additional performance bank guarantee(s) equivalent to the difference of quoted rate/s and justified rate/s of the item/s shall be required to be furnished by the bidder before issue of LOI of the work. Additional Bank Guarantee(s) obtained in these context shall be returned to the bidder after the satisfactory execution (duly certified by Site In-charge) of work at site.

h) The amount paid by EPI or recoveries effected from EPI’s Bills on account of taxes and duties including labour cess and royalties by Client proportionate to the petty contractor’s portion of works shall be recovered from the amount due to him by way of reduction in payable amount.

11.0. Clause nos. 15 & 16 of GCC shall stand amended as under:

Price Adjustment in the rates of the petty contractor shall be guided as enumerated in PRICE ADJUSTMENT Clause 14.0 and its sub-clauses in the Client’s Special Conditions of Contract and referred Railway GGC and Client’s Corrigendum-3 attached in the NIT Documents.

Price Variation/Escalation for the Petty Contractor shall be considered by EPI provided:–
- Enlargement of completion time of the contract of EPI with its client is granted by client without any recovery or imposition of liquidated damages from the contract price of EPI for non-completion of works within the originally stipulated completion time and
- No reduction in contract price of the petty contractor has been effected by EPI on account of delay in completion of works beyond the originally stipulated completion period as mentioned in the “Memorandum”

Subject to above the amount on account of Price Adjustment/escalation/price variation in the rates/prices of the petty contractor shall be restricted to the amount received/deducted by/from EPI from the client proportionate to the petty contractor’s portion of work.

The rates/prices of the petty contractor shall remain otherwise firm till completion of work including maintenance and defect liability period.

12.0. The clause nos. 17.0, 18.0 & 19.0 of GCC of EPI shall stand amended as under:

Insurance charges for insurances to be taken by EPI for the project like Contractor’s All Risk Policy, Erection All Risk Policy including transit and third party liability and any other Policy mentioned in Client’s Conditions shall be borne by the petty contractor in proportion to his contract price. However, the petty contractor shall take insurance cover at its own cost.
towards Workman Compensation Act for its own workers and employees engaged by it for the works under the present tender/sub-contract within 10 days of issuance of Letter of Intent by EPI and shall furnish documentary proof of the same to EPI. In case the petty contractor fails to do so, EPI shall be at liberty to withhold all payments to the petty contractor till the submission of such documentary evidence or take the required insurance policy under the Workman Compensation Act and recover the cost of the insurance premium(s) paid in this respect by EPI to the insurance company from the petty contractor’s bill(s). Notwithstanding payment of such insurance premiums and the resulting recovery thereto the petty contractor shall remain bound to furnish details of his liabilities/assets/resources deployed bonafided for the work in prescribed proforma and in prescribed periods of the Insurance company and assist EPI in follow up with the insurance company in case of any claim related to the petty contractor’s scope of work. EPI is not liable to pay any claim of the petty contractor if it is not paid by insurance company due to any reasons whatsoever. The insurance company providing such insurance cover shall be approved by IRDA.

13.0. The petty contractor shall remain liable to pay to EPI all cost of materials, T&P etc. belonging to EPI and issued to him in case they are lost or damaged by petty contractor or any of his employees.

14.0. The following shall stand added to the clause no 20 of GCC:

The con-contractor shall keep EPI indemnified against all claims, damages, compensation and expenses payable, if any, in consequence of any accident, or injury sustained by any workman or any other person employed by the petty contractor.

15.0. The following shall stand added to Clause no. 21.0 and 23.0 including their sub-clauses of the GCC:

Notwithstanding the fact that EPI may have obtained or may be in the process of obtaining a valid license under the Contract labour (Regulation and Abolition) Act 1970 and Contract Labour Act (R & A) Central Rules 1971 and amended from time to time and registration under Building and other Construction Works (Regulation of Employment and Conditions of Service) Act 1996 and Building and other Construction Workers’ Welfare Cess Act 1996 from the relevant office of the REC and continues to have them until the completion of work including the maintenance and defect liability period, the petty contractor shall at all times remain bound to comply with and observe the provisions of the all laws and regulations pertaining to the deployment of contract labour. He shall also extend all assistance to EPI during inspection of the officials of such law enforcing agencies including the rectification of defects/observations (if any) made/pointed out during the visit(s) of the officials of the said ALC/RLC under jurisdiction of whom the work site shall be covered.

16.0. The following shall stand added to the clause no 27.0 including its sub-clauses of GCC of EPI

The petty contractor, within 10 days of issuance of LOI (Letter of Intent) to him shall furnish Resource Deployment program as required in clauses 25.3 to 25.6 Client’s Special Conditions of Contract. The Petty-Contractor’s technical manpower shall be guided by clause no 32.0 of Client’s Special Conditions of Contract.

17.0. The clause no. 28.3 of the GCC stands modified as under:

The petty contractor shall bear the cost of construction and maintenance of a Site office and preferably in a porta cabin or Similar type with provision of Electricity, Computer, Printer,
Internet Connection, Chairs, Tables, Almirahs, File Cabinets, Sanitation etc. for comfortable sitting and working of Client’s/EPI’s officials as well as safe record keeping. The Petty Contractor shall also provide a Vehicle of decent condition Scorpio/Bolero with Driver, Fuel all inclusive (monthly running to be restricted to 2000 KM) dedicated for EPI. Cost of all the facilities above for the period from 10 Days of issue of LOI to till end of defect liability shall be borne by the Petty Contractor, cost of which shall be deemed to be inclusive in the awarded cost to the petty-contractor. Further, the petty contractor shall to bear the cost of the Project sign board (Type & Format to be decided by EPI).

Incase contractor fails to provide the above facilities, the same will be arranged by EPI and the actual cost of the facilities and their maintenance alongwith 5% administrative charges will be recovered by EPI from the dues of the petty contractor.

18.0. The following shall stand added to the clause no. 31.0 of the GCC :

The petty contractor shall take a suitable policy in compliance with the Workmen’s Compensation Act 1923 within 10 days of issuance of LOI and keep it valid till completion of works or till the time he is required to keep his workmen at the worksite whichever is later and produce a copy of the receipts of the premium paid by him in this regards as and when asked by EPI.

19.0. Clause. 35.0 of GCC of EPI shall be read in conjunction with Clause 43(b) of Client’s Special Conditions of Contract and secured advance shall be admissible to the petty-contractor for the materials brought by Petty contractor only if the same is admitted and paid by client. It will be obligatory on part of the petty contractor that, if the material for which secured advance is admissible and sought by the petty contractor and purchase invoices for the same are required to be in the name of EPI to process Secured advance bill by client, the same shall be arranged by the petty-contractor. Secured advance on materials not admitted by client or on materials issued by EPI shall not be admissible to the petty contractor.

20.0. The following shall be added to the clause no. 36.0 of the GCC:

The measurement of the works as certified/recorded by the client for the portion of works executed by the petty contractor shall be final and binding on the petty contractor. The contractor shall remain liable to provide all assistance at the time of recording the measurements by the client.

21.0 Payments : The clause no. 37.0 of the GCC stands modified as under :

Payments as and when received by EPI from the Client for the petty contractor’s portion of work shall be released to him within Ten working days of its receipt by EPI including mobilization advance/Secured advance etc. if any, and after making the recoveries towards facilities mentioned at clause 17.0 hereinabove and other recoveries. The final bill payment to the petty contractor shall be released only after receipt of corresponding payment from client and when the petty contractor submits GST Clearance, EPF clearance certificate, all other clearances, approvals, certificates etc. as per agreement of EPI with the client for the “Works” and as per statutory requirement. The petty contractor shall have no claim on EPI in case the payments are delayed by the client due to any reason whatsoever.
22.0. The clause no. 43.2 of GCC of EPI shall be read in conjunction with clause 25.1 & 25.2 and its sub-clauses of Clients Special Conditions of Contract.

23.0. The clause no. 45.0 of the GCC stands modified as under:

The petty contractor shall, at his own expense, provide all materials except the items mentioned at Sl. No. 9.0 hereinabove as required for completion of the works under the sub-contractor. The petty contractor shall at his own expense and without delay supply to EPI/client samples of all materials including the materials being provided by EPI to him to be used on the works and shall get the same approved by EPI. All such materials shall be in conformity with the specifications laid down or referred to in the sub-contract. In case the petty contractor fails to submit the samples in time, EPI shall be at liberty to finalize the type and source of the materials and that shall be binding on the petty contractor at no extra cost to EPI. The petty contractor shall at all time remain bound to provide the samples in quantity and manner as instructed by EPI to be analyzed or tested in an outside laboratory or in the field laboratory at site. The cost of testing charges is included in the prices of the petty contractor. EPI shall, however, be at liberty to get the materials tested independent of the petty contractor and the petty contractor shall remain bound to render all assistance to EPI in conductance of such tests including making available the materials in sufficient quantity and in time and payment of the testing charges. EPI/client shall at all times have full access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery. The petty contractor shall afford every facility and assistance and cost in obtaining the right and visit to such access.

EPI shall have full powers to require the removal from the premises of all materials which in their opinion are not in accordance with the specifications and in case of default, EPI shall be at liberty to employ at the expense of the petty contractor, other persons to remove such materials without being answerable or accountable for any loss or damage that may happen or arise to such materials. EPI shall also have full powers to require other proper materials to be substituted thereof any in case of default by the petty contractor, any cause the same to be supplied and all costs which may require such removal and substitution shall be to the petty contractor's account.

24.0. The following shall be added to clause no. 52.6 of GCC:
The field testing laboratory to be established by the petty contractor at his cost shall be equipped with the minimum number of testing equipment as per Annexure-B.

25.0. The following provisions shall supersede that of clause no. 69 of GCC wherever applicable:

Claim on account of extra / substituted / variation of items etc. pertaining to the petty contractor’s portion of work shall be allowed to the extent what is admitted and paid by Client. Any claim by the petty contractor, if not paid by the Client, for whatsoever be the reason shall not be admitted by EPI. The amount, if at all admitted and paid by the Client for the petty contractor’s portion of work, shall be paid to him after making a provision of 10% (Ten percent) towards EPI’s overhead and administrative charges. EPI’s decision in this respect shall be final and binding on the petty contractor. The deviation limit for which the rates of items shall remain firm shall be the higher of EPI’s GCC Clause 69 of Clients Special Conditions Clause 40.0.

26.0. In case the project execution is delayed beyond the contractual scheduled completion period due to reason attributable to the petty contractor, the staff and site office expenses of EPI for
extended period shall be paid by him to EPI at the rate of Rs.20,000/- per month. This shall be in addition to the facilities provided by the petty contractor to EPI and the other recoveries, if applicable as per clause no 72 (including its sub-clauses) of GCC and Penalties etc. If any, levied by Client for the works pertaining to the petty contractor’s scope of work. The decision of EPI in this regard shall be final & binding on the petty contractor.

27.0. The petty contractor shall be responsible for obtaining all approvals from Client with regard to quality of materials & workmanship and measurements etc. for their portion of work. All such approvals shall be in the name and title of EPI. The petty contractor shall be responsible for reconciliation of issued materials with Client/EPI, if any, and the petty contractor shall make arrangements for safe up keeping / custody of the material and final reconciliation is also to be done by the petty contractor. In case there is any shortfall of any issued items during reconciliation, recovery at double the cost of materials prevailing at that time of recovery shall be made from the petty contractor’s due payment.

28.0. The petty contractor will not deal directly with Client and all the correspondence in matters regarding bills, claims, interpretation of the specifications, conditions and all matters related to the contract with Client, Client’s Consultants, all other agencies including Government and Statutory bodies etc. shall be done through EPI only. The petty contractor shall prepare and submit expeditiously all bills, claims, details, clarifications, documents, information, etc. as required by EPI/Client for proper execution and successful completion of the “Works”.

29.0. Issues related to interpretation and claims, if any, related to the petty contractor’s scope of work, arising out of contract between EPI and Client shall be referred with full justification by the petty contractor to EPI for settlement with Client including arbitration with Client, if inescapable, and outcome of such a settlement shall be binding on the petty contractor. EPI at its option may associate the petty contractor in the above process of settlement for his portion of work. The cost & expenses on arbitration with Client shall be shared by EPI and the petty contractor in proportion of his offer and EPI’s mark up towards its overheads & profits. In case the award/settlement with the Client is in favour of EPI, ninety percent of the award/settlement amount shall be shared between EPI and petty contractor in proportion of petty contractor’s contract price with EPI and EPI’s mark up towards its overheads & profits. The balance ten percent of the award/settlement amount shall be retained by EPI towards its administrative charges. In case the award/settlement is against EPI, the entire damages/counterclaims imposed, if any shall be borne by the petty contractor alone and the petty contractor shall have no claim whatsoever against EPI in such a settlement. Further, EPI shall have no liability towards any claim of the petty contractor, which is not paid by the Client.

30.0. In case of non-approval of petty contractor’s association for the Project by the Client and/or by the corporate office of EPI due to any reasons whatsoever at any stage of the “Works”, the petty contractor shall have no claim on EPI.

31.0. The work executed by the petty contractor shall be subject to audit and quality control checks from Quality Control Division & Technical Audit of EPI, Client, and Inspection Agency of the Client and Chief Technical Examiner of Central Vigilance Commission, Govt. of India. In the eventuality of any defect / sub-standard works as brought out in the report or noticed otherwise at any time during execution, maintenance period etc. the same shall be made good by the petty contractor without any cost to EPI. In case the petty contractor fails to rectify the defect/sub-standard work within the time period stipulated by EPI, EPI shall get it rectified at the risk and cost of the petty contractor and shall recover the amount from the dues of the petty contractor.
32.0. EPI has agreed to associate the petty contractor on the basis of details regarding his experience profile, financial standing, credentials, fulfillment of statutory obligations, etc. by him to EPI. In case, at a later stage if it is found that the petty contractor has submitted incorrect, false details and credentials resulting in apprehensions on the capabilities of the petty contractor with regard to quality & timely completion of works, financial capabilities etc. EPI can terminate this order solely at its option. In this eventuality the petty contractor shall be liable for the losses suffered by EPI and further the petty contractor shall have no claim on EPI, whatsoever.

33.0. If EPI is granted some concession or exempted from certain obligations by Client, by virtue of EPI being a Public Sector Company, the same concessions / exemptions shall not be applicable to the petty contractor. The decision of EPI in this regard including interpretation of terms & conditions shall be final & binding on the petty contractor.

34.0. ARBITRATION: CLAUSE NO. 76.1 OF EPI GCC SHALL STAND AMENDED AS BELOW:

Before resorting to arbitration as per the clause given below, the parties if they so agree may explore the possibility of conciliation as per the provisions of Part III of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015. When such conciliation has failed, the parties shall adopt the following procedure for arbitration:

i) Except where otherwise provided for in the contract, any disputes and differences relating to the meaning of the Specifications, Design, Drawing and Instructions herein before mentioned and as to the quality of workmanship or materials used in the work or as to any other questions, claim, right, matter or things whatsoever in any way arising out of or relating to the Contract, Designs, Drawings, Specifications, Estimates, Instructions, or these conditions or otherwise concerning the works of the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the Sole Arbitrator appointed by the Chairman & Managing Director (CMD) of Engineering Projects (India) Limited (EPI) or any other person discharging the functions of CMD of EPI. The person approached for appointment as Arbitrator shall disclose in writing circumstances, in terms of Sub-Section (1) of Section (12) of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015 as follows:

a) Such as the existence either direct or indirect, of any past or present relationship with or interest in any of the parties or in relation to the subject- matter in dispute, whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to his independence or impartiality; and

b) Which are likely to affect his ability to devote sufficient time to the arbitration and in particular his ability to complete the entire arbitration within a period of twelve months.

The Arbitrator shall be appointed within 30 days of the receipt of letter of invitation of arbitration duly satisfying the requirements of this clause.

ii) If the arbitrator so appointed resigns or is unable or unwilling to act due to any reason whatsoever, or dies, the Chairman & Managing Director aforesaid or in his absence the person discharging the duties of the CMD of EPI may appoint a new arbitrator in accordance with these terms and conditions of the contract, to act in his place and the new arbitrator so appointed may proceed from the stage at which it was left by his predecessor.
iii) It is a term of the contract that the party invoking the arbitration shall specify the disputes, differences or questions to be referred to the Arbitrator under this clause together with the amounts claimed in respect of each dispute.

iv) The Arbitrator may proceed with the arbitration ex-parte, if either party, in spite of a notice from the arbitrator, fails to take part in the proceedings.

v) The work under the contract shall continue as directed by the Engineer-In-Charge, during the arbitration proceedings.

vi) Unless otherwise agreed, the venue of arbitration proceedings shall be at the venue given in the 'Memorandum' to the 'Form of Tender'.

vii) The award of the Arbitrator shall be final, conclusive and binding on both the parties.

viii) Subject to the aforesaid, the provisions of the Arbitration and Conciliation Act, 1996 as amended by Arbitration and Conciliation (Amendment) Act, 2015 or any statutory modifications or re-enactment thereof and the Rules made thereunder and for the time being in force shall apply to the arbitration proceedings and Arbitrator shall publish his Award accordingly.

35.0. CLAUSE NO 76.2 OF EPI GCC SHALL STAND AMENDED AS UNDER

“In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSE) / Port Trust inter se and also between CPSE and Government Departments / Organisations (excluding disputes concerning Railways, Income Tax, Customs and Excise Departments), such dispute or differences shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22.05.2018”

36.0. Client’s Contractor Performance Feedback and Evaluation System:

The clause of Client’s Contractor Performance Feedback and Evaluation System is produced below:

“The employer will have a ‘Contractor Performance Feedback and Evaluation System’ for periodic evaluation of Contractors performance during execution of Contract. In case contractor’s over-all performance is found unsatisfactory (<85%) based on the parameters as listed in Annexure ‘II’, the Contractor is liable to be declared a ‘Non – Performer’, and will become ineligible for participation in future tenders of this Organization for a period of 2 (two) years from the date of such decision. This decision is to be conveyed to the Contractor in writing. The non-performer status may be revoked during currency of the contract on improvement of performance parameters during the next annual review. This is without prejudice to any other recourse available to the Employer under the Conditions of Contract.”

The successful bidder who may be appointed by EPI as Petty Contractor must take note of the above clause and in case of any adversity is faced by EPI due to shortfall in performance by the Petty Contractor, EPI shall take suitable action on the petty contractor.
### ANNEXURE – A

**LIST OF MINIMUM TOOLS, PLANT AND MACHINERY**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Description</th>
<th>Minimum numbers required</th>
<th>To be Deployed within Days of LOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Station with Accessories</td>
<td>One Set</td>
<td>10 days</td>
</tr>
<tr>
<td>2</td>
<td>75 Cum/Hr (100-120TPH) Batch type HMP</td>
<td>One Set</td>
<td>120 days</td>
</tr>
<tr>
<td>3</td>
<td>Paver Finisher with Hydrostatic Sensor</td>
<td>One</td>
<td>120 days</td>
</tr>
<tr>
<td>4</td>
<td>Smooth Wheel Roller (8-10T)</td>
<td>One</td>
<td>10 days</td>
</tr>
<tr>
<td>5</td>
<td>Vibratory Roller (10-12 T)</td>
<td>One</td>
<td>15 days</td>
</tr>
<tr>
<td>6</td>
<td>Smooth Wheeled Tandem Roller (8T)</td>
<td>One</td>
<td>120 days</td>
</tr>
<tr>
<td>7</td>
<td>Motor Grader 90-110 HP</td>
<td>One</td>
<td>15 days</td>
</tr>
<tr>
<td>8</td>
<td>Water Tanker 6K</td>
<td>One</td>
<td>10 days</td>
</tr>
<tr>
<td>9</td>
<td>Tractor with Rotavator</td>
<td>One</td>
<td>15 Days</td>
</tr>
<tr>
<td>10</td>
<td>Hydraulic/Mechanical Broom with Tractor</td>
<td>One</td>
<td>30 days</td>
</tr>
<tr>
<td>11</td>
<td>Air Compressor 250 cfm</td>
<td>One</td>
<td>30 days</td>
</tr>
<tr>
<td>12</td>
<td>Hydraulic Excavators</td>
<td>Three</td>
<td>10 days</td>
</tr>
<tr>
<td>13</td>
<td>Bitumen Pressure Distributor</td>
<td>One</td>
<td>120 days</td>
</tr>
<tr>
<td>14</td>
<td>Front End Loader</td>
<td>Two</td>
<td>30 days</td>
</tr>
<tr>
<td>15</td>
<td>Tipper(10T) with hydraulic unloading</td>
<td>Four</td>
<td>10 days</td>
</tr>
<tr>
<td>16</td>
<td>DG Set 250 KVA</td>
<td>One</td>
<td>45 days</td>
</tr>
<tr>
<td>17</td>
<td>DG Set 125 KVA</td>
<td>One</td>
<td>45 days</td>
</tr>
<tr>
<td>18</td>
<td>Dozer D50/80</td>
<td>One</td>
<td>15 days</td>
</tr>
<tr>
<td>19</td>
<td>Batch type Concrete mixer 10 Cum/Hr</td>
<td>One</td>
<td>30 days</td>
</tr>
<tr>
<td>20</td>
<td>Mechanical Mixer with Hopper</td>
<td>Two</td>
<td>30 days</td>
</tr>
<tr>
<td>21</td>
<td>Shuttering Plates</td>
<td>200 SqM</td>
<td>30 days</td>
</tr>
<tr>
<td>22</td>
<td>Steel Cutting &amp; Bending Machine</td>
<td>One</td>
<td>30 days</td>
</tr>
<tr>
<td>23</td>
<td>Vibrator with 2 Nos 40 MM and 2 No 60 MM Needles</td>
<td>One Set</td>
<td>30 days</td>
</tr>
</tbody>
</table>
Note:

a) The period mentioned above shall be reckoned from the date of issue of LOI and as per approved schedule as per NIT.

b) The quantities of equipment indicated are tentative and can be increased as per the requirement of work OR as per the direction of Engineer-in-Charge. The above equipment list is indicative and not complete. The contractor has to deploy all the required equipment to complete all the works within stipulated specifications & time period as contract documents.

c) The petty contractor will not be allowed to take out equipment from the site without the written permission of Engineer-in-Charge.

ANNEXURE – B

LIST OF MINIMUM TESTING EQUIPMENT

Laboratory Test Equipment as per Recommended in MORTH Section-100, Table 100-2

Note:

a) The period mentioned above shall be reckoned from the date of issue of LOI and as per approved schedule as per NIT.

b) The quantities of equipments indicated are tentative and can be increased as per the requirement of work OR as per the direction of Engineer-in-Charge. The above equipment list is indicative and not complete. The contractor has to deploy all the required equipment to complete all the works within stipulated specifications & time period as contract documents.

c) The petty contractor will not be allowed to take out equipments from the site without the written permission of Engineer-in-Charge.
### ASSESSMENT OF PERFORMANCE OF WORKING SUBCONTRACTOR

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Weightage</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Assigned</td>
<td>Obtained</td>
</tr>
<tr>
<td>1</td>
<td><strong>Resource Management/Financial Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Timely mobilization of manpower, as per the requirement of work and/or as suggested by Engineer in writing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Timely mobilization of machinery, as per the requirement of work and/or as suggested by Engineer in writing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Physical Progress/Project Execution Capability</strong></td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Target Vs Achieved review of the progress and adherence to milestones of the work as per above submitted &amp; approved programme (may be judged as below to be modified depending on availability of front/site or as indicated in Contract)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>At 33% time:&gt;15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>At 50% time:&gt;30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>At 100% time:&gt;60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>At 175% time:&gt;98%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Quality Assurance Capability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Documentation of procedures, work instructions, check list and adherence to the requirements of ISO 9001:2008</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Rectification of defects/non-conformity to quality standards within 30days:(Nos. mentioned in writing/ Rectified within 30 days of writing)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Implementation of corrective and preventive measures to control non-conformities/rejections</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td><strong>Claims and Disputes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Raising unnecessary claims and litigation</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
IRCON INTERNATIONAL LTD.
(A Govt. of India Undertaking)
CIN-L45203DL1976G0008171 Web: www.ircon.org

Corrigendum – 3, Dt. 23/10/’19

Tender No.: IRCON/2056/AANRLP/Tender/ROAD Tender/154, Dt. 05/10/2019.

Name of Work: Construction of Roads consisting of Earthwork in filling in embankment, GSB, WBM, Bituminous work and other ancillary works in Transshipment Yard including approach road of Passenger and Cargo side, and development work in cargo and passenger area in between stretch from Km 2+400 (Agartala) to km 5+360 (India- Bangladesh Border fencing) in connection with Agartala - Akhaura New Rail Link Project.

Corrigendum is issued for the following as mentioned below:

<table>
<thead>
<tr>
<th>Clause No. and Section of Tender</th>
<th>Notified Description</th>
<th>Revised Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5 (i) of SCC, Price Adjustment</td>
<td>Price variation in Structural Steel: ( S_1 = S_{w1} \times (S_a - S_s) / S_a \times 100 )</td>
<td>Price variation in Structural Steel: ( S_1 = S_{w1} \times (S_a - S_s) / S_a )</td>
</tr>
<tr>
<td>14.5 (ii) of SCC, Price Adjustment</td>
<td>Price variation in Reinforcement Steel: ( S_2 = S_{w2} \times (S_a - S_s) / S_a \times 100 )</td>
<td>Price variation in Reinforcement Steel: ( S_2 = S_{w2} \times (S_a - S_s) / S_a )</td>
</tr>
<tr>
<td>Mode of Submission of documents</td>
<td>Annexure VII of Bid Document</td>
<td>Annexure VII of Corrigendum-3</td>
</tr>
</tbody>
</table>

All other Terms and Conditions shall remain unchanged. This corrigendum shall be part of the Tender document.

Encl.:— Revised Annexure VII

Additional General Manager/Agartala,
IRCON INTERNATIONAL LTD

[Signature]

Additional General Manager/Agartala,
IRCON INTERNATIONAL LTD

[Signature]

[Name]

[Title]

[Signature]

[Title]

[Name]

[Title]

[Name]
1.0 INTRODUCTION

The contract will be governed by the provisions of Indian Railways / West Central Railway Standard General Condition of Contract, Sept.2019 (hereinafter called the General Condition of contract / GCC) as modified and added to by the following Special Condition of Contract which shall to be read and constructed as General Condition as if they were incorporated there with. All the terms referred in Indian Railway Standard General Condition of contract, Sept.2019 would be applicable to contract of subject construction work.

Wherever there is conflict in any condition between GCC and special condition mentioned in tender document, the condition, mentioned in special condition will prevail. However, Engineer-in-charge decision in this condition shall be final and binding.

2.0 DEFINITIONS

In the Contract, as herein after defined, the following word expressions shall have the meanings hereby assigned to them, except where the context requires otherwise.

i) “RAILWAY/CLIENT/PRINCIPAL EMPLOYER” shall mean the President of the Republic of India or the Administrative Officers of the Northeast Frontier Railway/IRCON or of the successor Railway authorized or any other officer of IRCON authorized to deal with any matters which these presents are concerned on his behalf. In this tender “CLIENT”/” PRINCIPAL EMPLOYER” means the Northeast Frontier Railway represented through the Chief Administrative Officer/Construction.

ii) “Employer” means the IRCON INTERNATIONAL LIMITED, A Govt. of India Undertaking (IRCON in abbreviation) acting through its Chairman and Managing Director or any other authorized officer and shall include their legal successors in title and permitted assignees.

iii) “Engineer or Engineer in Charge” means the Project Head of IRCON INTERNATIONAL LTD (Employer) or General Manager of IRCON or any other officer authorized by the Employer or General Manager of IRCON to act on his behalf and for the purpose of operating the contract.

iv) "Engineer's Representative" means any official nominated from time to time by the Engineer to act on his behalf.

v) “Contractor” means the individual, firm, Company, Corporation, or Consortium whether incorporated or not, who enters into the Contract with the Employer/Engineer, and shall include its heirs, executors, administrators, successors, legal representatives, as the case may be.
vi) "Contractor's Representative" shall mean the person responsible for execution of the contract who shall be so declared by the Contractor and who shall be authorized under a duly executed power of attorney to comply the instructions and to use, receive materials issued by the Engineer to the Contractor for works. He shall be capable of taking responsibility for proper execution of works.

vii) "Sub-Contractor" means the individual, firm company, corporation, Joint Venture or Consortium, having direct Contract with the Contractor and to whom any part of the work has been sublet by the Contractor and shall include his heirs, his executors, administrators, successors, legal representatives, as case may be.

viii) "Other Contractors" means the individual, firm, Company, Corporation or Consortium employed by or having a Contract directly or indirectly with the Client/Employer/Engineer other than the Contractor.

ix) "Tenderer or Bidder" means the individual, firm, Company, Corporation, or Consortium submitting a bid/tender.

x) "Scheduled Bank" means a bank included in the second schedule to the Reserve Bank of India Act, 1934, or modification thereto.

xi) "Tender or Bid" means the offer (Technical and/or Financial) made by individual, firm, Company, corporation, Consortium for the execution of the works.

xii) "Bill of Quantities (BOQ)/ Schedule of Rates" means list of items of work, their quantities and rates.

xiii) "Original Contract Value" means the sum stated in the letter of Acceptance/Contract Agreement.

xiv) "Contract Value" means the original contract value subject to the adjustments in accordance with the provisions of the Contract.

xv) "Approval or Approved" means approval in writing including subsequent written confirmation of previous verbal approval.

xvi) "Defect Liability Period" means the specified period of defects liability from the date of completion of the work as certified by the Engineer.

xvii) "Letter of Acceptance" means the letter from the Employer or the Engineer to the Contractor, conveying acceptance of the Tender.

In case, there is an ambiguity in any definition, the decision of IRCON regarding the interpretation shall be final and binding.
3.0 BOOKS OF REFERENCE

These tender documents are to be read with the followings books/ codes/ manuals with versions updated/corrected/modified up to the date of tender opening:

a) Delhi Schedule of Rates and Delhi Analysis of Rates 2018.


c) NF Railway Engineering Department Unified Standard Schedule of Rates Engineering Department 2012”, as amended by updated correction slips (termed USSR, 2012) up to the date of tender dropping.

d) CPWD Specifications latest edition with correction slips published from time to time.


g) All Relevant Indian Standards Codes & Specifications:

h) Specification for Road and Bridge Works, MORTH, Fifth Revision

i) Specifications Tripura PWD wherever applicable.

Note: The books of reference shall also include further references mentioned in above mentioned books of references.

4.0 PRIORITY OF CONTRACT DOCUMENTS

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence: i.e. a document appearing earlier shall override the document appearing subsequently:

1. Agreement
2. Letter of Acceptance of Tender
3. Addendum(s)/Corrigendum(s), if any
4. Notice Inviting Tender
5. Instructions to the Tenderers
6. Appendix to Tender
7. Form of Bid
8. Special Condition of the Contract
10. Technical Specifications
5.1 **SCOPE OF WORK**

i. The work of construction of Agartala- Akhaura New Rail Link Project has been entrusted to IRCON vide letter dated 03.01.2014 and followed by contract agreement no Con/Agartala- Akhaura/1869 dtd. 12.11.2014 with NFR.

ii. Transhipment yard has been planned on Indian side of the Indo- Bangla border at Nischintapur comprising of Station building, Passenger Terminal building with Customs and immigration facilities, Platform, Goods Circulating area etc. to facilitate the passenger / cargo movements between Bangladesh and Agartala.

iii. The above work includes Earthwork and Blanketing along the alignment. Turfing, GSB Work, WMM, DBM and BC for approach road for cargo side and passenger side along the alignment.

iv. The scope of work also includes Chain fencing and Barbed fencing at Nischintapur Yard.

5.2 The rates include material cost, transportation, all types of material handling and stocking, labour, Taxes etc and all other contingencies.

5.3 Payable items are provided in the Bill of Quantities (BOQ) and any other enabling / temporary works required to be carried out for the eventful completion of the proposed works, are deemed to have been included in the rates quoted for the payable items in the BOQ. No claims of whatever nature shall be entertained for any item of enabling / temporary works and activities listed below including supply of necessary materials, tools and for the works.

   a- Based on the approved design and drawing, the contractor will organize surveys and shall re-establish the layout of Road, establish co-ordinate and providing reference pillars during execution and till handing over of the site.

   b- Setting up a Testing Laboratory at site equipped with the apparatus needed for day to day testing of construction materials during construction period as directed by the Engineer-in-charge (*Annexure*. VIII of Technical Specification).

   c- Safety bands, Ribbons and other gadgets for Construction site & workmen shall be maintained as per scheme approved by the engineer. Safety board’s duly written with desired LOGO & safety slogans shall be for information of workers so that they do not enter restricted premises. The quoted rates are deemed to include the cost of all such bands, ribbons, gadgets etc. and nothing extra shall be paid for such
items unless provision exits in BOQ. Taking all precautionary measures to safeguard safety measures against any accidents for the contractor’s employees, labor, general public, and supervisory staff of IRCON by providing all necessary safety equipment, helmets etc. at work site. All labor employed by the firm/contractor shall be got registered with Tripura’s Statutory Authorities.

d- Setting of required mixing equipment as per latest IS code on each group/place of site. Any cost towards Plant & equipment including land costs and clearances are to be borne by Contractor.

e- Apart from the above listed works, IRCON shall require the contractor at his own cost, to make/produce any samples of work, materials, and accessories/finishes prior to procurement / manufacture. Failure to comply with these instructions may result in rejection of the work.

f- IRCON have the liberty to modify the design in any case as per site requirement, the contractor should follow the instruction very strictly as no extension in contract time will be granted by the IRCON in respect of the modification of the design. The Contractor shall use material of reputed Brands and a list of Brands to be used for some material is specified in Annexure X.

g- Arranging inspection of concerned IRCON/Railway officials.

6.0 RATES FOR ITEMS OF WORK TO BE ALL INCLUSIVE

(i) The rates entered in the accepted Bill of Quantities of the Contract, shall be all-inclusive and provide for works duly and properly completed in accordance with terms and conditions of the Contract and processes as mentioned in specifications and drawings (including revised drawings), relevant codes whether mentioned or not in the nomenclature of the item in Bill of Quantities. All rates quoted in the tender shall also deemed to include except specifically provided otherwise in the Contract:

(ii) All materials, labour, tools and plant, stores, centering, shuttering, etc.

(iii) Construction/Erection, maintenance and removal of all temporary works.

(iv) All watching, lighting, pumping and draining unless otherwise provided for.

(v) All barriers and arrangements for safety of the property, utilities, public or employees/workers during the execution of works.

(vi) All sanitary and medical arrangements for labour camps.

(vii) The setting out of all works of construction, repair and up-keep of all centre lines, benchmarks, reference pillars etc.

(viii) Site clearance except specifically provided otherwise in the Contract.
(ix) Nothing extra shall be payable over the quoted rates, except as specifically provided in the Contract.

(x) The setting out of all works of construction, repair and up-keep of all centre lines, benchmarks, reference pillars etc.

(xi) Site clearance except specifically provided otherwise in the Contract

(xii) Insurances and Royalties complete on Material and completed Work.

(xiii) Cost of all Tests towards quality control and quality assurance including third party test as on when required as directed by the Engineer-in-charge

(xiv) The contractor shall work out the requirement of manpower and machineries in line with the scope of work to be completed within the targeted period and accordingly ensure deployment of those manpower and machineries.

(xv) All materials shall conform to the relevant Standards & Specifications and shall be of the approved make and design as per instructions of the Engineer in Charge. If required or wherever directed by Engineer in Charge, sample of material shall be approval before proceeding for procurement/ installation of material.

(xvi) The contractor shall examine all architectural, structural and other services drawings before starting the work & report to the Engineer in Charge for discrepancies, if any, and obtain clarification. Any changes found essential to coordinate execution of his work with other services and trades, shall be made with prior approval of the Engineer in Charge. Based on the approved design and drawings, the contractor will organize surveys and shall execute work based on detailed engineering drawings for all items of works.

(xvii) The contractor at his cost shall submit to Engineer in Charge 06 sets of “As Built Drawings” incorporating all the changes effected during the execution of work prepared in AutoCAD with colour nomenclatures in reproducible tracing paper. The contractor will also supply the ‘As built drawings’ in CD’s. Unless all the “As Built Drawings” with all the details, test Certificates for materials and works and Guarantees for water proofing etc. are submitted in original, from time to time, the final payment will not be released.

(xviii) The contractor has to organize, conduct & maintain required & proper quality control test and records for day to day work on regular basis. The contractor shall ensure that the work is executed conforming to the approved design, drawings and specifications. For the period for execution of work, the contractor has to follow the, Safety, Health & Environment Manual of Ircon. The Engineers to be deployed by the Contractor shall work under the direction of the Engineer-in-charge. They shall be bound the carry out all duties related with the work assigned by the Engineer-in-charge or his representative. All lab facilities and equipment’s required
for proper construction, safety for all workers and quality control during execution of entire work shall be arranged by the contractor at his own cost.

(xix) The work shall be carried out in terms of specifications of latest editions (and up-to-date correction/amendment/errata) of CPWD, MORTH and BIS (Bureau of Indian Standard) & other relevant codes, whatever/wherever applicable (refer para 3.0 of SCC) and as directed by the Engineer in Charge.

(xx) IRCON reserves the right to get the work executed in the best and most economical manner and may add or may not operate any item(s) of work(s) as the Railway/IRCON may consider fit.

(xxi) The contractors are expected to use the latest technology and machinery and achieve a most efficient and best quality finished construction.

(xxii) Diversion road if any required at site, Contractor shall make his own arrangements at his cost. Any extra land required by the contractor to facilitate the work shall be arranged by the Contractor. Similarly, agency shall make his own arrangement for site office, storage space and IRCON shall not be liable to provide any type of assistance.

(xxiii) Wherever required, the contractor has to carry out accurate instrumental survey to establish co-ordinate, layout and proper verification system at site.

(xxiv) Vertical & Horizontal Clearance shall be maintained for corresponding construction/components of subject work, within/outside Railway/construction limits for maintaining desired safety/construction requirements.

(xxv) Nothing extra shall be payable over the quoted rates, except as specifically provided in the Contract.

(xxvi) All rates quoted in the Bill of Quantities shall be deemed to be inclusive of all types of direct and indirect taxes imposed by Central/State Govt. and local bodies such as royalties, duties, labour Cess as applicable on contract value, octroi and other levies as applicable and also include all import duties. The rates shall also be inclusive of all taxes, duties and other charges imposed outside the country on the production, manufacture, sale and transport of the Contractor’s equipment, plant, materials and supplies to be used on or furnished under the contract and on the services performed under the contract. No additional amount shall be paid or claim be entertained on this account by Employer/Engineer.

The Contractor shall bear the cost of all royalties, fees and other payments in respect of patents, patents right and license(s) which may be payable to patentee, licensee or other person or corporation and shall obtain all necessary licenses/permissions. In case of any breach (whether willfully or inadvertently) by the Contractor of this provision, the Contractor shall indemnify Employer, Engineer and their employees.
against all claims, proceedings, damages, costs, charges, loss and liability which they or any of them may sustain, incur or be put to by reason or in consequence directly or indirectly of such breach and against payment of any royalties, damages or other money which the Employer/Engineer may have to make to any persons or pay in total to the patent rights in respect of the users of any machine, instruments, process, articles matter or thing constructed, manufactured, supplied or delivered by the Contractor under this contract.

Works to be carried out as per the Bill of Quantities/Structural details and design as approved by IRCON and any other related works considered necessary for the main work, as decided by the Engineer-in-Charge. The quoted rates shall include all that has been covered under the scope of work and in Schedule of items and quantities or elsewhere in this Tender Document along with all such works of temporary / permanent nature (enabling works) which are necessary for successful completion of Work as per specifications and as directed by the Engineer-in-charge

7.0 MOBILISATION ADVANCE

7.1 Conditions for Payment:

If requested by the Contractor in writing, the Employer/Engineer shall make an interest-bearing mobilization advance payment to the contractor for an amount not more than 10 (Ten) per cent of the original contract value. The Mobilization Advance shall be interest bearing at the rate of 10% (Ten percent) per annum. Interest will be compounded annually on reducing balance. Payment of such advance shall be made after fulfillment of the following conditions to the satisfaction of the Engineer:

(i) Execution of the Agreement between the Engineer and the Contractor as per Format at Annexure. XI.

(ii) Submission of Performance Security by the contractor in accordance with Clause 8.2 of General Conditions of Contract.

(iii) Submission of an unconditional Bank Guarantee in the format annexed as Annexure. XIII from a Nationalized Bank in India for an amount equal to 110% of the Mobilization Advance being paid and amount of interest for one year. The Bank Guarantee may be split into four separate Bank Guarantees & each having a minimum value of 2.5 % of the original contract value. Such Bank Guarantee shall remain effective until the advance payment along with the interest has been recovered from the Contractor. Bank Guarantee(s) for the amount recovered from the Contractor shall be released to the Contractor progressively.

7.2 Payment

After fulfilment of the pre-conditions as described in Para 7.1 above, the mobilization advance shall be released to the Contractor in following stages:
Stage- I- Maximum 5% of contract value on fulfilment of the conditions described in Clause 7.1 above.

Stage- II- Maximum 5% of contract value on establishment of site camps and offices, mobilization of necessary Plant and Machinery and man power and other facilities for commencement of work.

Satisfactory Utilization Certificate from the contractor for Stage- I Mobilization advance should be obtained before releasing stage- II advance.

7.3 Recovery:

The recovery of mobilization advance along with upto date interest thereon shall commence from the Contractor’s on account bills when the value of the work executed under the contract reaches 15% of original contract value, and shall be completed when the value of work executed reaches 85 % of the original contract value. The instalments on each “on account bill” shall be on pro-rata basis.

7.4 In the event of amount of outstanding advance with interest thereon becoming more than the available B.G, the Contractor shall have to provide a fresh B. G. with increased amount or provide a separate B. G. to cover additional amount likely to be overdue beyond the existing value of Bank Guarantee.

7.5 Calculation of Interest:

Interest shall be compounded on diminishing balance basis on the amount of advance outstanding. The date of issue of Cheque/Telegraphic Transfer shall be reckoned as the date on which the recovery has been made for purpose of computing the outstanding advance and working out the interest.

8.0 SUPPLY OF MATERIALS BY ENGINEER

Contractor shall make his own arrangements at his cost for all materials required for execution, completion and maintenance of all items of work included in his scope of work to the complete satisfaction of the Engineer. Engineer/IRCON shall not supply any materials nor shall assist for procurement of any materials required for execution, completion and maintenance of works.

Contractor has to submit ‘Manufacturing Test Report’ from Manufacturer and further Carry out Test from NABL approved laboratory as required by Engineer-in-charge.

9.0 SUPPLY OF PLANT AND MACHINERY BY EMPLOYER/ENGINEER

No Tools, Plant, Equipment and Machinery shall be provided by IRCON.
Contractor shall make his own arrangements, at his own cost, for all Plant, Machinery and Equipment required for execution, completion and maintenance of all items of works included in his scope to the entire satisfaction of the Engineer. This shall also include all other associated equipment, tools/tackles, spare parts, POL, consumables, stores, manpower as required for the execution of works. Engineer shall neither supply plant and machinery nor assist for procurement of any plant and machinery required for execution, completion and maintenance of works.

Contactor shall make adequate facility for attending repairs and regular maintenance of his equipments/machineries etc. at site premises.

The contractor is required to start mobilization of the above equipments within 15 (fifteen)days of issue of LOA and complete the mobilization of equipments by 40 days of issue of LOA.

Any delay due to non approval of Structural Design by IIT/NIT or IRCON/NFR shall not be ground for claims.

In case, the contractor fails to engage sufficient machinery at site, IRCON shall have the option to engage the Machinery as required and the cost of the same shall be recovered from the Contractor’s Running Bills.

The decision of the Engineer for the amount to be deducted on this account shall be final and binding on the Contractor.

9.1 CONTRACTOR’S MACHINERY/MATERIALS AT SITE TO BE EXCLUSIVE TO THE WORK

Contractor’s machinery / materials at site to be exclusive to the work. All constructional machinery and materials brought to the site by the Contractor be deemed to be exclusively intended for the execution of the work or part of the work and the Contractor shall not remove the same without the permission of the Engineer till completion of work or part of work.

9.2 REMOVAL OF CONSTRUCTIONAL MACHINERY /MATERIALS FROM SITE

Upon completion of the works, the Contractor shall remove from the site all the said constructional machinery remaining thereon and unused materials belonging to the Contractor.

9.3 LOSS OR DAMAGE TO CONSTRUCTIONAL MACHINERY /MATERIALS

The Employer/Engineer shall not at any time be liable for the loss of or damage to any of the said constructional machinery, temporary works or materials.

10.0 LABORATORY
10.1 A field laboratory shall be set up by the contractor at his own cost and keep the equipments as per List at Annexure VIII. No payment shall be made to the Contractor for setting up laboratory, unless otherwise stipulated in BOQ.

All materials to be incorporated in the permanent works, will be tested from IRCON’s approved institute/Laboratory. All the cost of such testing & it’s arrangements & witnessing by the Engineer/Clients, will be borne by the contractor. Nothing extra will be payable on this account.

10.2 The contractor shall furnish samples of the all materials indicating the Date, location & source and obtain the approval of source before proceeding with execution of works.

11.0 CHARGES FOR TESTING:
No payment shall be made for getting any tests from the outside NABL accredited laboratory approved by the Engineer and rate quoted in Bill of Quantities shall be deemed to include all testing and other costs.

12.0 TAXES AND DUTIES
13.1 The Contractor shall get registered with the concerned Goods and Service Tax Department of the relevant state(s) of the Project and submit a copy of the same to the Employer/ Engineer. He shall be responsible for filling Goods and Services tax returns and assessments, as necessary as per prevalent Laws, Rules and regulations and shall also furnish necessary certificates to Employer/ Engineer from time to time.

13.2 Wherever certain exemptions/ benefits are available on custom duty the Contractor shall consider the same while quoting his rates. For instance, materials/ Plant and Machinery etc. used for execution of the projects financed by International organizations enjoy exemption from custom duty under Foreign trade Policy as Deemed Export on fulfilling the conditions as per Govt. notifications. Similarly, the Contractor shall ensure that whenever any benefits are available under any other law, these shall be considered while quoting the rates.

14.0 PRICE ADJUSTMENT-

14.1 PVC is applicable as per Clause no 46A of Indian Railway General conditions of contract (GCC) Sept. 2019.

14.2 For adoption of percentage of labour component, other material components, plant machinery & Spares, Fuel & Lubricant component in this contract this work shall be considered for "Earthwork and Minor bridges".

14.3 For adoption of percentage of labour component, other material components, plant machinery & Spares, Fuel & Lubricant component in this contract this work shall be considered as "Earthwork and Minor bridges".

14.4 Amount of Price variation in Cement shall be derived as below;
$C = CV \times \frac{(CQ - CB)}{CB}$

Where,

$CV = \text{Quantity of Cement} \times \text{Rate of cement}$

Quantity of cement = Theoretical quantity consumed based on Approved Mix design of Concrete for the quarter under consideration.

Rate of Cement = Rs 6093/- per ton (six thousand and ninety three)(rate is excluding GST)

14.5 Amount of Price variation in Steel shall be derived as below;

$S = S_1 + S_2$

$S_1 = \text{Amount of Price variation in Structural Steel.}$

$S_2 = \text{Amount of Price variation in Reinforcement steel.}$

(i) $S_1 = SW_1 \times \frac{(SQ - SB)}{SB} \times 100$

Where,

$SW_1 = 0.57 \times \text{Gross value of BoQ item no 1 & 2 under schedule C (excluding GST)}$

$SB$ and $SQ$ for structural steel shall be taken as per SL 3 of Table in clause 46A.9 of GCC (‘e. Mild Steel – Flat Products’ of (N) MANUFACTURE OF BASIC METAL)

$SB$ and $SQ$ indices for Reinforcement bars shall be taken as per SL 1 of Table in clause 46A.9 of GCC (MS Bright Bars’ individual commodity of group item (d) Mild Steel-Long Products under (N) MANUFACTURE OF BASIC METAL)

(ii) $S_2 = SW_2 \times \frac{(SQ - SB)}{SB} \times 100$

Where,

$SW_2 = 0.74 \times \text{Gross value of BOQ item no 1 under schedule D (excluding GST)}$

14.6 For the purpose of deducting price value of Steel supplied by contractor for arriving at value of ‘W’, $SW$ shall be calculated as per below formulae

$SW = SW_1 + SW_2$

14.7 GST shall be paid extra as per extant rules and regulations.

15.0 DRAWINGS:
15.1 Good for Construction Drawings shall be provided commensurating to Progress of Work.
15.2 General Arrangement drawings of Yard Road, Chain & Barbed fencing have been uploaded. These drawings are only of the purpose of tendering and reference for the bidder.

15.3 All the detailed working drawings, good for construction, shall be provided after award of work to the successful bidder.

15.4 The Employer shall endeavor to provide drawings for execution of works as soon as the work is awarded. In case, it is not possible for the Engineer to make the entire drawings available due to any reason, the drawing shall be made available by the Engineer progressively. The Contractor shall have to adjust his work program accordingly. No claim whatsoever on account of any delay or hold up of the work(s) arising out of not giving the complete drawing on award of works and for giving the drawing progressively shall be tenable except for the purpose of extension of time and price variation as provided under clause 3 of Special conditions of contract, where justified.

15.5 The Contractor Shall keep at site in good condition one copy of latest approved Specifications and Drawings and also such other Contract documents as may be necessary and make them available to the Client/employer/Engineer or his Representative at all reasonable times. Any specifications & drawing shall not be used on any other work or communicated to a third party by the Contractor.

15.6 Adherence to Specifications and Drawings: The work shall be executed in perfect conformity with the specifications and drawings of the Contract issued to the Contractor by the engineer from time to time. If the Contractor does any work or part of work in a manner contrary to the specifications or drawings without the approval of the Engineer, he shall bear all the costs arising therefrom including dismantling and reconstructions and drawings and shall be responsible for all the losses/delays to the Employer/engineer. The term drawings in this sub-clause also includes the drawings prepared by the Contractor and approved by the Engineer.

15.7 Meaning & Intent of Specifications 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 measurement of the works, the decision of the Engineer thereon shall be final and binding.

16.0 COMPLETION PERIOD:

The work is required to be completed within a period as specified in the Appendix to Tender from the date of issue letter of Acceptance (Including monsoon period).

Contractor shall have to plan his construction programme and activities so as to complete the work in the stipulated period by working in multiple shifts if required. The period of completion given includes the time required for mobilization as well as testing, rectifications, if any, re-testing and completion in all respects to the entire satisfaction of Engineer-in-Charge.
No additional payment shall be made to the contractor for any multiple shift of working or any other methods contemplated by him in his work schedule even though the time schedule is approved by the Engineer-in-Charge.

17.0 Defect Liability Period

The Contractor shall maintain, rectify and make good at his own cost any defect/deficiencies, which may develop in the work or as notified by the Engineer during Defect Liability Period as specified in the Appendix to Tender. However, maintenance during Defect Liability Period shall not include day to day upkeep, cleaning, custody and security of the work.

18.0 INSURANCE

18.1 Before commencing of works, it shall be obligatory for the Contractor to obtain, at his own cost, insurance cover from reputed companies under the following requirements:

i) Contractors’ All Risk Policy (CAR) for the works as per agreement,

ii) Liability for death of or injury to any person or loss of or damage to any property (other than the work) arising out the performance of the Contract.

iii) Construction Plant, Machinery and Equipment brought to site by the Contractor. Any other insurance cover as may be required by the law of the land.

18.2 The Contractor shall provide evidence to the Employer/Engineer before commencement of work at site that the insurances required under the contract have been affected and shall within 30 days of the commencement date; provide the insurance policies to the Employer/Engineer. The Contractor shall, whenever, called upon, produce to the Engineer or his representative the evidence of payment of premiums paid by him to ensure that the policies indeed continue to be in force.

18.3 The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.

18.4 The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or his sub-Contractor or petty Contractor. The Contractor shall indemnify and keep indemnified the Employer/Engineer against all such damages and compensation for which the Contractor is liable.

18.5 The Policies of the Contractor shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period except for any specific insurance covers necessary for shorter period.
18.6 If the Contractor fails to effect or keep in force or provide adequate cover as acceptable to the Engineer in the insurance policies mentioned above, then in such cases, the Engineer may affect and keep in force any such insurance or further insurance on behalf of the Contractor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the Engineer in this regard from the payment due to the Contractor or from the Contractor’s Performance Security. However, the Contractor shall not be absolved from his responsibility and/or liability in this regard.

19.0 INSPECTION OF SITE AND SITE DATA:

The Contractor shall be deemed to have inspected and examined the site and information available in connection therewith and to have satisfied himself fully before submitting his bid about the extent and nature of work and materials necessary for the completion of the works, hydrological and climatic conditions, the means of access to the site and accommodation he may require. He shall also be deemed to have obtained all necessary information regarding risks, contingencies and all other circumstances which may influence or affect the contract.

20.0 PERFORMANCE SECURITY & RETENTION MONEY

20.1 Performance security shall be required to be submitted by the Contractor.

20.2 Forms of Performance Security:

(i) The successful bidder shall submit a Performance Guarantee (P. G) in the form of irrevocable bank guarantee on the Performa annexed as Annexure. XII from any Scheduled Bank for an amount of 5% (Five percent) of the contract value. This P.G. shall be initially valid upto 60 days beyond the stipulated date of completion. 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. The value of P. G. to be submitted by the contractor will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (Five Percent) for the excess value over the original contract value should be deposited by the contractor. On the other hand, if the value of the contract is reduced by more than 25 % of the original contract value, original Performance Bank Guarantee (PBG) shall be returned to the contractor as per his request after submission of PBG amounting to 5 % of the reduced contract value.

Alternatively, the performance security can be furnished by the Contractor in the form of Fixed Deposit Receipt (FDR) from a scheduled bank endorsed in favour of the Employer.

(ii) 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), but before
signing of the contract agreement. Extension of time for submission of PG beyond 21 (Twenty One) days and up to 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, 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 a contract is terminated Employer shall be entitled to forfeit Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit 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.

(iii) No payment under the contract shall be made to Contractor before receipt of performance security.

20.3 RETENTION MONEY:

i) Retention money for all contracts shall be recovered from on account/ final bills of the Contractor @ 10% of gross value of each bill after adjusting Earnest Money Deposit (EMD) amount till the amount so recovered including EMD amount adds up to 5% of the contract value of the work. The entire Retention Money may be deposited in the form of irrevocable bank Guarantee issued by any Scheduled bank also in the contract valuing more than Rs. 10 Crore after signing of the contract agreement, but before payment of 1st on account bill. Provided that validity of the B.G. shall be extended from time to time depending upon extension of the contract.

ii) No interest shall be payable to the Contractor on the amount retained in cash towards retention money.

20.4 RELEASE OF PERFORMANCE SECURITY:

i) Performance Security shall be returned to the Contractor, subject to the issue of Completion Certificate by the Engineer in accordance with contract conditions. This shall not relieve the Contractor from his obligations and liabilities, to make good any failures, defects, imperfections, shrinkages, or faults that may be detected during the defect liability period specified in the Contract.

ii) Wherever the contract is rescinded, the security deposit shall be forfeited and the Performance Security shall be encashed and the balance work shall be got done independently without risk and 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 either in his/her individual capacity or as a partner of any other J.V./Partnership firm.

iii) The Engineer shall not make a claim under the Performance Guarantee (P.G.) except for amounts to which Ircon International Limited is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:

a) Failure by the contractor to extend the validity of the P.G. as described herein above, in which event the Engineer may claim the full amount of the P.G.

b) Failure by the contractor to pay Ircon International Limited 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.

c) The contract being determined or rescinded under provision of the General Conditions of Contract (GCC) the P.G. shall be forfeited in full and shall be absolutely at the disposal of the Engineer.

20.5 RELEASE OF RETENTION MONEY:

i) The Retention Money shall be released to the Contractor after preparation of final bill and acceptance of the same by the Contractor and after the expiry of the defect liability period specified in the Contract, reckoned from the date on which the Engineer shall have issued the Certificate of Completion comprising the whole of works. The retention money shall be released after all failures, defects, imperfections, shrinkages and faults have been rectified by the Contractor to the satisfaction of the Engineer and Defect Liability certificate is issued by the Engineer.

ii) Release of 50% Retention Money Against Bank Guarantee/FDR:

a) For contracts valuing less than Rs. 30 Crores:

If requested by the contractor, 50% of the Retention Money may be released on satisfactory completion of works against submission of Bank Guarantee for an equivalent amount by the Contractor in the performa annexed as Annexure. XIV from any Scheduled Bank in India. This Bank Guarantee shall be kept valid till the period of three months beyond the expiry of Defect Liability Period. Fixed Deposit Receipt (FDR) from a scheduled bank endorsed in favour of the Employer can be submitted by the Contractor in lieu of the Bank Guarantee for release of 50% Retention Money.

b) For contracts valuing Rs. 30 Crores or more:

If requested by the contractor, 50% of the Retention Money may be released at a stage when full amount of retention money (i.e. 5% of the contract value) has been recovered at the stage when not less than 50% financial progress has been achieved against submission of Bank Guarantee for an equivalent amount by the Contractor in the performa annexed as Annexure. XIV from any Scheduled Bank in India. This Bank
Guarantee shall be kept valid till the period of three months beyond the expiry of Defect Liability Period.

iii) Where different defect liability periods are applicable to different parts of the works, the expression - "expiration of the defect liability period" shall for the purpose of this clause be deemed to mean the expiry of last of such periods.

19 COMMUNICATION BETWEEN EMPLOYER/ENGINEER AND CONTRACTOR

19.1 COMMUNICATION TO BE IN WRITING

All notices, communications, references and complaints by either party to the Contract shall be in writing in English or Hindi. Communication from only authorized representative of the Contractor shall be entertained.

19.2 LANGUAGE OF CONTRACT

The Contract document shall be drawn up in English.

19.3 INSTRUCTIONS IN WRITING

Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any instructions orally, the Contractor shall comply with such instructions. Confirmation in writing of such oral instruction given by the Engineer, whether before or after carrying out of the instructions shall be deemed to be instructions within the meaning of this sub-clause.

The Contractor shall also be bound to carry out any instructions issued by client as confirmed in writing by the Engineer.

19.4 All certificates, notices, written orders or letters, to be given by the Employer or the Engineer to the Contractor, shall be deemed to have been served, if the same are delivered to the Contractor or his authorized representative, or delivered or left at or posted by speed post/registered post to the given address of the Contractor or Contractor's registered office or principal place of business and essentially delivering the same by e-mail to the Engineer duly attached with scanned copy of such certificates, notices, written orders or letters and Proof of Dispatch (POD) with a copy to Employer on nominated e-mail address. Such documents shall be deemed to have been received on the day they are left or delivered, or in the case of postal transmission, on the day they would ordinarily have reached but not exceeding 7 days from the date of posting inclusive of day of posting, in any case.

The contractor shall furnish the postal address/registered office address and e-mail address for communication.

19.5 NOTICES TO EMPLOYER AND ENGINEER
All notices or letters to be given by the contractor to the Employer or to the Engineer, under the terms of the contract, shall be served by sending by Speed/Registered post or by delivering the same, to the respective nominated addresses and essentially delivering the same by e-mail to the Engineer duly attached with scanned copy of such notice(s) or letters and Proof of Dispatch (POD) with a copy to Employer on nominated e-mail address.

19.6 CHANGE OF ADDRESS

Either party may change the nominated address by prior written notice to the other party. However, either party shall not change their email address during currency of the contract without obtaining prior mutual consent for doing so.

19.7 CHANGE IN CONSTITUTION OF FIRM

In case of any change in the constitution of Contractor’s firm, the same shall forthwith be notified by the Contractor to the Engineer and the Employer.

21.0 DUTIES OF ENGINEER AND ENGINEER’S REPRESENTATIVE

21.1 DUTIES AND AUTHORITY OF ENGINEER

The Engineer shall carry out the duties specified or implied in the Contract including issue of instructions, decisions, certificates and orders, as are specified in the contract, or necessary for the observance/administration of the Contract and expeditious and timely completion of the work.

21.2 DUTIES AND AUTHORITY OF ENGINEER’S REPRESENTATIVE

The Engineer's Representative shall be responsible to the Engineer. His duties are to supervise the work and to test and examine any materials to be used or workmanship employed in connection with the works. He can issue day to day instructions to the Contractor in Site Order Book, which should be noted and complied by the Contractor. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract, except as expressly provided hereunder or elsewhere in the Contract, to order any work involving delay or any extra payment by the Employer, or to make any variation in the works. He is authorized to measure the works for the purpose of payment.

22.0 GENERAL OBLIGATIONS OF THE CONTRACTOR

22.1 GENERAL RESPONSIBILITY OF THE CONTRACTOR

The Contractor shall comply with the provisions of the Contract with due care and diligence design (to the extent provided for in the Contract), execute, complete and
maintain the works and remedy the defects in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, plant, & Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and maintenance of works and rectification of any defects, as directed by the Engineer or his Representative.

22.2 SITE OPERATIONS AND METHODS OF CONSTRUCTION:

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and method of construction, provided that the Contractor shall not be responsible for the design and specifications of Permanent works or for the design or specifications of any temporary works provided by the Engineer. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such works, notwithstanding any approval by the Engineer.

22.3 APPRAISAL OF ERRORS / OMISSIONS IN THE DRAWINGS:

The Contractor shall promptly inform in writing to the Engineer of any error, omission, fault and other defects, in the design, drawings or specifications for the works which are noticed while reviewing the Contract documents or in the process of execution of the works.

The bidder shall go through the tender drawings carefully and clarification if any required should be obtained within 2 weeks after award of work to avoid any ambiguity during execution stage.

The contractor has to prepare all the shop drawings required for the execution of the work and get the same approved from IRCON before taking up fabrication and execution activity for the same.

22.4 COMPLIANCE WITH REGULATIONS AND BYE-LAWS:

The Contractor shall comply with the statutory provisions relating to the works, regulations and by-laws of any local authority and undertaking, including those controlling the utilities such as water supply, sewerage, telephones, power supply, etc., in whose jurisdiction the work is to be executed. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws, as aforesaid. It shall be the responsibility of the Contractor to arrange all necessary clearances and approvals from the concerned authorities or undertakings before the work is taken up. However, assistance, if any, may be provided by Employer/Engineer/Client.

22.5 CONTRACT AGREEMENT:

The Contractor shall enter into and execute the Contract Agreement in the form of agreement (Annexure. XI) within 28 days after the date of issue of Letter of
Acceptance. The stamp papers of the requisite value as per the prevailing laws shall be provided by the Contractor at his own cost. Original agreement shall be retained by the Employer/Engineer and a certified copy shall be made available to the Contractor.

22.6 CONTRACTOR’S REPRESENTATIVE

When the Contractor is not in a position to be present, he shall keep responsible representative at site or work place during all working hours, who shall, on receiving a reasonable notice, present himself to the Engineer, Engineer’s Representative or their Assistants. The instructions and orders given to the Contractor’s representative shall be deemed to have the same force as if they have been given to the Contractor. The Contractor should furnish the necessary Power of Attorney in favour of his representative for the purpose of this clause. If the Contractor fails to appoint a suitable authorized representative as directed by the Engineer, the Engineer shall have full powers to suspend the execution of the works until such time a suitable authorized representative is appointed and the Contractor shall be held responsible for the delay so caused to the works.

Further failure on part of the Contractor to comply with this provision shall constitute a breach of Contract and may lead to action as per contract conditions.

23.0 SUB-CONTRACTING

i) The Contractor shall not subcontract the whole of the works. Except where otherwise provided in the Contract, the Contractor shall not subcontract any part of the works without the prior consent of the Engineer in writing. Any such consent shall not relieve the Contractor from any of his liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his representative, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor.

ii) Provided that the Contractor shall not be required to obtain such consent for

a) The provision of labour, or
b) The purchase of materials which are in accordance with the specifications/standards specified in the Contract, or
c) The subcontracting of any part of the works for which the subcontractor is named in the contract.
d) The purchase of Plants and Equipment for execution of the works.
e) The hiring of Plants and Equipment for execution of the works.
f) Any breach of the above conditions shall entitle the Employer/Engineer to rescind the contract.
Provided always that execution of specific works by petty contractors, or on piecework basis, under the personal supervision of the Contractor, shall not be deemed to be subcontracting under this clause.

24.0 PROVISIONS OF EFFICIENT AND COMPETENT STAFF

The Contractor shall employ and keep on the works at all times efficient and competent staff to give necessary directives to his workers to see that they execute works in a safe and proper manner. The Contractor shall employ only such supervisors and workmen as are capable, careful, and skilled. The Engineer shall be at liberty to object to and order the Contractor to remove forthwith from the works, any person employed by the Contractor in or about the execution of works or maintenance of works, who, in the opinion of the Engineer, misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Engineer to be undesirable and such person shall not be employed again in the works without the written permission of the Engineer. Any person so removed from the works shall be replaced as soon as possible by a competent substitute.

25.0 PROGRAMME OF WORK

25.1 The Contractor shall submit the programme for completion of work to the Engineer for his approval within 15 days from the date of receipt of letter of acceptance considering completion period as indicated in appendix to tender. Unless otherwise directed, the programme shall be in the form of Bar-Chart showing proposed execution of quantities of principal items of work. The programme shall be related to the capability of equipment proposed to be deployed and site conditions. Programme so submitted and agreed by IRCON will become part of the contract agreement. The Contractor shall also provide in writing methodology for execution of major items of work as desired by the Engineer. The submission and approval of such programme shall not relieve the Contractor of any of his duties or responsibilities or obligations under the contract. The Engineer shall have full power and authority during the progress of work, to issue such instructions as may be necessary for the proper and adequate execution of the work.

The work programme may be submitted in CPM network chart showing the milestone and critical path for completion of work within the stipulated time and as per conditions of the contract. The programme should clearly include Manpower, Material and Machinery resources proposed to be deployed for achieving the targeted progress, justification for same based on machinery output, the date from which each machinery shall be available at site in working condition etc. complete. The programme shall be subject to the approval of engineer-in-Charge who may order changes in the programme. The decision of Engineer-in-Charge shall be final and binding in this regard.
Contractor shall also provide Site / office organogram for the project with contact details and their roles / responsibilities of manpowers engaged.

25.2 Execution Programme:

25.2.1 Within 15 days of award of contract, the contractor shall submit to IRCON for approval a Detailed Execution/completion Programme with milestones/ Key dates based on completion period.

The Engineers-in-Charge can hold the payment till such time; the contractor does not submit CPM/Milestone Chart/Construction Programme etc.

Contractor is expected to mobilize and deploy sufficient resources as per the agreed programme to achieve the progress within the broad frame work of accepted methods of working and safety. Timely deployment of required machineries, equipments, apparatus and instruments are to be treated as one of the sections of the work.

25.2.2 During the currency of the work the contractor is expected to adhere to the time schedule on milestone and total completion and this adherence will be a part of Contractor’s performance under the contract.

25.3 DEPLOYMENT OF RESOURCES:

Within 15 days of award of contract, the contractor shall also submit resource deployment program i.e. key personnel, manpower, Plant & Machinery and Other resources deployment program. These shall be to be incorporated in the Contract Agreement after approval by Engineer in charge.

25.4 Within 15 days of award of contract, the contractor shall also submit Cash flow statement and cumulative monthly progress plan (in the form of S curve). These shall be to be incorporated in the Contract Agreement after approval by Engineer in charge.

25.5 Within 15 days of award of contract, the Contractor shall submit to IRCON Method statement for various activities and Quality Assurance Plan (QAP) and start the work after their approval.

25.6 Within 15 days of the award of the contract, the contractor shall submit to IRCON, their Organization chart for the project with the CV of the key personnel’s to be deployed at the project site. The scrutiny of the same will be done by the IRCON and will be approved by the Engineer.
26.0 CO-OPERATION WITH OTHER CONTRACTORS

The Contractor shall in accordance with the requirements of the Engineer, cooperate with and afford all reasonable opportunities for carrying out the work by other Contractors engaged by the Client/Employer/Engineer or any other Authority.

27.0 CONTRACTOR TO KEEP SITE CLEAR

During the progress of works, the Contractor shall keep the site reasonably clean and free from obstructions and shall store neatly construction plant and materials.

28.0 PROTECTION OF EXISTING SERVICES

Protection of existing services: - It shall be the responsibility of the agency to protect the existing service road, vehicular lanes, building structure etc. before digging for deeper excavation for RCC foundations, retaining wall, ramp work etc. Necessary protection measures against sliding of earth shall be the responsibility of the agency and nothing extra shall be paid on this account. The proposal will be submitted for approval of the Engineer in Charge, in advance before commencement of the activity.

29.0 SAFETY PROCEDURES

The Contractor shall:

i) Comply with all applicable safety regulations,

ii) Take care for the safety of all persons entitled to be on the Site,

iii) Use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,

iv) Provide fencing, lighting, guarding and watching of the Works until completion and taking over, and

v) Provide any Temporary Works (including roadways, footways, guards and fences), protection of existing embankment, track, and bridges which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

vi) The Contractor shall supply all necessary safety appliances such as safety goggles, helmets, safety belts, ear plugs, masks etc. to the workers, staff and also for consultants, employer, visiting officers/guests etc.

30.1 PREVENTION OF ACCIDENTS
A (i) The Contractor shall remain fully responsible for ensuring safety & in case of any accident shall bear cost of all damages to his equipment & men and also damages to railway & its passengers or any member of the public.

(ii) Engineer-in-charge may impose any other condition necessary for a particular work or site.

(iii) Road vehicle can ply along the track after suitable cordonning of track with minimum distance of 6 m from the centre of the nearest track. For plying of road vehicles during night hours, adequate measures to be communicated in writing along with a site sketch to the contractor/contractor’s representative and controlling Engineer / Supervisor—in-charge of the work including officers and the in-charge of the section.

(iv) The road vehicles will ply only between sunrise and sun set save as per clause (v) above.

(v) IRCON representative shall issue competency certificate after checking license and their working to all drivers of nominated vehicles/machinery. Inspector at site shall ensure that the driver who does not possess competency certificate will not work at site.

(vi) The contractor(s) shall be responsible for the safety of his work men and shall provide them with necessary standard wear and apparel consistent with the nature of work being executed by his workmen.

(vii) The contractor(s) shall protect the site of work, e.g. excavated area as, by adequate fencing and / or other suitable means to prevent accidents to his own work men, Railways men or any member of the public.

(viii) Should any accident take place, the total cost of such damage including the cost of treatment / loss and /or compensation shall be payable by the contractor.

(B) During the execution of works, unless otherwise specified the contractor shall at his own cost provide materials and execute all shorting, 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.

(C) 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 compensation claimed for any unauthorized closure, cutting through, alternation, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the contractor by deduction from any sums which may be come due to him in terms of the contract, or otherwise according to law.

(D) During progress of work in any street or through farm, the contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or through fare and for any drainage, water supply or means of lighting which may be interrupted by reason of the execution of the works and shall correct and maintain at his own cost barriers lights and other safeguards
as prescribed by the Engineer for the regulation of traffic, and provide watchmen necessary to prevent accidents. The work shall in such cases be executed day and night if so ordered by the Engineer and with such vigour so that the traffic way be impeded for as short a time as possible.

(E) The contractor shall be responsible to take all precautions to ensure the safety of the public property or railway property and shall post such look out men as may in the opinion of the Engineer be required to comply with regulations pertaining to the work.

(F) 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 whenever occurring on the work to the Engineer or the Engineer’s Representative and shall make every arrangement to tender all possible assistance.

(G) The Contractor shall be responsible for all risk to the works 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 and this although all reasonable and proper precautions may have been taken by the Contractor and 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 a fore said by reason of any act, or any negligence or omissions on the part of the contract or the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway/IRCON may incur in reference there to, shall be charged to the Contractor. The Railway/IRCON 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 a foresaid, any sum or sums of money which may be paid any expenses whether of any such payment, defense or compromise, and the incurring of any such expenses shall not be call in question by the Contractor.

(H) The area of work should be demarcated by providing barricades and sign board, which will enable the work men posted at site and also the lorry drivers to have clear guide lines of movement of vehicles.

(I) All the work inside a tunnel, deep cuttings, on bridges, constricted are as etc. should be carried out in accordance to the provisions in Chapter VIII of IRPWM and Para1009 of Bridge Manual 1998 and preferably under block protection.
30.2 SAFETY FIRST BOOK.

The successful tenderer(s) i.e. the contractor(s) shall purchase, if he does not already possess a copy of the booklet “SAFETYFIRST” which may be purchased from the office of the Chief Administrative Officer (Con)/Northeast Frontier Railway.

30.0 IMPLEMENTATION OF QUALITY, SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT SYSTEM

30.1 Quality Management System: IRCON is an ISO Certified Company in Quality Management System and expects the Contractor to work as per the Standards.

30.1.1 The Contractor shall follow various requirements of Quality Management System of IS/ ISO 9001: 2015 and Quality Policy of IRCON. The contractor already holding QMS Certificate need to act swiftly to keep it updated and fulfill various requirements as sites.

30.1.2 The contractor shall develop the Quality Assurance Plan (QAP) and Inspection and Testing Plan (ITP) and get it approved from Project Head/ the Engineer. The records of tests to be conducted as per ITP and tests done actually shall also be kept by the contractor.

30.1.3 The Contractor shall ensure the timely calibration of all measuring and testing equipment at his own cost from reputed laboratory and the hard copies of Documented Information are to be kept ready for any time inspection by the Engineer.

30.1.4 The Contractor shall ensure maintenance and overhauling of all plants and machinery deployed for the works as per guidelines issued by Manufacturer/ Supplier/ Vendor/ Legal Requirements/ Engineer.

30.1.5 The Contractor shall keep the hard copies of the Documented Information of Manufacturer’s Test Certificates (MTCs) and Third-Party Test Certificates, from approved laboratory at his own cost, as required, for all the materials supplied by him. These records shall be checked any time by the Engineer.

30.1.6 The Contractor shall ensure the use of materials (Manufactured either tailor made or available off the shelf) of branded make/ manufactured by reputed companies. (Materials like rebar’s, structural steel, cement, chemicals such as admixtures, retarders, accelerators, curing compounds, de- shuttering oils, bituminous materials- modified, cationic emulsions, cutbacks; glass, paints of all types, bolts & nuts, all types of fasteners, etc.). To ensure quality output the Contractor shall get his Batching Plant, Crushing Plant, other Mixing Plants and Hot Mix Plant certified from third party existing in the approved list of Quality Council of India, New Delhi.
30.1.7 The Contractor shall provide work instructions/ check lists for proper execution of work. The Contractor shall also maintain all relevant records and documents properly and same shall be made available to the Engineer as required. The Quality Checklists developed by Quality Management Department of RCON shall also be followed.

30.1.8 All QAP, ITP, Laboratory Formats and other Documents related to Quality should wear the logo of IRCON along with that of the contractor.

30.2 SAFETY, HEALTH, AND ENVIRONMENT MANAGEMENT SYSTEM:

IRCON is an ISO Certified Company in the areas of Occupational Health & safety, and Environment Standards and expects the Contractor to work as per these standards.

30.2.1 The Contractor shall execute the work as per Safety, Health and Environment Standards of IRCON (attached with the Tender Paper). Contractor shall provide and ensure the use of required Personal Protective Equipments (PPEs) for all workers/ staff and engineers. The contractor shall provide and erect safety barricades as required, display safety posters and instructions regarding safety.

30.2.2 The Contractor shall prepare a ‘Project Safety, Health and Environment Manual (SHE Manual)’ and get it approved by the Project Head. The Contractor will own the ultimate responsibility of all aspects of Safety, Health and Environmental, upkeep of the work place and it’s surroundings.

30.2.3 The Contractor will facilitate Safety Checks, Health Checks and Environmental Checks and checks on compliance to all the norms as per the ‘SHE Manual’ and the same shall be checked by PH or the nominated Safety Officer at regular interval. IRCON has developed the Checklists on Safety, Health and Environmental issues and expects the Contractor to follow the same.

30.2.4 All Checklists and other Documents related to SHE should wear the logo of IRCON along with that of the Contractor.

30.2.5 The Employer may, at their discretion undertake such corrective measures as deemed fit for immediate restoration of safe conditions at the work place at the cost of the contractor and recover the cost from Contractor’s running bills. The Contractor will keep the Employer indemnified against any corrective action by the Employer. In addition to such recourse, the penalty for each violation will be enforced as under, without issuing any show cause notice for the same:
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Nature of violation</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Non-preparation of Site Safety Plan before the first running bill.</td>
<td>Rs 10,000.00</td>
</tr>
<tr>
<td>2.0</td>
<td>Violation of safety norms pointed out by inspecting officials, such as deficient documentations or safety gadgets or lack of supervision/ process control etc.</td>
<td>Rs 10,000.00 for each violation subject to maximum 1% of the contract value in all.</td>
</tr>
<tr>
<td>3.0</td>
<td>Injury to worker leading to stoppage of work.</td>
<td>Rs 25,000.00 for each case.</td>
</tr>
<tr>
<td>4.0</td>
<td>Fatalities to workers at work related accidents.</td>
<td>Rs 5.00 Lakh for each mortality</td>
</tr>
<tr>
<td>5.0</td>
<td>Repetition of violation</td>
<td>May lead to termination of work.</td>
</tr>
</tbody>
</table>

### 31.0 QUALITY ASSURANCES

(i) The Contractor will submit QAP (Quality Assurance Programme) conforming to ISO: 9001 or similar accreditations, in details in regard to the measures, which will be taken by them for quality assurance during execution of the work. The details should include the ISO9001 or similar accreditation measures to be adopted, testing facilities to be developed at site and consultants to be engaged in this regard if any.

(ii) The contractor shall create a separate Quality Assurance Cell which shall be responsible exclusively for monitoring of quality aspects as per approved Quality assurance plans etc., specifications and contract conditions. No personnel of this cell shall, in any case, be involved in execution of works.

(iii) During the execution of work, the Firm will have to comply with all the measures directed by the Engineer to ensure quality of work. The decision of the Engineer in this regard will be final.

(iv) In case a contractor executes a work, which is below the specified structural strength, the work shall be dismantled and re-executed at contractor’s cost at the sole discretion of the Engineer at site.

(v) In case a contractor executes a work which is structurally up to specification, but sub-standard in finish, the same may be approved and accepted by the Railway in case where finish is not so important, at the Railways’ sole discretion, provided that where such a work is accepted, the payment for such work shall be at 80% of rates accepted for such work in the Schedule of items.
32.0 WORKMEN OF THE CONTRACTOR(S)

a It would be appreciated by the Contractor(s) that there are a number of areas of work where no amount of supervision by IRCON/Railway can ensure proper quality of work. The quality can only be ensured if competent, experienced and skilled workmen are employed to carry out the job.

The Contractor shall provide and keep on the works, the following efficient engineering staff during the execution of the works.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Staffs Details</th>
<th>Minimum Qualification/ Experience</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Project Manager</td>
<td>Graduate Engineer (B.E.-Civil) Min. 10yrs experience in relevant field of Road Construction</td>
<td>1 Nos.</td>
</tr>
<tr>
<td>2.</td>
<td>Quality Engineer</td>
<td>Graduate Engineer (B.E. -Civil). Min. 5yrs experience in relevant field Road Construction</td>
<td>1 Nos.</td>
</tr>
<tr>
<td>3.</td>
<td>Surveyor</td>
<td>Diploma Engineer (Diploma. -Civil). Min. 3yrs experience in relevant field.</td>
<td>1 Nos.</td>
</tr>
<tr>
<td>4.</td>
<td>Site Engineer</td>
<td>Diploma Engineer (Diploma. -Civil). Min. 5yrs experience in relevant field.</td>
<td>2 Nos.</td>
</tr>
</tbody>
</table>

b In case, the contractor fails to deploy the sufficient Engineers as per mentioned in table above in commensuration with Project Programme days starting from issue date of LOA, the Engineer shall be entitled to recover the amount mentioned above from the dues of the Contractor, as per table below;

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Staffs Details</th>
<th>*Recovery, if not deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Project Manager</td>
<td>Rs. 50,000/- per month or part thereof</td>
</tr>
<tr>
<td>2.</td>
<td>Quality Engineer</td>
<td>Rs. 40,000/- per month or part thereof</td>
</tr>
<tr>
<td>3.</td>
<td>Surveyor/Site Engineer</td>
<td>Rs. 25,000/- per month or part thereof</td>
</tr>
</tbody>
</table>

c The Contractor shall, therefore, engage workmen having adequate competence, experience and skill for doing the work at site.

d In case the Engineer-at-Site finds that anyone or more of the workmen of the Contractor is not competent or is in-experienced or not skilled enough, he may order
the contractor to remove such workmen from the site of work and to replace them by other suitable workmen. The Contractor shall be bound to remove such workmen from site and to replace them by suitable workmen without any claim and / or delay, the decision of the Engineer-at- Site shall be final and binding on the contractor.

33.0 COMPLETION DRAWINGS:

Contractor shall, within his quoted rates, prepare and submit detailed completion drawings of all the works executed by him, prepared in AUTOCAD, in three copies on tracing sheets, six copies on paper-sheets and three copies in CD. Drawings may be submitted in phased manner as the works get completed as directed by Engineer. However, all the drawings shall be submitted within 30 days of date of completion.

34.0 CONTRACTOR TO STUDY DRAWING & SPECIFICATIONS ETC. AND HIS LIABILITY

The tenderer shall be responsible for close scrutiny of the approved drawings supplied by IRCON. For any discrepancies, error or omissions in the drawings or in other particulars indicated there in, the contractor shall approach IRCON immediately for rectification of such discrepancies, errors and omissions. If any dimension/figure/features etc. on approved drawings or plans differ from those drawings or plans issued to the tenderers at the time of calling of the tender, the dimensions as figured upon the approved drawings or plans shall be taken as correct. No claim shall be entertained on this account and decision of IRCON shall be final, binding and conclusive on the contractor.

The work shall be executed as per RDSO, CPWD & MORTH Specifications along with their latest revision.

35.0 DEATH OF CONTRACTOR

If the Contractor is an individual or a sole proprietary concern, and the individual or a sole proprietor dies, in that case, unless the Employer/Engineer is satisfied that the legal representative of the individual Contractor or of the sole proprietor, as the case may be, are capable of carrying out and completing the contract, the Employer/Engineer shall be entitled to rescind the contract as to its incomplete part. In that event, the Employer/Engineer shall not be liable to pay any compensation to the legal heirs of the deceased Contractor on account of such cancellation of contract. The Engineer’s decision as to whether the legal representatives of the deceased Contractor are capable of carrying on and completing the contract shall be final and binding on the parties. Provided further that the legal representatives of the deceased Contractor shall also not be liable to pay any damages, alleged or actually suffered by the Employer/Engineer, in respect of incomplete part of the contract. Any liability incurred by the deceased Contractor, before his death, shall be recovered from the legal representatives of the deceased Contractor of the said contracting firm as the case may be.
36.0 MODIFICATIONS TO WORK

The Engineer shall be competent to 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 execution or use of materials for the execution thereof and to any additional works to be done or any work not to be done.

The enlargement, extension, diminution, reduction, alterations or additions, referred to above shall in no way affect the validity of the contract, but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations, obligations and rates as if they had been originally and expressly included and provided for in the Bill of Quantities, specifications and drawings, and the amount to be paid there for shall be calculated in accordance with accepted rates and other extra items of works at the rates, determined as per contract. However, the rates of quantities exceeding 25% of those provided in Bill of Quantities shall be finalized as per clause 35 and 36 of these conditions.

37.0 HANDING OVER OF THE SITE & DRAWINGS/START OF WORK

(i) Site for execution of works shall be made available as soon as the work is awarded. In case, it is not possible for the Engineer to make the entire site available due to any reason, the site shall be made available by the Engineer gradually and progressively in parts. The Contractor shall have to adjust his work program accordingly.

(ii) It should be specifically noted that some of the detailed drawings may not have been finalized by the Railway/IRCON and will, therefore, be supplied to the contractor as and when they are finalized on demand. No compensation whatsoever on this account shall be payable by the Railway/IRCON Administration. No claim whatsoever will be entertained by the Railway/IRCON on account of any delay or hold up of the works(s) arising out of delay in approval of drawings, changes, modification, alteration, additions, omission and site layout plan or detailed drawings and design and or late supply of such materials as are required to be arranged by the Railway/IRCON or due to any other factor on Railway/IRCON account.

(iii) No claim for idle of labour and or idle of machinery etc. on any account will be entertained. Similarly, no claims shall be entertained for business loss or any such loss.

(iv) For some stretch land may not be available or acquired by railway. The land will be made available to contractor on proportionate basis depending up on the progress of contractor on the stretch, wherever land has been made available for the work.
38.0 ROYALTIES AND PATENT RIGHTS

The Contractor shall defray the cost of all royalties, fees and other payments in respect of patent rights and licenses which may be payable to any patentee, licensee or any other person or corporation and shall obtain all necessary licenses unless otherwise stated in the special conditions. In case of any breach (whether willfully or inadvertently) by the Contractor of this provision, the Contractor shall, indemnify the Railway/IRCON and their officers, staff, representatives against all claims, proceedings, damages, cost charges, acceptances loss and liability which they or any of them sustain, incur or be put by reason or in consequence directly or indirectly of any such breach and against payment of any royalties, damages and other monies which the Railway / IRCON may have to make to any person or any machine, instruments, process, articles, matters, or thing constructed, manufactured, supplied or delivered by the Contractor to his order under this contract.

39.0 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any moneys due to the Contractor either alone or jointly with others, including the performance guarantee amount returnable to him may be withheld or retained or encashed by exercise of lien by the Client/ Employer/Engineer against any claim of the Client/ Employer/Engineer or any other branch, office department or subsidiary of the client/ Employer/Engineer in respect of a sum of money arising out of or under any contract other than the present contract made by the Contractor alone or jointly with the client/ Employer/Engineer or any other branch, office, department or subsidiary of the client/ Employer/Engineer. It is agreed term of contract that the sum of money so withheld or retained under this clause by the client/ Employer/Engineer, shall be kept withheld or retained till the claims arising out of or under the contract, are either mutually settled or determined by the Arbitrator, or by the competent court, as the case may be and that the Contractor shall have no claim for interest or damages whatsoever on this account or any other account, in respect of any sums of money withheld retained, under this clause and duly notified to the Contractor.

40.0 VARIATION IN QUANTITY OF ITEMS COVERED BY THE BILL OF QUANTITIES

As per GCC of Railway- Sept’ 2019

41.0 ITEMS NOT INCLUDED IN THE BILL OF QUANTITIES

41.1 If any item of work not provided for in the accepted Bill of Quantities and required to be executed for completion of work, the Contractor on receipt of instructions from the Engineer, shall be bound to carry out such items of work at the rates to be decided as per sub-clauses below.
41.2 The rate for such extra items shall be derived from rate for similar items available in the accepted Bill of Quantities.

41.3 In case rates cannot be derived from the accepted Bill of Quantities, the rate may be worked out on the following basis:

a. Cost of materials and consumables at current market rates, as actually utilized in the final finished permanent work, including a reasonable percentage for wastage and cost of loading, unloading and transportation.

b. Cost of labour required for the work.

c. Hire charges for plant and machinery, scaffolding, shuttering, forms, etc. required to be used at the site of the work.

d. An amount of 10% of items (a), (b) and (c) above to allow for Contractor’s overheads, profits and other contingencies.

41.4 In all cases where extra items of work are involved, for which there are no rates in the accepted Bill of Quantities, the Contractor shall give a notice to the Engineer, of at least 15 days before the need for their execution arises.

Such a notice shall not however be necessary if the Engineer has already instructed in writing to take up such an item of work. To decide the rate, the Contractor shall furnish detailed analysis of the rates on the lines mentioned in sub-clause above and attend a meeting with Engineer to settle the rate as and when called for. The Contractor shall be bound to furnish the requisite details and to attend the meeting.

41.5 PROVISIONAL PAYMENT FOR EXTRA ITEM

In case mutually agreeable settlement of rates is not arrived at between the Engineer and the Contractor, the Contractor shall be bound to carry out the works at rates to be decided by the Engineer. In the absence of a finalised rate for a new item, the Engineer shall be entitled to certify payment to the Contractor based on a provisional rate fixed by the Engineer for the work done under the new item. This shall be subject to upward or downward adjustment after the rate is finalised by the Engineer for that item.

41.6 The decision of the Engineer under this clause shall be final and binding.

42.0 MEASUREMENTS OF WORK AND PAYMENTS

a) MEASUREMENTS

The Contractor shall be paid for the works at rates in the accepted Bill of Quantities of the contract and extra items of work at rates determined under clause of these
conditions. The measurement shall be taken by the Engineer or his representative in the presence of the Contractor or his authorized representative.

b) **MEASUREMENT OF WORK AT REGULAR INTERVALS**

The measurements of the work shall be taken in accordance with the contract during progress of work and at such intervals, as in the opinion of the Engineer or Engineer’s Representative shall be proper, having regard to the progress of the work. On an agreed date and time, the Engineer or his Representative shall take the on account or final measurements in the presence of the Contractor or his authorized representative. The Engineer or his authorized representative shall sign the measurements, which shall also be signed by the Contractor or his authorized representative as an acceptance of the measurements. If the Contractor or his representative fails to turn-up at the time of taking measurements in spite of notice to do so, the Engineer or his representative shall be entitled to record the measurements ex-parte and these shall be final and binding on the Contractor.

c) **MEASUREMENT OF WORKS AS PER RECORDS AND DRAWINGS**

i. For the purpose of measuring such permanent works, as are to be measured by records and drawings, the Contractor shall prepare records and drawings at regular intervals and submit to the Engineer or Engineer’s representative for his scrutiny.

ii. In case, there is a discrepancy in the measurements of work done and the measurements as per drawings, measurements for the minimum of the two shall only be accounted for, provided the executed work is acceptable to the Engineer.

iii. The Engineer or the Engineer’s representative shall have the right to rectify any incorrect measurements and delete/correct any measurements if it is found at a later stage that the work is incomplete, defective and/or not conforming to the specifications.

43.0 **ON ACCOUNT PAYMENTS**

a) The Contractor shall be entitled to be paid from time to time, by way of “On-account” bills, only for such works, as in the opinion of the Engineer, the Contractor has executed in terms of the contract. Such payments shall be made at intervals, not less than One Month, to be decided by the Engineer depending upon the progress of work. Payment shall be made only on submission of bills along with measurements and necessary documents by the Contractor for scrutiny of the Engineer. The amount certified shall account for all deductions, including statutory deductions as for sales tax, income tax/GST etc., recoveries for advances and any amounts due from the Contractor. Such payments made by the Engineer shall not constitute any final acceptance of the measurements. In case of any discrepancy, the Engineer shall have the right to alter, modify, reduce or diminish the quantities or classification entered
in the Measurement Books. In such cases, the Engineer shall have the right to recover any amount paid in an earlier bill/bills from any subsequent bill/bills and should the amount to be recovered be more than the amount of the subsequent bills, the Contractor shall on demand from the Engineer immediately refund the amount to the Engineer within 7 days, failing which he shall have to pay interest @1% per month till the said extra amount is paid back by him.

b) For materials brought to site by the Contractor, the Engineer may allow (interest free) payment @ 75% cost of major materials brought to site for use in the works as secured advance which will normally be paid along with next on account payment. The payment of secured advance shall be made without any bank guarantee but on written request of the Contractor along with indemnity bond indemnifying Employer/Engineer against any loss and/or damages to the materials for which secured advance is sought by the Contractor. The indemnity bond shall be submitted on a non-judicial stamp paper of minimum value of `10/- duly notarized as per the format approved by the Engineer. The Contractor should supply necessary vouchers etc. as evidence that payment has been made by the Contractor for all the materials brought to site for which secured advance is sought by the Contractor. Secured advance shall be paid at the rates derived from the accepted rate of the item(s) for which the materials are to be consumed and procurement rates, whichever is lower. The Engineer’s decision as to the Quality, Quantity and value of the materials for which such secured advance is payable will be final and binding on the Contractor. The recovery of secured advance so made will be made from the subsequent on account bills to the extent the materials are consumed in the work.

c) The Engineer may on specific request and authorization by the Contractor in writing release payments directly to the Suppliers, sub-contractors or petty contractors of the Contractor from the amount(s) certified, passed and due for payment to the contractor.

d) In cases of default by the Contractor, the Engineer may without any notice to the Contractor, release payments directly to the suppliers/sub-contractors and/or petty contractors of the Contractor. All such payments shall be recovered with interest @ 1.25% (including administrative charges) per month from the payments due to the Contractor.

e) In exceptional circumstances, if the Contractor is not able to make prompt payments to his suppliers affecting supplies of materials and progress of work, the Engineer may (but shall not be obliged to) give assurance to the suppliers for payments against supply of materials/consumables to the Contractor. In this case, the Contractor shall give to the Engineer an undertaking in writing that cost of such materials if not paid by him may be directly paid to his suppliers and recovered from his dues. Such payments shall only be made after receipt of materials at site and verification of the payments by the Contractor. The recovery of such payments shall be made with interest @ 1.25% (including administrative charges) per month from the next
payment due to the Contractor. Total payments so made on behalf of the contractor shall not exceed 5% of the Contract value during the entire contract period.

f) The decision of the Engineer regarding exceptional circumstances and payments to be made to the suppliers, sub-contractors and petty contractors under the above clause shall be final and binding on the Contractor. Such payments shall also not relieve the Contractor from any of his liabilities or obligations under the Contract.

g) No payment under the contract shall be made to the Contractor before receipt of performance security. The Engineer shall also be entitled to withhold payments under the above sub-clauses in case the Contractor fails to get himself registered under sales tax/labour laws or fails to fulfil his obligation under the contract.

h) As a practice Contractor shall not raise any RA bill for value less than 10% of the contract value.

44.0 FINAL MEASUREMENTS AND PAYMENTS

As soon as possible after completion of work, the Contractor shall submit the final bill along with detailed measurements of work done, accountal of the materials, plant and machinery issued by the Engineer and all other statements, supporting documents required for finalization of the bill. The final bill, measurements and documents submitted by the Contractor shall be scrutinized by the Engineer or his representative and in case the same are found not in order, the Engineer shall direct the Contractor to re-submit the final bill along with all details. On receipt of all requisite details and final bill from the Contractor, the Engineer shall have the final measurements taken, recorded and signed jointly. An accountal of any plant, equipment and materials issued by the Engineer to the Contractor, shall also be prepared and signed jointly. Based on the final measurements and materials and plant and equipment accountal statements, the Engineer shall prepare the final bill.

The Contractor shall sign the Engineer’s copy of the Final Bill Account in token of acceptance of the full and final value of the works performed under the contract and submit a “No Claim Certificate” on the prescribed Performa along with a list of unsettled claims, if any. The Engineer shall then arrange to make payment against the final bill.

45.0 MODE OF PAYMENT AND TAX DEDUCTION AT SOURCE

46.1 Mode of Payment:

46.1.1 All payments to the Contractor shall be made through Electronic Clearing System (ECS). The contractor shall furnish his Banker’s details in addition to his own bank account details. All amounts payable to the Contractor shall be directly credited to his bank account.
46.1.2 In case, the contractor is having his account with a bank not having Electronic Clearing System (ECS), the Contractor may open a bank account with the bank having this facility.

46.1.3 All payments to the Contractor shall be made by above means only unless specifically otherwise agreed by the Engineer in special circumstances for petty payments.

46.2 TAX DEDUCTION AT SOURCE (TDS) & OTHER DUTIES AND CESS

Income tax shall be deducted from the payments credited/released by Employer/Engineer to the Contractor against execution of work as per law of the land. The deductions shall be made as per prescribed rates prevalent from time to time unless a tax exemption certificate is produced by the Contractor. Amount of tax deduction shall be deposited with the concerned authorities and tax deduction certificate shall be issued by Employer/Engineer.

Labour Cess, as applicable, will be deducted on the gross contract value, whereas Income tax and Sales tax shall be deducted from the Contractor’s bills as per extant instructions issued from time to time, the Contractor shall furnish certificate of payment of Royalty charges from the concerned State Mining department before payment of such bills.

IRCON shall also deduct the any other tax from the Contractor’s bill at the rate as applicable as per rules framed by concerned Govt./ Local bodies from time to time and remit it to concerned department and shall issue a certificate regarding Tax/Duties/Levies so deducted on demand by the Contractor.

The Contractor shall furnish to the Engineer Registration No. under works tax and PAN (for TDS), as applicable.

46.3 Payment through Discounting of Bills on TReDS Exchange

(a) With introduction of MSME TReDS platform by the Ministry of Heavy Industries & Public Enterprises, IRCON has entered into Master Agreement with M/s. RXIL (Receivable Exchange of India Limited) for setting up TReDS Exchange where MSEs vendors of IRCON have the option to realize their payment before due date by discounting their bills on MSME TReDS Exchange platform of M/s. RXIL.

If MSEs vendors are willing to avail facility of discounting their bills through TReDS Exchange, they will first have to enter Master Agreement with M/s. RXIL and share a copy of Agreement with IRCON.

(a) In such cases, after logging in to TReDS Exchange, MSEs vendor is required to create a factoring unit on the basis of invoice after deductions/ recovery of all statutory dues. It may be noted that the factoring unit shall be verified by IRCON for net
payable amount only, i.e. after recovery/deduction of statutory dues and as per terms and conditions of the Contract Agreement.

(b) In case, the factoring unit gets financed by finances in the RXIL’s TReDS platform Exchange, IRCON’s payment liability towards MSEs vendors ceases to be existed. In such cases IRCON, shall make payment to the ultimate financer on the due date of payment as per terms of the Contract Agreement.

(c) In the event of a factoring unit remains unfinanced, IRCON shall make the payment directly to the MSEs vendor’s account through ECS mode as per sub-clause no. 64.1.1. of the GCC.

(d) IRCON shall not be liable for any damages, losses, claims and liabilities (including legal cost) resulting from any of the following:

(i) MSEs Vendor’s inability to use RXIL’s TReDS Platform or its services.
(ii) any defect in services on the TReDS platform from any Participant or any other third party through the site.
(iii) Unauthorized access by third parties to data or private information of any user/participant.
(iv) Any matter relating to services however arising, including negligence.

46.0 DEFECT LIABILITY CERTIFICATE

46.1 In the contract, the expression “Defect Liability Period” shall mean the period of defect liability prescribed elsewhere in the contract, commencing from the date of completion of the works, as certified by the Engineer.

The Contractor shall maintain, rectify and make good at his own cost any defects/deficiencies, which may develop in the work or as notified by the Engineer during Defect Liability Period. However, maintenance during Defect Liability Period shall not include day to day upkeep, cleaning, custody and security of the work.

46.2 The contract shall not be considered as completed, until a Defect Liability Certificate has been issued by the Engineer stating that the works have been completed and maintained to his satisfaction. Defect Liability certificate shall be issued by the Engineer, upon expiry of Defect Liability period or as soon thereafter as any works ordered during such period, have been completed to the satisfaction of the Engineer.

46.3 No certificate other than “Defect Liability Certificate” shall be deemed to constitute final approval of the work or part of the work for which it is issued.
47.0 EXTENSION OF COMPLETION DATE

Extension of time for the completion of the work shall be governed by Clause 17 of the GCC- 2019, and the contractor shall be responsible for requesting such extension in terms thereof. While applying for such extension, a Bar Chart showing the work already done and the program for the work to be done shall be prepared and shown in juxta position with the bar chart submitted under clause-16 of SCC-I, giving reasons for slippage activity-wise. The Railway/IRCON may agree to such extension of time of completion, if they consider justified.

48.0 LIQUIDITY DAMAGE

As per Clause 17-B of GCC Railway-sept’

49.0 SITE FACILITIES FOR THE EMPLOYER AND THE ENGINEER

Providing and maintaining a site office preferably a Porta Cabin or similar type with provision of Table/Chair and electrical equipments with electricity etc. for comfortable sitting of officials, with its maintenance during the contract period.

50.0 SURVEY TEAM AND INSTRUMENTS

Contractor will keep deployed at least one survey team and TOTAL STATION SURVEY INSTRUMENT of approved configuration with all accessories for exact and precise setting out of all the works at his own cost. Contractor shall also have to make/maintain adequate numbers of secondary reference survey pillars/ points/towers of suitable dimensions at his own cost. No additional payment shall be given on this account.

51.0 ACCESS ROAD TO SITE

51.1 The contractor shall maintain the access road including sprinkling of water regularly used by their equipment for doing scope of work under the contract and coordinate with other agencies.

51.2 If any public road/utilities are damaged by the contractor’s equipment then the same shall be repaired by them at their own cost.

52.0 Updating of Labour data on Railway Shramikkalyan Portal (Ref. Cl. 54 & 55 IRGCC).

52.1 Contractor shall abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of Clause no. 40.0: “Wages of Labour” of IRCON’s Policy. 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 of Portal shall be done as under:

a) Contractor shall apply for onetime registration of his company/ firm etc. in the Shramik kalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor’s registration on the portal within 7 days of receipt of such request.

b) Contractor once approved by the Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.

c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA)/ Contract Agreement on Shramikkalyan portal within 15 days of issue of the LOA for approval of the 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 the 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.

52.2 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 labour engaged in connection with this contract and payments made to them during the wage period in Railway’s Shramikkalyan portal at ‘www.shramikkalyan.indianrailways.gov.in’ till_______Month______Year.”

53.0 CLAIMS

Not Applicable

54.0 SETTLEMENT OF DISPUTES – RECONCILLATION and ARBITRATION:

Not Applicable

55.0 COURT OF JURISDICTION

The Jurisdiction of court for any type of dispute resolution will be in New Delhi.
PROCEDURE FOR SUSPENSION/BANNING OF BUSINESS DEALINGS

CONTENTS

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>46</td>
</tr>
<tr>
<td>2.</td>
<td>Scope</td>
<td>46</td>
</tr>
<tr>
<td>3.</td>
<td>Definitions</td>
<td>46</td>
</tr>
<tr>
<td>4.</td>
<td>Grounds on which Suspension/banning of Business Dealings can be initiated</td>
<td>47</td>
</tr>
<tr>
<td>5.</td>
<td>Initiation of Suspension/Banning</td>
<td>48</td>
</tr>
<tr>
<td>6.</td>
<td>Appeal against the Decision of the Competent Authority</td>
<td>50</td>
</tr>
</tbody>
</table>
1. Introduction

1.1 IRCON is a specialized construction organization covering the entire spectrum of construction activities and service in the infrastructure sector, especially Railways. The primary objective of IRCON is timely and efficient execution of projects assigned to it and at the same time ensuring the quality thereof. As a commercial organization IRCON is expected to adopt ethics of highest standards and a very high degree of integrity, commitment and sincerity towards the work undertaken. Accordingly, it is not in the interest of IRCON to deal with such Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded/orders issued to them. Appropriate action needs to be taken against them in accordance with the procedure prescribed herein.

1.2 This procedure shall be applicable for effecting suspension/banning of business dealing with Agencies working for IRCON. It is incumbent upon IRCON to ensure compliance with the laws and principles of natural justice for banning the business dealings with any Agency. After issue of the Ban order for dealings in IRCON the Management may consider whether or not to refer the matter to the Indian Railways to consider imposition of similar ban by Indian Railways.

1.3 Since banning of business dealings involves severe consequences for the Agency concerned, it is essential that an adequate opportunity is provided to the Agency to present its case and any explanation, if tendered, is properly considered. If necessary, a personal hearing may be given to the Agency, before passing an order of order of banning based on the facts and circumstances of the case on record.

2. Scope

2.1 The procedure for (i) Suspension and (ii) Banning of Business Dealings with Agencies, is laid down in these guidelines.

2.2 It is clarified that these guidelines do not cover the process for declaring an Agency as “Non performer” for which instructions have been issued separately.

2.3 The Suspension / banning shall be with prospective effect, i.e., it will affect future business dealings only.

2.4 These guidelines shall apply to all the Projects/Regional Offices of IRCON.

3. Definitions

3.1 In these Guidelines, unless the context otherwise requires:
i) ‘Agency’ means a ‘Bidder/Contractor /Supplier/ Consultant’

ii) ‘Competent Authority’ and ‘Appellate Authority’ shall mean the following:

   a. ‘Competent Authority’ shall be the concerned Director of IRCON and
   b. ‘Appellate Authority’ shall be CMD, IRCON

Note: ‘Competent Authority’ and ‘Appellate Authority’ shall not be the same person.

iii) ‘Investigating Agency’ shall include Central Vigilance Commission (CVC), the Vigilance Departments of IRCON/Ministry of Railways, Central Bureau of Investigation, or any Central/State Government Department having powers to investigate into the propriety of working of the Agency for IRCON.

iv) Other Terms used in this Circular shall have the same meaning as assigned to them in Clause 1102 of Chapter-XI of Vigilance Manual of Indian Railways.

4. Grounds on which Suspension/Banning of Business Dealings can be initiated:

   4.1 For security considerations, including suspected disloyalty of the Agency to the State or IRCON, as the case warrants;

   4.2 If any Director /Owner /Proprietor or partner of the Agency, is convicted by a Court of Law for an offence involving moral turpitude in relation to its business dealings with IRCON, any Government Department /Ministry or any other Public Sector Enterprise.

   4.3 If there is Strong justification for believing that any Director, Proprietor, Partner, owner of the Agency has been guilty of malpractices, such as bribery, corruption, fraud, substitution of tenderers, interpolations, etc.

   4.4 If the Agency engages a public servant dismissed/ removed from service on account of corruption or employs a person convicted for an offence involving corruption, moral turpitude or abetment of such offence, in a position where he could corrupt government servants.

   4.5 If the Agency has resorted to corrupt, fraudulent malpractices including misrepresentation of facts.

   4.6 If the Agency uses intimidation/ threats or brings outside pressure on the Company (IRCON) or/on its officials in acceptance of Tender or performance of the job under the contract.

   4.7 Based on the findings of the investigation report of the Investigating Department against the Agency that it has resorted to malafide/unlawful acts
or improper conduct on its part in matters relating to IRCON, any Government Ministry/Department or any other PSU.

4.8 If the Agency has submitted a false or wrong Affidavit along with its bid with regard to the credentials of the firm or misrepresented/ manipulated the facts in regard to or in connection with any bid submitted to IRCON.

4.9 Established litigant nature or the Agency to derive undue or benefit.

4.10 If the Agency misuses the premises or facilities of the IRCON forcefully occupies or damages the IRCON’s properties including land, water, resourced, forests/ trees or tampers with documents/record etc.

4.11 If the business dealings with the agency have been banned by the Ministry of Railways.

(Note: The above grounds are illustrative only and not exhaustive. The Competent Authority may decide to suspend/ban business dealings for any other reasonable cause and sufficient reason)

5. Initiation of Suspension/Banning

5.1 Suspension of Business dealing

5.1.1 Action for suspension may be initiated by the concerned ED/IRCON on the receipt of a report from the Project head /Functional head/ Investigating Department and if it is considered that allegations are of a serious nature, which may warrant banning of business dealings with the Agency. The report should also bring out whether pending banning of business proceedings it would be in the interest of IRCON to enter into fresh business dealings with the Agency or order immediate suspension of further business dealings with the Agency. The ED shall submit his report to the Competent Authority.

5.1.2 As far as possible, the existing contract(s) with the Agency may be continued unless the Competent Authority, having regard to the circumstances of the case decides otherwise in the interest of IRCON.

5.1.3 If the Competent Authority, after consideration of the matter, including the recommendations of the Investigating Department/report of the ED, decides that it would not be in the interest of IRCON to enter into business dealings with the Agency pending investigations, he may order suspension of business dealings with the Agency.

5.1.4 The Investigating Department may be advised to complete their investigations and submit a final report within a period of three months.
5.1.5 The order of suspension of business dealings would not remain effective for a period beyond three months from the date of the issue of the suspension order unless show cause notice for banning of business is issued to the Agency within this period. However, if the final investigation report is not received within this period, the Competent Authority may extend the period of suspension by another three months, during which period the show cause notice must be issued. Once the show cause notice is issued the suspension order will continue till decision by Competent Authority.

5.1.6 In case of suspension the Agency must be informed immediately of the suspension order with brief charges under investigation. It is not necessary to enter into correspondence with or offer explanations to the Agency at this stage.

5.1.7 The order of suspension can be issued without giving any show cause notice or personal hearing to the Agency. However, the suspension cannot be continued for an indefinite period, unless a show – cause notice for banning of business is issued with 6 (six) months, the period of suspension will either be extended or the suspension shall be revoked.

5.2 Banning of Business Dealings

5.2.1 A decision to ban business dealings with any Agency shall normally apply throughout IRCON. However, the Competent Authority can impose such a ban project/ region wise only if in the particular case banning of business dealings in respective project/region will serve the purpose and achieve its objective and banning throughout the Company is not required in view of the local conditions and impact of the misconduct /default. Any ban imposed by Corporate Office shall be applicable across all Units of IRCON.

5.2.2 An Investigating committee consisting of ED concerned, ED/Finance and an ED nominated by Competent Authority shall look into the charge(s) against the agency. The functions of the committee shall, inter –alia include:

(i) To study the report of the project head/Functional head/Investigation agency and decide if a prima- facie case for banning exists, if not, send back the case to the Competent Authority.

(ii) To recommend for issue of show –cause notice to the Agency by the competent authority as per clause 5.2.3.
(iii) To examine the reply to show –cause notice and call the Agency for personal hearing, if required.

(iv) To submit final recommendations to the Competent Authority for banning or otherwise.

5.2.3 On receipt of the report of the Investigating Committee if the Competent Authority is prima-facie of the view that action for banning of business dealings with the Agency is called for, a show-cause notice may be issued to the Agency after approval by the Competent Authority.

5.2.4 The show cause notice, duly approved by the Competent Authority, may be issued by Regd. A.D. /Speed Post by concerned ED in charge of the project along with a statement containing the imputation of misconduct or malpractice and the Agency should be asked to submit its written explanation or statement in defense within 30 days of the date of notice. If no reply is received, a decision may be taken ex- part by the Investigating Committee based on facts and evidence on record.

5.2.5 If the Agency requests for inspection of any relevant document mentioned in the show cause notice in possession of IRCON, the facility for inspection of such documents may be provided.

5.2.6 After considering the reply of the Agency and other circumstances and the recommendation of the investigating committee, a final decision shall be taken by the Competent Authority, if considered necessary after giving an opportunity for personal hearing to the Agency. The Competent Authority may then consider and pass an appropriate speaking order.

a) exonerating the Agency, if the charges are not established;

b) banning the business dealings with the Agency along with the period for which the ban would be operative, if the charges are proved.

c) whether or not to refer the matter to the Indian Railways to consider imposition of similar ban by Indian Railways.

5.2.7 The order for banning or business dealings by all units of IRCON shall be applicable to the Agency including its allied firms as defined in Para 1102 of IR Vigilance Manual.

5.2.8 Decision of Competent Authority will be intimated to the concerned ED, who will convey the same to the delinquent Agency and its allied firms and circulate it to the corporate office and all Project head/Functional head for applying these orders uniformly in IRCON. The reasons may not be disclosed in such communications. However, the
fact that the representation has been considered should invariably be mentioned in the communication.

5.2.9 The validity of the banning order shall be for a specified time period, on expiry of which, the banning order shall cease to operate, unless extended further by competent authority.

6. Appeal against the Decision of the Competent Authority:

6.1 The Agency may file an appeal against the order of the Competent Authority for suspension continuing beyond six months or order of banning business dealings with the Agency. The appeal shall lie with the Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning of business dealings or order of continuance of suspension order beyond six months.

6.2 Appellate Authority shall consider the appeal and pass an appropriate order which shall be communicated to the Agency as well as the Competent Authority. If the decision of the Competent Authority is modified by the Appellate Authority, the same will be intimated by concerned ED to the delinquent agency and its allied firm and circulates it with advice to all Project Heads and Corporate Office of IRCON. This procedure order is issued with the approval of CMD/IRCON.

P.S.: Where ED is not dealing with the case of a particular contract (or), the same action may be taken by the Coordinating GM or any other officer made in charge for the work.
1.0 The Safety may be defined:

1. State of being "safe", the condition of being protected from harm or other non-desirable outcomes. Safety can also refer to the control of recognized hazards in order to achieve an acceptable level of risk.
2. Relative freedom from danger, risk, or threat of harm, injury, or loss to personnel and/or property, whether caused deliberately or by accident.
3. Safety means keeping yourself and others free from harm or danger. It also means to avoid accidents by being careful with what you are doing.

Construction is one of the most dangerous industries. Be it a fall, a mechanical malfunction, Men–Machine Interaction, or problems with exposure, construction workers can face serious injury while on the job. A good Safety Management System can go a long way to help prevent accidents and occupational hazards. The purpose of the Safety (& Occupational Health) Services for the staff/workers is:

a) Identification & assessment of the risks from various hazards in the work place.
b) Advising on planning & organization of work & working practices.
c) Providing advice, information, training & education on Safety.
d) To implement the requirements as per ISO Standards, and IS Specs. such as IS: 18001, IS: 3786, IS: 15656, BOCWA - 1996.

1.1. Contractor’s Safety Organization:

To make successful implementation of the safety plan, the contractor/agency shall formulate the Safety Organization at project. Safety organization consists of:

a) Safety Officer\(^1\)
b) Safety team members (all engineers / supervisors working at sites)

\(^1\) If the Contract Price is equal or more than Rs. 25 Crore, then a full time qualified Safety Office\(^2\) is to be appointed by the Contractor. For works having Contract Price less than 25 Crore, an Engineer (Degree in Engineering) can be nominated as Safety Officer\(^3\).

\(^2\) Minimum Qualification of Safety Officer: Any one of the following:

i) B.Sc. / Diploma in Engg. with Advanced Safety Management Diploma from Central Labour Institute / Regional Labour Institute at Mumbai/ Chennai / Kolkata / Kanpur and Faridabad (Haryana)
ii) B.Sc. (Physics/Chemistry/Maths) with one year Full Time Advanced Safety Diploma from NICMAR, Hyderabad,

iii) B.Sc. (Physics/Chemistry/Maths) with one year Full Time Diploma in Safety Engineering offered by West Bengal State Technical Education Departments and similar courses by other states

iv) Degree in Science / Diploma in Engineering with Govt. recognized Safety Diploma from Correspondence Course of NICMAR, Annamalai University, National & State Productivity Councils, other state Technical Education Boards etc.

v) Graduate in any discipline and International qualifications like CSP (Certified Safety Professional), NEBOSH (National Examination Board in Occupational Safety and Health, UK)

For nominated Safety Officer :

i) Degree in Engineering or Technology or Architecture with practical experience of at least 2 years;

or

ii) Diploma Engineering or Technology with practical experience of at least 5 years

1.2 Responsibilities & Accountability of the Contractor / Agency

It is the obligation of all Contractors, Sub-contractors and their petty contractors to become familiar with and adhere to the provisions of the Safety (and Health & Environment) Management System as per relevant ISO standards, IRCON’s Safety, Health, and Environment (SHE) Policy, and contractual obligation to provide a safe and healthful working environment for their employees and for the persons at the site who may be affected by their work.

The contractor/agency shall submit CVs of Safety Officer/s for engagement at site/s.

1.3(i) Documented Information: The contractor/ Agency shall formulate and maintain the following documents:

1. Development of Safety (& Health) Monitoring Plan

2. Setting of ‘Safety & Health Objectives’ of the project or particular process of the project

3. Maintaining of Applicable Legal & Other Requirements Register and to ensure that all statutory and Safety (& health) requirements are being met.

4. Implementation of BOCWA - 1996

5. Identification of hazards for each activity and analyze the corresponding risks. The preparation and implementation the control procedure to eliminate / substitute/ minimize the risk.
6. Maintenance all equipments, tools, tackle & implements in a safe & serviceable condition.
7. Periodic testing & servicing of all the tools & tackles is to be ensured and testing records to be maintained.
8. Ensure ‘Permit To Work’ for all hot works and other critical works.
9. For Electrical Works ensure ‘Lock Out, Tag Out’
10. All near miss should be reported to IRCON
11. Complete and promptly submit an accident, unusual occurrence or dangerous incident reports.
12. A plan should be in place to face any Emergencies concerning Safety
13. Emergency Control Procedures
14. Training Records
15. Records of Internal Audits

1.3 (ii) Provision of Safety Protection Arrangements at Sites: The contractor/Agency shall make the following provisions at sites:

1. Safety Induction Training should be provided to each and every one before deploying at site. The induction shall include, but not limited to:
   a. Safety requirement.
   b. Fire prevention.
   c. Emergency procedures.
   d. Security requirement.
   e. Housekeeping procedures.
   f. Use Personal Protective Equipment as required.
2. The Contractor shall issue the identity card to each and every person engaged related to the contract works.
3. Sufficient Numbers of Safety and Health Related Posters to be displayed at site.
4. Safety instructions regarding use of P & M shall be pasted at appropriate places.
5. Conduct daily “Toolbox Meeting” before start of work and keep the records.
6. Organize safety meetings with Safety Officer as chairman at least once in a month and keep the records & photographs of the same.
7. Provide Personal Protective Equipment for all employees, free of cost.
8. The Contractor shall ensure that all equipment, plants and machines engaged at site are checked and passed as per the Safety norms.
9. Suitable guards shall be ensured on all moving parts of machines.
10. Access to Working Areas Below Ground Level: For excavation depth exceeding 1.5M (but less than 3M) and of minimum size of 1M x 3M (Width x Length), a steel step ladder with tread 30cm and rise 15cm and with hand rails should be used for way in / out. If the depth of excavation is more than 3M then an access steel tower staircase should be used. When the size of excavation being carried out mechanically is quite large with minimum width of 3M and length at least two times the width then for depth exceeding 1.5M (but less than 3M) steps cut in firm ground at least at two locations may serve the purpose, if approved by Site In-charge. For deep excavations more than one steel tower staircase accesses are required.

11. Access to Working Areas Above Ground Level: Working above ground level or work at height means work in any place where, if precautions were not taken, a person could fall a distance liable to cause personal injury. You are working at height if you: 1) work above ground/ floor level. 2) are working on a ladder or a flat roof 3) could fall from an edge, through an opening or fragile surface or a hole in the ground. For access to / out of working areas at height steel step ladders with tread 30cm and rise 15cm and with hand rails should be used. The working platform (steel only) should be stable without any slippery surface, with 15cm toe board and guard rails at 90cm and 120 cm heights. While working at heights, the workers should wear body harness belts and the hooks should be anchored with solid and non yielding support above shoulder height, always.

12. All fall prone areas such as slabs, opening in slabs, column heads, bridges during erection etc. should be protected by hard barricades like pipe barricades.

13. Provide Fire Extinguishers/ Fire Stand at each flammable locations and as suggested by the Safety Officer/ the Engineer/ the Project Head.

14. Suitable Storage space for storage of Oxygen and LPG Cylinders as per standards is to be developed by the Contractor/ Agency.

15. For metal cutting works, a trolley shall be used to carry cylinders. The use of good conditioned gas pipes shall be ensured and non-return valves and flash back arrestors shall be used at either end of each pipe. The Cutter shall always use good quality goggles.

16. The welding shall be carried out using Rectifiers and there will be no joint in the leads. The return current lead should be clamped with earth. A good quality welding shield shall be used by the welder.

17. The erected Pre-cast girders or any other element should be supported by steel members to ensure stability during construction stage.

18. Cooperate with Ircon and other subcontractors working in the vicinity in maintaining safety and health at workplace.

19. Report immediately to Ircon, all fatal, serious occupational injuries, incapacity for more than 3 days or illness (requiring hospitalization). The
contractor must investigate these incidents and should submit a complete report within 24 hours of the occurrences.

20. All lifting equipment/ cranes/ wire ropes shall carry load test certificate.

21. The cranes and Hydra cranes shall be fitted with Safe Load Indicator (SLI).

22. The construction area shall be barricaded properly or as instructed by Site In-charge.

23. Shall maintain the smooth traffic if working near running traffic. Suitable safety measures shall be in place while working near running traffic / railway track. While working near running track, the instructions of Railway’s and Site In-charge shall be followed in toto.

24. For road works, suitable traffic diversion with all sign boards as per IRC Specs. should be installed. The excavated area or any other area that pose danger to the running traffic should be hard barricades using either steel guards or New Jersy Barriers or any other method as approved by Site In-charge.

25. For power distribution at site, proper distribution boards with lock & key arrangements and fitted with rain protection hood and having MCB controlled power sockets, 30mA ELCB should be used.

26. All power cables to supply power at site should be joint free and laid properly either overhead or underground.

For all the above said Safety (& Health) points, Documented Information are to be maintained by the Contractor / Agency and shall be checked by IRCON from time to time. With the monthly bills original copies of all these Documented Information are to be submitted to IRCON.
1.4 FUNDAMENTAL SAFETY RULES APPLICABLE TO EACH EMPLOYEE AND WORKERS

1.4.1 ALCOHOL / BANNED DRUGS

Anyone found to be under the influence of alcohol or banned drugs will be suspended forthwith. This offence amounts to gross misconduct and will result in disciplinary action being taken. PH reserves the right to request alcohol and/ or drugs tests at anytime should there be probable cause.

1.4.2 PLANT AND EQUIPMENT

All plant and equipment must be in good condition. Any defect in plant or equipment must be notified by the Contractor/ Agency Engineer, and the item withdrawn from service until repaired or replaced. A suitable guard should be in use over all the movable parts.

All electrical equipment must be supported by certificate confirming its last inspection date.

1.4.3 PLANT CERTIFICATES

All plant requiring certification, whether for the machine, the operator or process, must arrive with the machine and the records are to be maintained. Any changes in circumstances must also be notified and recorded (e.g. change of driver / machine).

1.4.4 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Contractor/ Agency shall ensure that PPE must be worn for all activities at the site. The minimum PPE for Head, Foot and Eye Protection must be worn by all (including executives) during all times at site. For particular activities requiring specified PPE the same must be provided by the Contractor/ Agency in time.

1.4.5 METHOD STATEMENTS AND RISK ASSESSMENTS

Work must be carried out in compliance with the Method Statements and Risk Assessments that have been prepared for that activity. Nobody should proceed until he/ she is familiar with the assessment / statement and the restrictions imposed by it.

1.4.6 WELFARE FACILITIES

The contractor/ agency shall provide canteen and welfare facilities for all workforce at site, and the same must be maintained in a clean condition. The dustbins are to be provided for disposing waste food and packaging.
1.4.7 REPORTING ACCIDENTS AND/OR INJURIES

All near miss, accidents and/or injuries must be reported to the Site In-charge/IRCON. A detailed investigation report is to be prepared by the contractor/agency and to be submitted to IRCON.

1.4.8 LOCATION OF FIRST AID KIT

First Aid Kit(s) shall be provided at suitable location(s) and the locations are to be identified clearly. Schedule “H” drugs are prohibited in First Aid kit.

1.4.9 EMERGENCY PROCEDURES/ASSEMBLY POINT/ EMERGENCY TELEPHONE NUMBERS

A suitable assembly point is to be marked for assembling in case of any emergency situation arisen. The Important and Emergency Contact Numbers are to be displayed on a board readable from a distance and letters should be 7.5cm (minimum) in height and 1.2cm (minimum) in thickness.

1.4.10 MATERIAL HANDLING

The contractor/agency shall ensure that proper & certified tools and equipment are available for material handling and heavy lifting work.

1.4.11 WORKING AT HIGH ELEVATION

The contractor/agency shall pay special attention to avoid fall while working at site by using fall arrestors, body harness, proper working platform with railing and toe boards. The persons engaged for working at height should be given proper training.
SECTION – 2
HEALTH

2.0. The term ‘Occupational Health & Safety’ covers services entrusted with essentially preventive functions & responsibilities for staff, workers & their families. The purpose of the Occupational Health & Safety services for the staff/ workers is:

a) Identification & assessment of the risks from health hazards in the work place.
b) Advising on planning & organization of work & working practices.
c) Providing advice, information, training & education on occupational health, safety & hygiene.
d) To implement the requirements as per ISO Standards, and IS Specs. such as IS: 18001, IS: 3786, IS: 15656, BOCWA - 1996.

2.1 Contractor’s Occupational Health Organization:
To make successful implementation of the occupational health (& safety) plan, and to fulfill objectives as per IRCON’s SHE Policy, formulation of occupational health organization shall be the sole responsibility of the Contractor/ Agency. For this the contractor / agency shall establish the organization consists of:

a) Health Officer (1)
b) Health team members (all engineers / supervisors working at sites)

(1) If the Contract Price is equal or more than Rs. 100 Crore, then a full time qualified Health Office (2) is to be appointed by the Contractor. For works having Contract Price less than 100 Crore, an Engineer (Degree in Engineering) can be nominated as Health Officer (3).

(2) Minimum Qualification of Health Officer
   i) MBBS degree from a medical institute recognized by the Medical Council of India, or
   ii) Recognized degree or diploma in industrial health or equivalent post-graduate certificate of training in industrial heath.

(3) For nominated Health Officer :
   i) Degree in Engineering or Technology or Architecture with practical experience of at least 2 years; or
   ii) Diploma Engineering or Technology with practical experience of at least 5 years.
SAFETY, HEALTH, AND ENVIRONMENT MANAGEMENT SYSTEM

2.2 Responsibilities & Accountability of the Contractor / Agency

It is the obligation of all Contractors, Sub-contractors and their petty contractors to become familiar with and adhere to the provisions of the Occupational Health (and Safety & Environment) Management System as per relevant ISO standards and contractual obligation to provide a safe and healthful working environment for their employees and for the persons at the site who may be affected by their work.

The contractor/agency shall submit CVs of Health Officer/s for engagement at site/s.

2.3 (i) Documented Information: The contractor/ Agency shall formulate and maintain the following documents:

1. Development of Health (& Safety) Monitoring Plan
2. Setting of ‘Safety & Health Objectives’ of the project or particular process of the project
3. Maintaining of Applicable Legal & Other Requirements Register and to ensure that all statutory and Health (& safety) requirements are being met.
4. Implementation of BOCWA - 1996
5. List of identified Hazards of construction activities and Risk analysis of these identified Hazards. The preparation and implementation the control procedure to eliminate / substitute/ minimize the risk.
6. Medical services: To meet any emergency, any nearby hospital should be on the panel of contractor/ agency and Address of the Hospital and Phone Numbers of Concerned Persons to be contacted should be displayed on a board readable from a distance and letters should be 7.5cm (minimum) in height and 1.2cm (minimum) in thickness. Suitable transport arrangement should be promptly made to carry the sick or injured workers to the nearby hospital or other equivalent treatment center.
7. The mock drills are required to be conducted and Records of Mock drills to be maintained.
8. Keeping the records of Material Safety Data Sheet (MSDS) of Chemicals and other hazardous construction materials
9. A plan should be in place to face any Health Emergencies due to spread of Vector-borne diseases and epidemic or any other disease.
10. Emergency Control Procedures
11. Training Records
12. Records of Internal Audits
2.3 (ii) Provision of Occupational Health and Safety Protection Arrangements at Sites: The contractor/ Agency shall make the following provisions at sites:

1. Sufficient Numbers of Safety and Health Related Posters to be displayed at site.
2. Availability of drinking water
3. Availability of toilet facilities
4. Availability of First Aid Box
5. Availability of trained First Aider.
6. The sites where ‘Working at Height’ is involved, for rescue, at least one Inertia Reel – a safety device must be available.
7. Proper lighting system should be in place at site of work.

2.4 Labour Camps:

Camp sites should:
- be provided with portable drinking water and proper drainage facilities.
- Meal rooms & canteens with (1) a sufficient number of tables & chairs or benches, (2) drinking water; (3) adequate facilities for cleaning utensils, etc;
- the accommodation should be effectively protected from weather, ground moisture, mosquito etc..
- suitable provisions should be made for lighting, ventilation and sanitation.
- Adequate washing facilities should be provided for all workers, in which (1) There is a sufficient flow of clean water ; (2) There is adequate means of removing waste water ;

Construction Sites should:
- be provided with portable drinking water
- Meal rooms & canteens with (1) a sufficient number of tables & chairs or benches, (2) drinking water; (3) adequate facilities for cleaning utensils, etc;
- suitable provisions should be made for lighting, ventilation and sanitation.

For all the above said Health (& Safety) points, Documented Information are to be maintained by the Contractor / Agency and shall be checked by IRCON from time to time. With the monthly bills original copies of all these Documented Information are to be submitted to IRCON.
3.0 During construction works many by-products and effluents are generated like residue dusts, wastewater, air emissions, noise emission etc, which are discharged into the surroundings and create imbalance in the environment.

There are numerous laws, regulation and statutes, which govern and direct the construction processes with the aim and purpose to eliminate/ substitute/ minimize the various kinds of pollutants in the environment.

Contractor(s)/ Subcontractor(s)/ Agency shall confirm to all the Indian Environmental Laws and Codes, and objectives of IRCON’s SHE Policy, as are applicable to their construction activities. To specify a few, the Contractor shall comply with but not limited to:

- Building & Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (BOCWA)
  - Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998 (BOCWR)

- Environment Protection Act,1986 (Amended 1991)
  - The Hazardous & Other Wastes (Management & Trans-boundary Movement) Rules,2016
  - E-Waste (Management) Rules 2016
  - Batteries (Management & Handling) Rules,2001

- The Air (Prevention and Control of Pollution) Act,1981 (Amended 1987)
  - The Noise Pollution (Regulation and Control) Rules, 2000

- The Water (Prevention & Control of Pollution) Act,1974 (Amended 1988)
- The Water (Prevention & Control of Pollution) Cess Act, 1977 (Amended 1992)
- The Indian Forest Conservation Act, 1980 (Amended 1992)
- The Factories Act, 1948 (Amended 1987)
- Motor Vehicle Act,1988
- Delhi Fire Service Act, 2007
- Petroleum Act,1934
- The Explosives Act, 1884
- Electricity Act, 2003
- Agreement with IRCON/ Client
- ISO 14001 Standards
3.1 Nomination of Environmental Officer
Contractor shall nominate one Environmental Officer\(^{(1)}\). The Environmental Officer shall monitor and control environmental matters associated with the execution of Contract.

\(^{(1)}\) If the Contract Price is equal or more than Rs. 100 Crore, then a full time qualified Environment Officer\(^{(2)}\) is to be appointed by the Contractor. For works having Contract Price less than 100 Crore, an Engineer (Degree in Engineering) can be nominated as Environment Officer\(^{(3)}\).

\(^{(2)}\) Minimum Qualification of Environment Officer
i) Govt. recognized PG Degree / PG Diploma / Degree in Environmental Engineering / Science;
ii) Post Graduate Diploma in Industrial Safety & Environmental Management (PGDISEM) from any of the National Institute of Industrial Engineering.

\(^{(3)}\) For nominated Environmental Officer:
i) Degree in Engineering or Technology or Architecture with practical experience of at least 2 years;
ii) Diploma Engineering or Technology with practical experience of at least 5 years

3.2 Responsibilities & Accountability of the Contractor / Agency
It is the obligation of all Contractors, Sub-contractors and their petty contractors to become familiar with and adhere to the provisions of the Environment (and Safety & Health) Management System as per relevant BS/ ISO standards and contractual obligation to prevent the environment de-gradation due to construction activities and other construction related activities and do something good to enhance the environment.

The contractor/agency shall submit CVs of Environment Officer/s for engagement at site/s.

3.3 (i) Documented Information: The contractor/ Agency shall formulate and maintain the following documents:
1. Development of Environmental Management Plan for the project activities
2. Setting of ‘Environmental Objectives’ of the project or particular process.
3. Maintaining of Applicable Legal & Other Requirements Register and to ensure that all statutory and environmental requirements are being met.
4. Preparation of Environmental Aspect of activities and its significant Impacts.
5. Preparation of Operational Control procedures for significant impacts
SAFETY, HEALTH, AND ENVIRONMENT MANAGEMENT SYSTEM

6. Ensure proper liaison with Department of Forest and other Local Government Departments and to provide support to the officers of IRCON and external agencies during their inspection

7. A plan should be in place to face any Environmental Emergencies

8. Emergency Control Procedures

9. Training Records

10. Records of Internal Audit

3.3 (ii) Provision of Environment Protection Arrangements at Sites: The contractor/Agency shall make the following provisions at sites:

1. Environment Control requirements at borrow areas, quarries and Construction Camps.

2. Environment Control requirements at Crusher plant, Hot mix plant, WMM plant, Batching plant, Casting yard etc. such as control of dust (in cement silo filter should be provided), reduction in noise generation.

3. Environment Control Requirements during transport of material like covering of dump trucks, avoid over loading.

4. Environment Control requirements during Drilling and Blasting

5. Environment Control Requirements at Dumping Sites

6. Monitoring of Air Quality including dust pollution and Control

7. Water Quality Monitoring and Control

8. Ensure PUCC for all DGs, vehicles and all construction machines & equipment having IC Engine.

9. Noise Monitoring and Control

10. Hazardous Waste Monitoring and Control

11. Contaminated Site Monitoring and Control

12. Increase awareness level through environmental training for the construction supervision site staff.

For all the above said Environment points, Documented Information are to be maintained by the Contractor / Agency and shall be checked by IRCON from time to time. With the monthly bills original copies of all these Documented Information are to be submitted to IRCON.

For the convenience, the above said Documented Information on Safety, Health and Environment may be submitted in book form on monthly / quarterly basis after taking the approval for such submittals from Project Head/ the Engineer.

*****
As per list attached

Sub: Indian Railways Standard General Conditions of Contract


2. Based on the feedback received from different zonal railways, a few provisions of above GCC have been further reviewed to expedite execution of works.

3. Board (ME. FC) has approved new Indian Railways Standard General Conditions of Contract, September 2019 (GCC, September 2019).

4. The GCC, September 2019 has been uploaded on Railway Board’s website. It may be accessed through the path: www.indianrailways.gov.in/railwayboard >> “About Indian Railways” >> “Railway Board Directorates” >> “Civil Engineering” >> “Policy Matters” >> IR General Conditions of Contract, September 2019”.

5. The GCC, September 2019 shall be applicable to works contracts on Indian Railways with prospective effect.

6. This issues with the concurrence of Finance Directorate of Ministry of Railways.

[Signature]

(karvyakari nirdeeshak sitwale inji.(ji)/railway board)

New Delhi, dated 06.09.2019

Copy forwarded for information to:
1. The Deputy Comptroller & Auditor General of India (Railways), Room No. 224, Rail Bhawan, New Delhi.
2. The PFAs, All Indian Railways
LIST FOR DISTRIBUTION (Letter No. 2018/CE-I/CT/37/GCC/Policy, dated 04.09.2019)

1. General Managers, All Indian Railways & Production Units
2. General Manager (Con), N.F. Railway, Guwahati.
3. General Manager CORE, Allahabad.
4. Principal Chief Engineers, All Indian Railways.
5. Chief Administrative Officers (Con), All Indian Railways (except N.F. Railway)
6. Chief Vigilance Officers, All Indian Railways.
7. CAO/CAO(R), COFMOW, Tilak Bridge, New Delhi.
8. CAO/CAO(R), Diesel Locomotive Works, Patiala (Punjab).
9. CAO, Rail Coach Factory/Rae Bareli Project, Kishanganj, Delhi -110007.
10. Director General, RDSO, Manak Nagar, Lucknow.
11. Director General, Railway Staff College, Vadodara
12. Director, IRICEN, Rail Path, Pune – 411 001 (Maharashtra).
13. Director, IRIEEN, PB No.-233, Nasik Road-422101 (Maharashtra)
14. Director, IRIS, Taa Naka Road, Lalla Guda, Secunderabad-500017.
15. Director, IRIMEE, Jamalpur Distt-Jamalpur, PIN-811214 (Bihar).
16. Director, IRITM, Sarswati Residential Estate, IRITM Campus, Manak Nagar, Lucknow.
17. MD, DMRC, Metro Bhawan, 13, Fire Bridge Lane, Barakhamba Road, New Delhi-110 001.
18. MD, CONCOR, Concor Bhawan, C-3, Mathura Road, Opp. Apollo Hospital, New Delhi-110076.
19. IRCON International Limited, C-4, District Centre, Saket, New Delhi-110017
20. MD, RITES Ltd., RITES Bhawan, Plot No.1, Sector-29, Gurgaon.
21. CMD, RVNL, August Kranti Bhawan,Plot No.25, 1st Floor, Bhikaji Cama Place, New Delhi.
22. MD, MRVC Ltd., Churchgate Station Bldg, Mumbai- 400020
23. CMD, KONKAN Railway Corporation Ltd, Rail Bhawan, New Delhi-110001.
24. MD, DFCCIL, 5th Floor, Pragati Maidan Metro Station Building Complex, New Delhi-110001
25. MD, RLDA, Near Safdarjung Railway Station, Moti Bagh, Phase-I, New Delhi-110021
26. MD, CRIS, Chanakyapur, New Delhi.
27. CMD, RailTel Corporation of India Ltd. Plot No. 143, Institutional Area, Sector-44, Gurgaon – 122003.
28. MCF, Rae Bareilly
29. CME, IROAF, 12th Floor, Core-I, Scope Minar, Distt. Centre, Laxmi Nagar, Delhi-110092
30. CAO (Workshop Projects), Chamber Bhawan, Judge’s Court Road, Anta Ghat, Patna-800001, Bihar.
31. General Secretary, IRCA, DRM Office, New Delhi.
32. General Secretary, AIRF, Rail Bhawan, New Delhi
33. General Secretary, NFIR, Rail Bhawan, New Delhi
34. General Secretary, IRPOF, Rail Bhawan, New Delhi
35. General Secretary, FROA, Rail Bhawan, New Delhi
36. General Secretary, AIRPA, Rail Bhawan, New Delhi
37. General Secretary, AISC & STREA, Rail Bhawan, New Delhi
38. The Secretary, RBSS, Group (A) Offices Association, Rail Bhawan
39. The Secretary, RBSS, Group (B) Offices Association, Rail Bhawan
40. General Secretary, RBSSS Association, Rail Bhawan
41. The Secretary, RBMSA, Rail Bhawan
42. The Secretary, Railway Group (D) Employees Association, Rail Bhawan

Copy to:
CRB, ME, M(Tr.), M(RS), FC, MS, DG(S&T), DG(RS), DG(RHS), DG(RPF), AM(CE), AM(Works), AM(B), AM(Elec.), AM(RS), AM(ME), AM/Tele, AM/C&IS, AM/Sig., AM(Plg.), PED/SDE, PED(Bridges), PED(Vigilance), PED/Transformation, EDCE(G), EDCE(P), EDTD(M), EDTD(MC), EDTD(P), EDTD(B&S), EDF(X)-I, EDF(X)-II, ED(Works), EDW(Plg.), ED/Project(Mon.), ED(L&A), ED/SDE, ED(PSU), EDVE, ED(Safety), ED (Sig. Dev.), ED(Tele), EDRS(G), EDRE, EDEE(G), EDFE, EDE(N), ED(Accounts), ED/T&MPP, EDME(Chg.), EDME(Frt.), ED/Plg., ED/MTP, JS(conf), JS(P), JS(G), JS(D), Vigilance-III, Vig(Conf) of Railway Board.
Indian Railways
Standard
General Conditions of Contract

GCC September 2019

New Delhi

Engineering Department
Indian Railways

STANDARD GENERAL CONDITIONS OF CONTRACT

INDEX

PART - I
REGULATIONS FOR TENDERS AND CONTRACTS

<table>
<thead>
<tr>
<th>Clause</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Index</td>
<td>(i) to (iv)</td>
</tr>
<tr>
<td>1.</td>
<td>Meaning of Terms</td>
<td>1</td>
</tr>
<tr>
<td>1.0</td>
<td>Applicability</td>
<td>1</td>
</tr>
<tr>
<td>1.01</td>
<td>Order of Precedence of Document</td>
<td>1</td>
</tr>
<tr>
<td>1.1</td>
<td>Interpretation</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Definition</td>
<td>1</td>
</tr>
<tr>
<td>1.3</td>
<td>Singular And Plural</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Credentials Of Contractors</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>Application for Registration</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Tenders for Works</td>
<td>4</td>
</tr>
<tr>
<td>5.</td>
<td>Tender Forms</td>
<td>4</td>
</tr>
<tr>
<td>6.</td>
<td>Omission and Discrepancies</td>
<td>4</td>
</tr>
<tr>
<td>7.</td>
<td>Earnest Money</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td>Care in Submission of Tenders</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>Consideration Of Tenders</td>
<td>6</td>
</tr>
<tr>
<td>7A.</td>
<td>Right of Railway to Deal with Tenders</td>
<td>6</td>
</tr>
<tr>
<td>10.</td>
<td>Two Packets System of Tendering</td>
<td>6</td>
</tr>
<tr>
<td>11.</td>
<td>Contract Documents</td>
<td>6</td>
</tr>
<tr>
<td>12.</td>
<td>Execution of Contract Documents</td>
<td>6</td>
</tr>
<tr>
<td>13.</td>
<td>Form of Contract Documents</td>
<td>7</td>
</tr>
<tr>
<td>Annexures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annexure-I</td>
<td>Tender Form :</td>
<td>8</td>
</tr>
<tr>
<td>First Sheet</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Second Sheet</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Third Sheet</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Annexure-II</td>
<td>Agreement for Zone Contract</td>
<td>25</td>
</tr>
<tr>
<td>Annexure-III</td>
<td>Work Order Under Zone Contract</td>
<td>27</td>
</tr>
<tr>
<td>Annexure-IV</td>
<td>Form for Contract Agreement Of Works</td>
<td>29</td>
</tr>
<tr>
<td>Annexure-V</td>
<td>Format for Affidavit to be submitted / Uploaded Tenderer alongwith the tender documents</td>
<td>30</td>
</tr>
<tr>
<td>Annexure-VI</td>
<td>Tenderer's Credentials (Bid Capacity)</td>
<td>32</td>
</tr>
</tbody>
</table>
## PART - II

### STANDARD GENERAL CONDITIONS OF CONTRACT

<table>
<thead>
<tr>
<th>Para</th>
<th>Subject</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Definitions And Interpretation</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>(1) Definitions</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>(2) Singular and Plural</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>(3) Headings and Marginal Headings</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td><strong>General Obligations</strong></td>
<td>36</td>
</tr>
<tr>
<td>2.</td>
<td>Execution, Co-Relation and Intent of Contract Documents</td>
<td>36</td>
</tr>
<tr>
<td>3.</td>
<td>(1) Law Governing the Contract</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>(2) Compliance to Regulations and Bye-Laws</td>
<td>36</td>
</tr>
<tr>
<td>4.</td>
<td>Communication to be in Writing</td>
<td>37</td>
</tr>
<tr>
<td>5.</td>
<td>Service of Notices on Contractors</td>
<td>37</td>
</tr>
<tr>
<td>6.</td>
<td>Occupation and Use of Land</td>
<td>37</td>
</tr>
<tr>
<td>7.</td>
<td>Assignment or Subletting of Contract</td>
<td>37</td>
</tr>
<tr>
<td>8.</td>
<td>Assistance by Railway for the Stores to be Obtained by the Contractor</td>
<td>39</td>
</tr>
<tr>
<td>9.</td>
<td>Railway Passes</td>
<td>39</td>
</tr>
<tr>
<td>10.</td>
<td>Carriage of Materials</td>
<td>39</td>
</tr>
<tr>
<td>11.</td>
<td>Use of Ballast Train</td>
<td>39</td>
</tr>
<tr>
<td>12.</td>
<td>Representation on Works</td>
<td>39</td>
</tr>
<tr>
<td>13</td>
<td>Relics and Treasures</td>
<td>40</td>
</tr>
<tr>
<td>14.</td>
<td>Excavated Material</td>
<td>40</td>
</tr>
<tr>
<td>15.</td>
<td>Indemnity by Contractors</td>
<td>40</td>
</tr>
<tr>
<td>16.</td>
<td>(1) Security Deposit</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>(2) Refund of Security Deposit</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>(3) Interest on Amount</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>(4) Performance Guarantee</td>
<td>41</td>
</tr>
<tr>
<td>17.</td>
<td>Force Majeure Clause</td>
<td>43</td>
</tr>
<tr>
<td>17-A.</td>
<td>Extension of Time in Contracts</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>(i) Extension due to Modification</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>(ii) Extension for Delay not due to Railway or Contractor</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>(iii) Extension for Delay due to Railways</td>
<td>44</td>
</tr>
<tr>
<td>17-B.</td>
<td>Extension of Time for Delay due to Contractor</td>
<td>44</td>
</tr>
<tr>
<td>17 C</td>
<td>Bonus for Early Completion of Work</td>
<td>45</td>
</tr>
<tr>
<td>18.</td>
<td>Illegal Gratification</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td><strong>Execution Of Works</strong></td>
<td>46</td>
</tr>
<tr>
<td>19.</td>
<td>(1) Contractor's Understanding</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>(2) Commencement of Works</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>(3)</td>
<td>Accepted Programme of Works</td>
<td>46</td>
</tr>
<tr>
<td>(4)</td>
<td>Setting out of Works</td>
<td>46</td>
</tr>
<tr>
<td>20.</td>
<td>(1)</td>
<td>Compliance to Engineer's Instructions</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Alterations to be Authorised</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>Extra Works</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>Separate Contracts in Connection with Works</td>
</tr>
<tr>
<td>21.</td>
<td></td>
<td>Instructions of Engineer's Representative</td>
</tr>
<tr>
<td>22.</td>
<td>(1)</td>
<td>Adherence to Specification and Drawings</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Drawings and Specifications of the Works</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>Ownership of Drawings and Specifications</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>Compliance with Contractor's Request for Details</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>Meaning and Intent of Specifications and Drawings</td>
</tr>
<tr>
<td>23.</td>
<td>Working During Night</td>
<td>48</td>
</tr>
<tr>
<td>24.</td>
<td>Damage to Railway Property or Private Life and Property</td>
<td>48</td>
</tr>
<tr>
<td>25.</td>
<td>Sheds, Stores-Houses and Yards</td>
<td>49</td>
</tr>
<tr>
<td>26.</td>
<td>Provision of Efficient and Competent Staff at Work Sites by the Contractor</td>
<td>49</td>
</tr>
<tr>
<td>26A.</td>
<td>Deployment of Qualified Engineers at Work Sites by the Contractor</td>
<td>50</td>
</tr>
<tr>
<td>27.</td>
<td>(1)</td>
<td>Workmanship and Testing</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Removal of Improper Work and Materials</td>
</tr>
<tr>
<td>28.</td>
<td>Facilities for Inspection</td>
<td>51</td>
</tr>
<tr>
<td>29.</td>
<td>Examination of Works before Covering up</td>
<td>51</td>
</tr>
<tr>
<td>30.</td>
<td>Temporary Works</td>
<td>51</td>
</tr>
<tr>
<td>31.</td>
<td>(1)</td>
<td>Contractor to Supply Water for Works</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Water Supply from Railway System</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>Water Supply by Railway Transport</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>(A) Contractor to Arrange Supply of Electric Power for Works</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(B) Electric Supply from the Railway System</td>
</tr>
<tr>
<td>32.</td>
<td>Property in Materials and Plants</td>
<td>52</td>
</tr>
<tr>
<td>33.</td>
<td>(1)</td>
<td>Tools, Plant and Materials Supplied by Railway</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Hire of Railway's Plant</td>
</tr>
<tr>
<td>34.</td>
<td>(1)</td>
<td>Precautions During Progress of Works</td>
</tr>
<tr>
<td></td>
<td>(2)</td>
<td>Roads and Water Courses</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>Provision of Access to Premises</td>
</tr>
<tr>
<td></td>
<td>(4)</td>
<td>Safety of Public</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>Display Board</td>
</tr>
<tr>
<td>35.</td>
<td>Use Of Explosives</td>
<td>53</td>
</tr>
<tr>
<td>36.</td>
<td>Suspension of Works</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Suspension Lasting More Than Three Months</td>
<td>54</td>
</tr>
<tr>
<td>37.</td>
<td>Rates for Items of Works</td>
<td>54</td>
</tr>
<tr>
<td>No.</td>
<td>Section</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>Demurrage and Wharfage Dues</td>
<td>55</td>
</tr>
<tr>
<td>39.</td>
<td>Rates for Extra Items of Works</td>
<td>55</td>
</tr>
<tr>
<td>40.</td>
<td>(1) Handing over of Works</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>(2) Clearance of Site on Completion</td>
<td>56</td>
</tr>
<tr>
<td>40A</td>
<td>2% off loading of work</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Variations In Extent Of Contract</td>
<td>57</td>
</tr>
<tr>
<td>41.</td>
<td>Modification to Contract to be in Writing</td>
<td>57</td>
</tr>
<tr>
<td>42.</td>
<td>Power of Modifications to Contract</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Valuation of Variations</td>
<td>58</td>
</tr>
<tr>
<td>43.</td>
<td>Claims</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>(1) Quarterly Statement of Claims</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>(2) Signing of ‘No Claim Certificate’</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Measurement, Certificates And Payments</td>
<td>59</td>
</tr>
<tr>
<td>44.</td>
<td>Quantities in Schedule Annexed to Contract</td>
<td>59</td>
</tr>
<tr>
<td>45.</td>
<td>Measurements of Works</td>
<td>59</td>
</tr>
<tr>
<td>46.</td>
<td>(1) &quot;On Account&quot; Payments</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>(2) Rounding off Amounts</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>(3) &quot;On Account&quot; Payments not Prejudicial to Final Settlement</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>(4) Manner of Payment</td>
<td>62</td>
</tr>
<tr>
<td>46A</td>
<td>Price Variation Clause (PVC)</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>1. - Applicability</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>2. - Base Month</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>3. - Validity</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Components &amp; Percentages</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Price Variation During Extended Period of Contract</td>
<td>66</td>
</tr>
<tr>
<td>47.</td>
<td>Maintenance of Works</td>
<td>67</td>
</tr>
<tr>
<td>48.</td>
<td>(1) Certificate of Completion of Works</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>(2) Contractor not Absolved by Completion Certificate</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>(3) Final Supplementry Agreement</td>
<td>68</td>
</tr>
<tr>
<td>49.</td>
<td>Approval only by Maintenance Certificate</td>
<td>68</td>
</tr>
<tr>
<td>50.</td>
<td>(1) Maintenance Certificate</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>(2) Cessation of Railway’s Liability</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(3) Unfulfilled Obligations</td>
<td>69</td>
</tr>
<tr>
<td>51.</td>
<td>(1) Final Payment</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(2) Post Payment Audit</td>
<td>69</td>
</tr>
<tr>
<td>51-A</td>
<td>Production of Vouchers etc. by the Contractor</td>
<td>70</td>
</tr>
<tr>
<td>52.</td>
<td>Withholding and Lien in Respect of Sums Claimed</td>
<td>70</td>
</tr>
<tr>
<td>52-A</td>
<td>Lien in Respect of Claims in other Contracts</td>
<td>71</td>
</tr>
<tr>
<td>53.</td>
<td>Signature on Receipts for Amounts</td>
<td>71</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------</td>
<td>----</td>
</tr>
<tr>
<td><strong>Labour</strong></td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>54.</td>
<td>Wages to Labour</td>
<td>72</td>
</tr>
<tr>
<td>54-A.</td>
<td>Apprentices Act</td>
<td>72</td>
</tr>
<tr>
<td>55.</td>
<td>Provisions of Payments of Wages Act</td>
<td>72</td>
</tr>
<tr>
<td>55-C.</td>
<td>Shramikkalyan Portal</td>
<td>74</td>
</tr>
<tr>
<td>56.</td>
<td>Reporting of Accidents</td>
<td>75</td>
</tr>
<tr>
<td>57.</td>
<td>Provision of Workmen's Compensation Act</td>
<td>75</td>
</tr>
<tr>
<td>57-A.</td>
<td>Provision of Mines Act</td>
<td>75</td>
</tr>
<tr>
<td>58.</td>
<td>Railway not to Provide Quarters for Contractors</td>
<td>75</td>
</tr>
<tr>
<td>59.</td>
<td>(1) Labour Camps</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(2) Compliance to Rules for Employment of Labour</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(3) Preservation of Peace</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(4) Sanitary Arrangements</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(5) Outbreak of Infectious Diseases</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>(6) Treatment of Contractor's Staff in Railway Hospitals</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>(7) Medical Facilities at Site</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>(8) Use of intoxicants</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>(9) Restriction on the Employment of Retired Engineers of Govt. Services within One Year of their Retirement</td>
<td>77</td>
</tr>
<tr>
<td>60.</td>
<td>(1) Non-employment of Labourers below the age of 15 Years</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>(2) Medical Certificate of Fitness for Labour</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>(3) Period of Validity of Medical Fitness Certificate</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>(4) Medical Re-examination of Labourer</td>
<td>78</td>
</tr>
<tr>
<td><strong>Determination Of Contract</strong></td>
<td>78</td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>(1) Right of Railway to Determine the Contract</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>(2) Payment on Determination of Contract</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>(3) No Claim on Compensation</td>
<td>78</td>
</tr>
<tr>
<td>62.</td>
<td>(1) Determination of Contract owing to Default of Contractor</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>(2) Right of Railway after Rescission of Contract owing to Default of Contractor</td>
<td>81</td>
</tr>
<tr>
<td><strong>Settlement Of Disputes</strong></td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Reconciliation of disputes</td>
<td>82</td>
</tr>
<tr>
<td>(1)</td>
<td>Matters finally Determined by the Railway</td>
<td>82</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>64.</td>
<td>(1) Demand for Arbitration</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>(2) Obligations During Pendency of Arbitration</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>(3) Appointment of Arbitrator</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>(4), (5), (6) &amp; (7) - Arbitral Award &amp; General</td>
<td>87</td>
</tr>
</tbody>
</table>

**Annexures :**

<table>
<thead>
<tr>
<th>Annexure-VII</th>
<th>Proforma for Time Extension</th>
<th>88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annexure-VIII</td>
<td>Certificate of Fitness</td>
<td>89</td>
</tr>
<tr>
<td>Annexure-IX</td>
<td>Pro forma of 7 Days’ Notice</td>
<td>90</td>
</tr>
<tr>
<td>Annexure-X</td>
<td>Proforma of 48 Hrs. Notice</td>
<td>91</td>
</tr>
<tr>
<td>Annexure-XI</td>
<td>Proforma of Termination Notice</td>
<td>92</td>
</tr>
<tr>
<td>Annexure-XII</td>
<td>Proforma of 48 Hrs. Notice (Part Termination)</td>
<td>93</td>
</tr>
<tr>
<td>Annexure-XIII</td>
<td>Proforma of termination Notice (Part Termination)</td>
<td>94</td>
</tr>
<tr>
<td>Annexure-XIV</td>
<td>Final Supplementary Agreement</td>
<td>95</td>
</tr>
<tr>
<td>Annexure-XV</td>
<td>Agreement towards Waiver Under Section 12(5) and Section 31(A)(5) of Arbitration and Conciliation (Amendment) Act</td>
<td>97</td>
</tr>
<tr>
<td>Annexure-XVI</td>
<td>Certification by Arbitrators appointed under Clause 63 &amp; 64 of Indian Railways General Conditions of Contract</td>
<td>98</td>
</tr>
</tbody>
</table>
PART I

REGULATIONS FOR TENDERS AND CONTRACTS
FOR THE GUIDANCE OF ENGINEERS & CONTRACTORS FOR WORKS CONTRACTS

MEANING OF TERMS

1.0 Applicability: These 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 tender/contract, 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. Schedule of Items, Rates & Quantities

iii. Special Conditions of Contract

iv. Technical Specifications as given in tender documents

v. Drawings

vi. Indian Railways Standard General Conditions of Contract

vii. Indian Railways Unified Standard Specifications (Works and Material) updated with correction slips issued up to date of opening of tender

viii. IR Specifications/Guidelines

ix. Relevant B.I.S. Codes

1.1 Interpretation: These Regulations for 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 Regulations for Tenders and Contracts 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 Addl. General Manager, 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 Railway and shall also include Chief Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Signal & Telecom Engineer, Chief Signal & Telecom Engineer (Construction), Chief Mechanical Engineer 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” shall mean the Divisional Engineer or Executive Engineer, Divisional Signal & Telecom Engineer, Divisional Electrical Engineer, Divisional Mechanical Engineer in executive charge of the works and shall include the superior officers, both Open Line and 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 or as amplified, added to or superseded by special specifications if any, appended to the Tender Forms.

(k) “Schedule of Rates of the Railway” shall mean the Schedule of Rates issued under the authority of the Chief Engineer from time to time.

(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.

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. For this purpose, 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) / Principal Chief Engineer / Principal Chief Signal & Telecommunication Engineer / Principal Chief Mechanical Engineer / Principal Chief Electrical Engineer / Divisional Railway Manager, 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, Annexure-I.

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. Earnest Money:

   (1) (a) The tenderer shall be required to deposit earnest money 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 earnest money shall be as under:

   Value of the Work Earnest Money Deposit (EMD)

   | For works estimated to cost up to ₹ 1 crore | 2% of the estimated cost of the work |
   | For works estimated to cost more than ₹ 1 crore | ₹ 2 lakh plus ½% (half percent) of the excess of the estimated cost of work beyond ₹ 1 crore subject to a maximum of ₹ 1 crore |

   Note:

   (i) The earnest money shall be rounded to the nearest ₹100. This earnest money 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 earnest money deposit 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 earnest money mentioned in sub-clause (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Earnest Money 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 Earnest Money shall be deposited in cash through e-payment gateway or as mentioned in tender documents.

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. 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.

6.1 The tenderers shall submit a copy of notarized affidavit on a non-judicial stamp paper stating that all their statements/documents submitted along with bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-V. Non-submission of notarized affidavit 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 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.

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.

CONTRACT DOCUMENTS

8. Execution of Contract Document: The Tenderer whose tender is accepted shall be required to appear in person at the office of General Manager/General Manager (Construction), Chief Administrative Officer (Construction), Divisional Railway Manager or concerned Engineer, as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear and execute the contract agreement within seven days of notice from Railways that the Contract Agreement is ready. The Contract Agreement shall be entered into by Railway only after submission of valid Performance Guarantee by the Contractor. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. 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 Earnest Money 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.

(a) For Zone Contracts, awarded on the basis of the percentage above or below the applicable Schedule of Rates for the whole or part of financial year, the contract agreement required to be executed by the tenderer whose tender is accepted shall be as per specimen form, Annexure-II. During the currency of the Zone Contract, work orders as per specimen form Annexures-III, for works not exceeding ₹ 5,00,000 each, shall be issued by the Divisional Railway Manager / Executive Engineer under the agreement for Zone Contract.

(b) For contracts for specific works, the contract document required to be executed by the tenderer whose tender is accepted shall be an agreement as per specimen form Annexure- IV.
ANNEXURE - I

____________ RAILWAY

TENDER FORM (First Sheet)

Tender No. ____________________

Name of Work ___________________________________________________

To

The President of India

Acting through the _____________________________ Railway

I/We ____________________ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this tender open for acceptance for a period of ________ days from the date fixed for opening the same and in default thereof, I/We will be liable for forfeiture of my/our “Earnest Money”. I/We offer to do the work for _______ Railway, at the rates quoted in the attached schedule 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, Schedule of Rates with all correction slips up-to-date for the present contract.

3. A sum of ₹ ____________ has already been deposited online as Earnest Money. Full value of the Earnest Money 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 Earnest Money.
5. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Witnesses: __________________________

(1) ___________________  Signature of Tenderer(s)

(2) ___________________  Date ________________

Address of the Tenderer(s)  __________________________
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

(b) Special Conditions/Specifications (enclosed)

(c) Schedule of approximate quantities (enclosed)

(d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected upto latest correction slips, copies of which can be seen in the office of __________ or obtained from the office of the Chief Engineer, __________ Railway on payment of prescribed charges.

(e) Schedule of Rates as amended / corrected upto latest correction slips, copies of which can be seen in the office of __________ or obtained from the office of the Chief Engineer, __________ Railway on payment of prescribed charges.

(f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

2. Drawings for the Work: The Drawing for the work can be seen in the office of the __________ and / or Chief Engineer, __________ Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Schedule of Rates of __________ Railway as applicable to __________ Division except where he / they are required to quote item rates and must tender for all the items shown in the Schedule of approximate quantities attached. The quantities shown in the attached Schedule 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 Schedule. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his / their entries must be attested by him / them.

5. The works are required to be completed within a period of ________ months from the date of issue of acceptance letter.
6. Earnest Money:
(a) The tender must be accompanied by a sum of ₹ _________ as Earnest Money deposited in cash through e-payment gateway or as mentioned in tender documents, failing which the tender shall not be considered. Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as ‘Startups’ shall be exempted from payment of Earnest Money on submission of Registration Certificate issued by appropriate authority.
(b) The Tenderer(s) shall keep the offer open for a minimum period of 45 days (in case of two packet system of tendering 60 days) from the date of opening of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to ___________ Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited as Earnest Money for the due performance of the above stipulation, shall be forfeited to the Railway.
(c) If his tender is accepted the earnest money mentioned in sub clause (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Earnest Money 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 Earnest Money 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 full Security Deposit, the Railway shall return the Earnest Money so retained 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 the tenderer(s) expire(s) after the submission of his / their tender or after the acceptance of his / their offer, the Railway shall deem such tender cancelled. If a partner of a firm expires after the submission of their tender or after the acceptance of their tender, the Railway shall deem such tender as cancelled, unless the firm retains its character.
10. Eligibility Criteria:

10.1 Technical Eligibility Criteria:

(a) The tenderer must have 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:

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 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 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: Separate completed works of minimum required values for each component shall also be considered for fulfillment of technical eligibility criteria.

(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. Any work or set of works shall be considered to be a separate component, only when cost of the component is more than ₹ 2 crore each.

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 atleast 5 years prior to the date of opening 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.

10.2. Financial Eligibility Criteria: The tenderer must have received contractual payments in the previous three financial years and the current financial year upto the date of opening of tender, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client and/or Audited Balance Sheet duly certified by the Chartered Accountant etc.

10.3. Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI.

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

11. Tenderer Credentials:

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

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

(i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.

(ii) 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.

(iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.

(iv) A copy of notarized affidavit on a non-judicial stamp paper stating that they are not liable to be disqualified and all their statements/documents submitted alongwith bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-V. Non submission of a copy of notarized affidavit 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 by which they/he are/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 thereunder.

(vi) (a) In case of any information submitted by tenderer is found to be false forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Earnest Money Deposit besides banning of business for a period of upto five 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. Earnest Money Deposit (EMD), 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 five years.

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

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

14. **Partnership Deeds, Power of Attorney etc.:**

(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 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) In case tenderer is other than sole proprietorship firm, following documents shall be submitted by the tenderer:
(a) **Partnership Firm**: The tenderer shall submit (i) a copy of Partnership Deed and (ii) a copy of Power of Attorney (duly registered) in favour of an individual to sign the tender documents and create liability against the Firm.

(b) **Joint Venture (JV)**: The tenderer shall submit documents as mentioned in Clause 17 of the Tender Form (Second Sheet).

(c) **Company registered under Companies Act-2013**: The tenderer shall submit (i) the copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company; and (ii) 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.

(d) **LLP (Limited Liability Partnership)**: If the tender is submitted on behalf of a LLP registered under LLP Act-2008, the tenderer shall submit alongwith the tender- (i) a copy of LLP Agreement, (ii) a copy of Certificate of Incorporation; and (iii) a copy of Power of Attorney/Authorisation issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.

(e) **Registered Society & Registered Trust**: The tenderer shall submit (i) a copy of the Certificate of Registration, (ii) Deed of Formation; and (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) 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 etc. shall be neither asked nor considered, if submitted.

(v) A tender from JV / Partnership firm etc. shall be considered only where permissible as per the tender conditions.

(vi) The Railway will not be bound by any change 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 / joint venture (JV) / registered society / registered trust etc if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person specifically authorizing him/them to
submit the tender, sign the agreement, receive money, co-ordinate measurements through contractor’s authorized engineer, 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.

16. Employment/Partnership etc. of Retired Railway Employees:
(a) Should a tenderer be a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, or should a tenderer being partnership firm / company / joint venture (JV) / registered society / registered trust etc have as one of its partners a retired Engineer or retired gazetted officer as aforesaid, or should a tenderer being an incorporated company have any such retired Engineer or retired officer as one of its directors or should a tenderer have in his employment any retired Engineer or retired gazetted officer as aforesaid, the full information as to the date of retirement of such Engineer or gazetted officer from the said service 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 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, or to take the employment under the Contractor, 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. Tenders without the information above referred to or a statement to the effect that no such retired Engineer or retired gazetted officer is so associated with the tenderer, as the case may be, shall be rejected.

(b) Should a tenderer or Contractor being an individual on the list of approved Contractors, have a relative(s) or in the case of partnership firm / company / joint venture (JV) / registered society / registered trust etc. one or more of his shareholder(s) or a relative(s) of the shareholder(s) employed in gazetted capacity in the Engineering or any other department of the _____________ railway, the authority inviting tenders shall be informed of the fact at the time of submission of tender, failing which the tender may be disqualified/rejected or if such fact subsequently comes to light, the contract may be rescinded in accordance with provision in clause 62 of standard general conditions of contract.

JOINT VENTURE (JV) IN WORKS TENDERS

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.

17.5 Earnest Money Deposit (EMD) shall be deposited by JV or authorized person of JV through e-payment gateway or as mentioned in tender document.

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 alongwith 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 shall be enclosed alongwith the tender).

17.7 Once the tender is submitted, the MoU shall not be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) 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 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 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 MOU/JV agreement between members of the JV to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted alongwith the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case of Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case of Partnership Firm) or under 'The LLP Act 2008' (in case of 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 Earnest Money Deposit and other dues payable to the Contractor under this contract. This Joint Venture Agreement shall have, inter-alia, following Clauses:

17.11.1 Joint And Several Liability - Members of the JV 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 JV members 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 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.

17.11.3 Governing Laws - The Joint Venture Agreement 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 one of the members on behalf of the Joint Venture to deal with the tender, 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 alongwith 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:
(a) A copy of the Partnership Deed,
(b) 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,
(c) A copy of Power of Attorney (duly registered as per prevailing law) in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.

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

A copy of notarized affidavit on Stamp Paper declaring that his/her Concern is a Proprietary Concern and he/she is sole proprietor of the Concern OR he/she is in position of "KARTA" of Hindu Undivided Family (HUF) and he/she has the authority, power and consent given by other partners 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:

(a) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
(b) A copy of Memorandum and Articles of Association of the Company.
(c) 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 All the Members of JV shall certify that they are not blacklisted or debarred by Railways or any other Ministry / Department / PSU (Public Sector Undertaking) of the Govt. of India/State Govt. from participation in tenders/contract on the date of opening of bids either in their individual capacity or as a member of the JV in which they were/are members.

17.15 Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfillment 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 above, shall be satisfied by either the ‘JV in its own name & style’ or ‘lead member of the JV’. Each other member of JV shall have technical capacity of minimum 10% of the cost of work i.e., each JV member must have satisfactorily 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
(i) The technical eligibility for each component of work as per para 10.1 above, shall be satisfied by either the ‘JV in its own name & style’ or ‘lead member of the JV’. Each other member of JV shall have technical capacity of minimum 10% of the cost of any component of work i.e., each JV member must have satisfactorily 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.

OR

(ii) The technical eligibility for major component of work as per para 10.1 above, shall be satisfied by either the ‘JV in its own name & style’ or ‘lead member of the JV’ and technical eligibility for other components of work as per para 10.1 above, shall be satisfied by either the ‘JV in its own name & style’ or ‘any member of the JV’. Each other member of JV shall have technical capacity of minimum 10% of the cost of any component of work. i.e., each JV member must have satisfactorily 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.

Note for Clause 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 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 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
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. 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 prior to date of tender opening as per the Indian Partnership Act.

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 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 opening 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 EMD shall be forfeited.

If any Partner/s withdraws from the firm after opening of the tender and before the award of the contract, the offer shall be rejected. If any new partner joins the firm after opening 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 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 EMD shall be deposited by partnership firm through e-payment gateway or as mentioned in tender
document. The EMD submitted in the name of any individual partner or in the name of authorized partner(s) shall not be considered.

18.7 One or more of the partners of the firm or any other person(s) shall be designated as the authorized person(s) on behalf of the firm, who will be authorized by all the partners to act on behalf of the firm through a “Power of Attorney”, specially authorizing him / them to submit & sign the tender, sign the agreement, receive payment, witness measurements, sign measurement books, make correspondences, compromise / settle / relinquish any claim(s) preferred by the firm, sign “No Claim Certificate”, refer all or any dispute to arbitration and to take similar such action in respect of the said tender / contract. Such “Power of Attorney” shall be notarized / registered and submitted along with the tender.

18.8 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.

18.9 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.

18.10 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.

18.11 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:

(a) A copy of partnership deed.

(b) A copy of Power of Attorney (duly registered as per prevailing law) in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.

(c) 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 / any State Govt. from participation in tenders / contracts as on the date of opening of bids, either in their individual capacity or in any firm in which they were / are partners. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.

18.12 Evaluation of eligibility of a partnership firm:
Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Clause 10 above by the partnership firm:

(Signature)

(Designation)

Signature of Tenderer(s)                      _________Railway
Date ______________                        Date ______________
ANNEXURE - I (Contd. …)

TENDER FORM (Third Sheet)

Name of Work: __________________________________________________

SCHEDULE OF RATES AND QUANTITIES

<table>
<thead>
<tr>
<th>SL</th>
<th>Item No.</th>
<th>Description of Item of Work</th>
<th>Approximate Quantity</th>
<th>Unit</th>
<th>Rates in Figures and Words (₽)</th>
<th>Amount (₽)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

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

I/We undertake to do the work at _________ % above/below the Schedule of Rates of the _______ Railway as applicable to ________ Division or at the rates quoted above for each item.

Dated ______________

Signature of the Tenderer(s)

Note: Columns 1 to 5 shall be filled by the office of the Authority inviting tender. Columns 6 & 7 shall be filled by the Tenderer(s) only when percentage tenders are not invited.
AGREEMENT FOR ZONE CONTRACT

CONTRACT AGREEMENT No.______________ DATED _____________.

ARTICLES OF AGREEMENT made this _____________ day of ___________ between
the President of India acting through the ________________, _____________ Railway
hereinafter called the "Railway" of the one part and ___________________________
hereinafter called the "Contractor" of the other part.

WHEREAS the Contractor has agreed with the Railway during the period of _____
months from ______________ to _________________ for the performance of:

(a) New Works, additions and alterations to existing structures, special repair works and
supply of building materials subject to the contract value for such works not exceeding
₹ ________.

(b) All ordinary repair and maintenance works at any site between kilometer _________ and
kilometre ________ as will be set forth in the work orders (which work orders shall be
deemed and taken to be part of this contract) that will be issued during the said period at
_____% above/below the Schedule of Rates of the _____________ Railway, corrected up to
the latest correction slips and Standard Specifications of the _____________ Railway
corrected upto latest correction slips and the Special Conditions and Special Specifications, if
any in conformity with the drawings (if any) that will be issued with the work order, aforesaid
AND WHEREAS the performance of the said work is an act in which the public are interested.

NOW THIS INDENTURE PRESENTS WITNESSETH That in consideration of the
payment to be made by the Railway, the Contractor will duly perform the works set forth in the
said Work Order 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 on or
before the respective dates specified therein in accordance with the said specifications and said
drawings (if any) and said conditions of contract 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 had been duly set forth herein), AND the Railway both here-by agree that if the
Contractor shall duly perform the said work 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 completion thereof the amount due in respect thereof at the rates specified
above.

Contractor ________________
Address ________________

Designation
Railway ________

(For President of India)
Witnesses (to signature of Contractor): 
Signature of witnesses with address ______________________________________
Date __________

Signature of witnesses with address ______________________________________
Date __________

Signature of witnesses with address ______________________________________
Date __________

Signature of witnesses with address ______________________________________
Date __________
ANNEXURE - III

WORK ORDER UNDER ZONE CONTRACT

WORK ORDER NO._________, DATED ________ UNDER CONTRACT AGREEMENT NO._________________________________ DATED __________________.

Name of Work _____________________________________

(SITE) _____________________

Schedule of Drawings

____________________________________________________________

Authority__________________________________

Allocation _________________________

The Contractor(s) ____________________________ is / are hereby ordered to carry out the following works at _______% above/below the Schedule of Rates of _______ Railway corrected upto latest correction slips of ___________ Division under Zone Contract Agreement here-in-before referred to:

<table>
<thead>
<tr>
<th>SL</th>
<th>Item No.</th>
<th>Description of Item of Work</th>
<th>Approximate Quantity</th>
<th>Unit</th>
<th>Rates in Figures and Words (₹)</th>
<th>Amount (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Total Approximate Value of Work = ₹ ____________

The works herein mentioned are required to be completed on or before ________ (Date). The quantities provided herein are approximate and subject to variation under Clause 42 of the Standard General Conditions of Contract corrected upto latest correction slips.

Divisional Railway Manager/Divisional __________ Engineer

__________________ Division

__________________ Railway

Date ____________

for President of India

I agree to complete the works herein set forth on or before the date specified under the Zone Contract Agreement herein before referred to in conformity with the drawings hereto annexed and in accordance with the General and Special (if any) Conditions of Contract.
corrected upto latest Correction Slips and the Standard Specifications of _________ Railway with up-to-date Correction Slips.

I also agree to maintain such works for the period specified below from the date of completion:

(a) Repair and maintenance work including white/color washing: three calendar months from date of completion.

(b) All new works except earth work: Six calendar months from date of completion.

Contractor _______________ (Signature)    Railway:   Designation _____________
Address __________________________              For President of India)

Date _____________    Date _____________

Signature of Witnesses (to Signature of Contractor) with address

1. ________________________        _________________________
   ________________________        _________________________
   ________________________        _________________________

2. ________________________        _________________________
   ________________________        _________________________
   ________________________        _________________________
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.

WHEREAS the Contractor has agreed with the Railway for performance of the works ___________________ set forth in the Schedule hereto annexed upon the Standard General Conditions of Contract, corrected upto latest correction slips and the Specifications of __________ Railway corrected upto the latest correction slips and the Schedule of Rates of __________ Railway, corrected upto latest correction slips 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.

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 schedule 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 Schedule hereto annexed.

Contractor _______________ (Signature)              Railway: Designation ___________
Address _________________________                          (For President of India)
Date _____________                                                Date _____________

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

29
FORMAT FOR AFFIDAVIT TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

(To be executed in presence of Public notary on non-judicial stamp paper of the value of ₹100/-. The stamp paper has to be in the name of the tenderer) **

I……………………………… (Name and designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents),

M/s_____________________________ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of ____________________________________________ as per the tender No.____________ of (------- Railway), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer(s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith 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 understand that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for a period of upto five year. Further, I/we (insert name of the tenderer) **___________ and all my/our constituents understand that my/our offer shall be summarily rejected.
8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the
contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for a period of up to five years.

DEPONENT
SEAL AND SIGNATURE
OF THE TENDERER

VERIFICATION

I/We above named tenderer do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT
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.
TENDERER’S CREDENTIALS (BID CAPACITY) ———— RAILWAY

For works costing more than ₹ 20 cr. or as prescribed by Railways through instruction/NIT issued for the work, the tenderers who meet the minimum eligibility criteria will be qualified only if their 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:

Available Bid Capacity = \[A \times N \times 2\] – B

Where

A = Maximum value of construction works executed and payment received in any one financial year during the current and last three financial years immediately preceding the current financial year, upto date of opening of 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 to be completed in next ‘N’ years.

Note:

(a) The Tenderer(s) shall furnish the details of 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 opening of tender. In case of no works in hand, a ‘NIL’ statement should be furnished. This statement should be submitted duly verified by Chartered Accountant.

(b) In case of JV, the tenderer(s) must furnish the details of existing commitments and balance amount of ongoing works with each member of JV 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 opening of tender. In case of no works in hand, a ‘NIL’ statement should be furnished. This statement should be submitted 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 technical eligibility criteria 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.
Part II

STANDARD GENERAL CONDITIONS OF CONTRACT
FOR USE IN CONNECTION WITH WORKS CONTRACTS

DEFINITIONS AND INTERPRETATION

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 Administrative Officers of the 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 Railway and shall also include Chief Engineer (Construction), Chief Signal & Telecommunication Engineer, Chief Signal & Telecommunication Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Mechanical Engineer and shall mean & include their successors, of the Successor Railway.

(d) "Divisional Railway Manager" shall mean the Officer in-charge of a Division of the Railway and shall mean and include the Divisional Railway Manager of the Successor Railway.

(e) “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.

(f) "Engineer's Representative" shall mean the Assistant Engineer, Assistant Signal & Telecommunication Engineer and Assistant Electrical Engineer, Assistant Mechanical Engineer in direct charge of the works and shall include any Sr. Section/Junior Engineer of Civil Engineering/Signal and Telecommunication Engineering/Mechanical Engineering/Electrical Engineering Departments appointed by the Railway and shall mean and include the Engineer's Representative of the Successor Railway.
(g) "Contractor" shall mean the Person/Firm/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 Work Order, the accepted Schedule of Rates or the Schedule or Rates of 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.

(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) "Schedule of Rates of Railway" shall mean the Schedule of Rates issued under the authority of the Chief Engineer from time to time.

(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 maintenance from the date of completion of the works, as certified by the Engineer.

(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.

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.

---

**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.

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 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) Total value of work to be assigned to sub-contractor(s) shall not be more than 50% of total contract value.

(ii) 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 through a works contract directly given to him by a Govt. Department; or by a 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, 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.

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 endeavour to resolve all matters and payments amicably and speedily with the subcontractor.

(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.

(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, 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 Earnest Money deposited by the Contractor with his tender will be retained by the Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. The Security Deposit shall be 5% of the contract value. Security Deposit may be deposited by the Contractor before release of first on account bill in cash or Term Deposit Receipt issued from Scheduled Bank, or may be recovered at the rate of 10% 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.

Further, in case of contracts having value equal to or more than ₹ 50 crore (Rs Fifty crore) the Security Deposit may be deposited as Bank Guarantee Bond also, issued by a scheduled bank after execution of contract documents, but before payment of 1st on account bill. Provided further that the validity of Bank Guarantee Bond shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17 of the Standard General Conditions of Contract.
Further, in case Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in full amount, the Earnest Money deposited by the Contractor with his tender will be returned by the Railways.

Note: After the work is physically completed as certified by competent authority, Security Deposit recovered from the running bills of a Contractor can be returned to him, if he so desires, in lieu of Term Deposit Receipt/irrevocable Bank Guarantee for equivalent amount from Scheduled Bank, to be submitted by him.

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:

(a) 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 GCC, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited.

16.(3) No interest shall be payable upon the Earnest Money 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 Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as a Startup recognized by Department of

41
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) in any of the following forms, amounting to 5% of the contract value:

(i) A deposit of Cash;

(ii) Irrevocable Bank Guarantee;

(iii) Government Securities including State Loan Bonds at 5% below the market value;

(iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks;

(v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks;

(vi) Deposit in the Post Office Saving Bank;

(vii) Deposit in the National Savings Certificates;

(viii) Twelve years National Defence Certificates;

(ix) Ten years Defence Deposits;

(x) National Defence Bonds and

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

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

(d) The value of PG to be submitted by the Contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the Contractor. On the other hand, if the value of contract decreases by more than 25% of the original contract value, Performance Guarantee amounting to 5% (five percent) of the decrease in the contract value shall be returned to the Contractor. The PG amount in excess of required PG for decreased contract value, available with Railways, shall be returned to Contractor as per his request duly safeguarding the interest of railways.
(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 in addition to forfeiture of Security Deposit available with railway.

(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 the GCC

(h) The tenderer who has offered lower total cost as compared to tender value by more than 10%, shall be required to submit additional Performance Guarantee of value equal to percentage of tender value by which offer is lower than 10%.

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, 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.

17–A **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:** 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 and in any case not less than one month before the expiry of the date fixed for completion of the works.

(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. The Engineer on receipt of such request from the Contractor shall consider the same and shall grant 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.

(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.

17-B 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 following rates of the contract value of the works.
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.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Duration of extension of time under Clause 17-B</th>
<th>Rate of Liquidated Damages</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>Up to Twenty percent of original period of completion including period of extension of DOC granted under Section 17A(i)</td>
<td>As decided by Engineer, between 0.01% to 0.10% of contract value for each week or part of the week</td>
</tr>
<tr>
<td>(ii)</td>
<td>Above Twenty percent but upto Thirty percent of original period of completion including period of extension of DOC granted under Section 17A(i)</td>
<td>0.20% of contract value for each week or part of the week</td>
</tr>
<tr>
<td>(iii)</td>
<td>Above Thirty percent but upto Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)</td>
<td>0.30% of contract value for each week or part of the week</td>
</tr>
<tr>
<td>(iv)</td>
<td>Above Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)</td>
<td>0.50% of contract value for each week or part of the week</td>
</tr>
</tbody>
</table>

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.

17 C Bonus for Early Completion of Work: In case of open tenders having value more than Rs 20 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 3% of original contract value. The completion date shall be reckoned as the date of issuance of completion certificate by engineer.

18.(1) **Illegal Gratification**: Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner or agent or servant or anyone on his behalf, to any officer or employee of the Railway or to any person on his behalf in relation to obtaining or execution of this or any other contract with the Railway shall, in addition to any criminal liability which he may incur, subject Contractor to the rescission of the contract and all other contracts with the Railway and to the payment of any loss or damage resulting from
such decision and the Railway shall be entitled to deduct the amounts so payable from the Contractor’s bills/Security Deposit or any other dues of Contractor with the Government of India.

18.(2) The Contractor shall not lend or borrow from or have or enter into any monitory dealings or transactions either directly or indirectly with any employee of the Railway and if he shall do so, the Railway shall be entitled forthwith to rescind the contract and all other contracts with the Railway. 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. In the event of rescission of the contract under this Clause, the Contractor will not be paid any compensation whatsoever except payments for the work done upto the date of rescission.

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 fulfill 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.

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 co-operate 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 thereupon confirm or vary such decision.

22.(1) Adherence to Specifications and Drawings: 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 therefrom.

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 sunrise 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 or equivalent, or qualified Diploma Engineer, based on value of contract, as may be prescribed by the Ministry of Railways through separate instructions from time to time.

**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 may be prescribed by the Ministry of Railways through separate instructions from time to time for the default period.

**26A.3** No. of qualified Engineers required to be deployed by the Contractor for various activities contained in the works contract shall be specified in the tender documents as ‘Special Condition of Contract’ by the tender inviting authority.”

**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 therefor, 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.
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.

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:** Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted Schedules of Rates shall be executed at the rates set forth in the "Schedule of Rates of Railway" modified by the tender percentage, and for such items not contained in the latter, at the rate agreed upon between the Engineer and the Contractor before the execution of such items of work and the Contractors 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 Schedule of Rates does not include rate or rates for the 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 items shall be arrived at based on the prevailing rates and by taking guidance from the following documents in order of priority:

(i) Analysis of Unified Schedule of Rates of Indian Railways  
(ii) Analysis of Delhi Schedule of Rates issued by CPWD  
(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.

Clause 40A: At the final stage of completion and commissioning of work, in case the
contractor’s failure is limited to only some of the works costing not more than 2% of the original contract value, and the Contractor request the engineer that such works may be offloaded from him and got executed through another agency and additional cost incurred, if any, should be recovered from his dues; the Engineer on being convinced that the anticipated additional cost for such works will not be substantial and can be recovered from the dues of the contractor and that such offloading will help in completion and commissioning of work, may agree to such offloading without any adverse repercussion on the performance guarantee and security deposit of the Contractor. However, the Engineer will not be under any compulsion to agree to such a request. Further, before issuing letter of acceptance to another agency for such work, the Contractor shall be informed of the rates at which the work will be got executed and the Contractor should give his consent to do so and certify that he would have no future claim on this account and that the extra expenditure so incurred, if any, by the Engineer in getting the offloaded work done, shall be recovered from subsequent Bills or any other dues of the Contractor. In case the Contractor fails to give such consent within three working days, the Engineer may treat the same as not acceptable to Contractor and proceed accordingly. In any case, Railway shall deduct 10% of cost of such work or Rs one lakh whichever is lower, from the Contractor’s dues as administrative charges for the process of finalizing new agency for such work irrespective of whether or not such work is finally offloaded from Contractor or not.

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 up to 25% of the quantity originally contracted, except in case of foundation work.
(ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.

(iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates

(a) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
(b) Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
(c) Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.

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

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

(iv) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earthwork and variation in the quantities of individual classifications of soil shall not be subject to this limit.

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

(vi) As far as SOR items are concerned, the limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of NS 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 Schedule of Rates. 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 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 Schedule Annexed to Contract: The quantities set out in the accepted Schedule of Rates 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 fulfillment 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 Schedule of Rates 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 Schedule of Rates 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 Schedule of Rates 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 Schedule of Rates 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 Schedule of Rates 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 Schedule of Rates 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 ten 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) **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 those contracts where tender conditions specifically permit it. Materials supplied free of cost by Railway to the Contractors and any extra NS item(s) included in subsequent variation falling outside the purview of the Schedule of Items of tender shall fall outside the purview of Price Variation Clause. If, in any case, accepted offer includes some specific payment to be made to consultants or some materials supplied by Railway free or at fixed rate, such payments shall be excluded from the gross value of the work for the purpose of payment/recovery of price variation.

46A.2 **Base Month:** The Base Month for ‘Price Variation Clause’ shall be taken as month 28 days prior to opening of tender including extensions, if any, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following the month of opening of tender. 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 **Adjustment for variation in prices of material, labour, fuel, explosives, detonators, steel, concreting, ferrous, non-ferrous, insulators, zinc and cement** shall be determined in the manner prescribed.

46A.5 **Components of various items in a contract on which variation in prices be admissible,** shall be Material, Labour, Fuel, Explosives & Detonators, Steel, Cement, Concreting, Ferrous, Non-ferrous, Insulator, Zinc, Erection etc. However, for fixed components, no price variation shall be admissible.
46A.6 The percentages of labour component, material component, fuel component etc. in various types of Engineering contracts shall be as under:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Labour Component</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>50</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Other Material Components</td>
<td>10</td>
<td>15</td>
<td>30</td>
<td>35</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Plant Machinery &amp; Spares</td>
<td>30</td>
<td>15</td>
<td>20</td>
<td>5</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Fuel &amp; Lubricants Component</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>5</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Fixed Component*</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>6</td>
<td>Detonators &amp; Explosive Component</td>
<td>-</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* It shall not be considered for any price variation.

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

(i) \[ L = \frac{W \times (L_Q - L_B) \times L_C}{L_B} \times \frac{100}{100} \]

(ii) \[ M = \frac{W \times (M_Q - M_B) \times M_C}{M_B} \times \frac{100}{100} \]

(iii) \[ F = \frac{W \times (F_Q - F_B) \times F_C}{F_B} \times \frac{100}{100} \]

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

(v) \[ PM = \frac{W \times (PM_Q - PM_B) \times PM_C}{PM_B} \times \frac{100}{100} \]

(vi) \[ S = \frac{S_W \times (S_Q - S_B)}{S_B} \]

(vii) \[ C = C_V \times \frac{(C_Q - C_B)}{C_B} \]
For Railway Electrification Works:

(viii) \[ T = \left(\frac{C_S - C_O}{C_O} \times 0.4136\right) \times T_C \]

(ix) \[ R = \left(\frac{R_T - R_O}{R_O} + \frac{(Z_T - Z_O)}{Z_O} \times 0.06\right) \times R_C \]

(x) \[ N = \left(\frac{P_T - P_O}{P_O} \times \frac{Z_T - Z_O}{Z_O}\right) \times N_C \]

(xi) \[ Z = \left(\frac{Z_T - Z_O}{Z_O}\right) \times Z_C \]

(xii) \[ I = \left(\frac{I_T - I_O}{I_T}\right) \times 85 \]

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 Manufacture of machinery for mining, Quarrying and Construction

**S** Amount of price variation in Steel

**C** Amount of price variation in Cement

**T** Amount of price variation in Concreting

**R** Amount of price variation in Ferrous Items

**N** Amount of price variation in Non-Ferrous Items

**Z** Amount of price variation in Zinc

**I** Amount of price variation in Insulator

**L_C** % of Labour Component

**M_C** % of Material Component

**F_C** % of Fuel Component

**E_C** % of Explosive Component

**PM_C** % of Manufacture of machinery for mining, Quarrying and Construction Component

**T_C** % of Concreting Component

**R_C** % of Ferrous Component

**N_C** % of Non-Ferrous Component

**Z_C** % of Zinc Component

**W** Gross value of work done by Contractor as per on-account bill(s) excluding cost of materials supplied by Railway at fixed price, minus the price values of cement and steel. This will also exclude specific payment, if any, to be made to the consultants engaged by Contractors (such payment shall be indicated in the Contractor’s offer)

**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
FB Wholesale Price Index for the group Fuel & Power as published in the R.B.I. Bulletin for the base period

FQ Index Number of Wholesale Price Index – By Groups and Sub-Groups for the group Fuel & Power as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

EB 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.

EQ 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 average price index of 3 months of the quarter under consideration.

PMB Index number of Monthly Whole Sale Price Index for the category ‘k. Manufacture of machinery for mining, quarrying and construction’ under (R) MANUFACTURE OF MACHINERY AND EQUIPMENT, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.

PQM Index number of Monthly Whole Sale Price Index for the category ‘k. Manufacture of machinery for mining, quarrying and construction’ under (R) MANUFACTURE OF MACHINERY AND EQUIPMENT, published by Office of Economic Adviser, 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.

SW Gross value of steel supplied by the Contractor as per the ‘on-account’ bill for the month under consideration

SB Index number of Monthly Whole Sale Price Index for the relevant category of mild steel item as mentioned in Clause 46A.9, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIPP); for the base period.

SQ Index number of Monthly Whole Sale Price Index for the relevant category of mild steel item as mentioned in Clause 46A.9, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIPP); for the average price index of the 3 months of the quarter under consideration.

CV Value of Cement supplied by Contractor as per on account bill in the quarter under consideration

CB Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period

CQ 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

CS RBI wholesale price index for Cement, Lime & Plaster for the month which is six months prior to date of casting of foundation
$C_o$  RBI wholesale price index for Cement, Lime & Plaster for the month which is one month prior to date of opening of tender

$R_T$  IEEMA price index for Iron & Steel for the month which is two months prior to date of inspection of material.

$R_O$  IEEMA price index for Iron & Steel for the month which is one month prior to date of opening of tender.

$P_T$  IEEMA price index for Copper wire bar for the month which is two months prior to date of inspection of material.

$P_O$  IEEMA price index for Copper wire bar 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

$I_T$  RBI wholesale price index for the sub-group “other Portland and Ceramic product” for the month which is two months prior to date of inspection of material

$I_O$  RBI wholesale price index for the sub-group “other Portland and Ceramic product” for the month which is one month prior to date of opening of tender

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: Relevant categories of steel for the purpose of operating Price Variation formula as mentioned in this Clause shall be as under:

<table>
<thead>
<tr>
<th>SL</th>
<th>Category of Steel Supplied in Railway Work</th>
<th>Category of Steel Items as mentioned in Office of Economic Adviser, Govt. of India, Ministry of Commerce &amp; Industry Department of Industrial Policy &amp; Promotion (DIPP).</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reinforcement bars and other rounds</td>
<td>‘MS Bright Bars’ individual commodity of group item (d) Mild Steel-Long Products under (N) MANUFACTURE OF BASIC METAL.</td>
</tr>
<tr>
<td>2.</td>
<td>All types and-sizes of angles, channels and joists</td>
<td>‘Angles, Channels, Sections, Steel’ individual commodity of group item (d) Mild Steel-Long Products under (N) MANUFACTURE OF BASIC METAL.</td>
</tr>
<tr>
<td>3.</td>
<td>All types and sizes of plates</td>
<td>‘e. Mild Steel – Flat Products’ of (N) MANUFACTURER OF BASIC METAL.</td>
</tr>
<tr>
<td>4.</td>
<td>Any other section of steel not covered in the above categories and excluding HTS</td>
<td>Average of price for the 3 categories covered under SL 1, 2 &amp; 3 above</td>
</tr>
</tbody>
</table>

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 17-A of the Standard General Conditions of Contract. However, where extension of time has been granted due to Contractor’s failure under Clause 17-B 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 17-A, the price adjustment for the period of extension granted under Clause 17-B 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 17-A 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 17-A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17-B 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 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 fulfillment 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 up to the date of completion and on the accepted schedule of rates 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 8, 18, 22(5), 39, 43(2), 45(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1) to (xiii)(B) of 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 thereunder 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 thereunder 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 subcontractors 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 subcontractors 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 Indian Railways 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 of 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.”

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 from the Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from contractor’s bills as per provisions of the Act.

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 sub-contractor 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 at the risk and cost of the Contractor and forfeit his 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.

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 Regulations for Tenders and Contracts.

(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 Tenders and Contracts.

(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.

(A) At any time after the tender relating to the contract, has been signed and submitted by the Contractor, being a partnership firm admit as one of its partners or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired Engineer of the
gazetted rank or any other retired gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the Railways for the time being owned and administered by the President of India before the expiry of one year from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or

(B) Fail to give at the time of submitting the said tender:

(a) The correct information as to the date of retirement of such retired Engineer or retired officer from the said service, or as to whether any such retired Engineer or retired officer was under the employment of the Contractor at the time of submitting the said tender, or

(b) The correct information as to such Engineers or officers obtaining permission to take employment under the Contractor, or

(c) Being a partnership firm, the correct information as to, whether any of its partners was such a retired Engineer or a retired officer, or

(d) Being in incorporated company, correct information as to whether any of its directors was such a retired Engineer or a retired officer, or

(e) Being such a retired Engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired Engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the Contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the Contractor.

(f) 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.

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 GCC.

(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. Reconciliation of disputes: 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.

The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of contract.

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.

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.

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 8, 18, 22(5), 39, 43(2), 45(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1) of 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 Arbitration Clause.

64.(1) : Demand for Arbitration:

64.(1)(i): 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.(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) : Appointment of Arbitrator where applicability of section 12 (5) of Arbitration and Conciliation Act has been waived off:

64.(3)(a)(i): In cases where the total value of all claims in question added together does not exceed ₹ 1,00,00,000/- (Rupees One Crore), the Arbitral Tribunal shall consist of a Sole Arbitrator who shall be a Gazetted Officer of Railway not below Junior Administrative Grade, nominated by the General Manager. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitration is received by General Manager.

64.(3)(a)(ii): In cases not covered by the Clause 64(3)(a)(i), the Arbitral Tribunal shall consist of a panel of three Gazetted Railway Officers not below Junior Administrative Grade or 2 Railway Gazetted Officers not below Junior Administrative Grade and a retired Railway Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the Railway will send a panel of at least four (4) names of Gazetted Railway Officers of one or more departments of the Railway which may also include the name(s) of retired Railway Officer(s) empanelled to work as Railway Arbitrator to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to 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 shall appoint at least one out of them as the Contractor’s nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the ‘presiding arbitrator’ from amongst the 3 arbitrators so appointed. General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of Contractor’s nominees. While nominating the arbitrators, it will be necessary to ensure that one of them is from the
Accounts Department. An officer of Selection Grade of the Accounts Department shall be considered of equal status to the officers in Senior Administrative Grade of other departments of the Railway for the purpose of appointment of arbitrator.

64.3.(a).iii: The serving railway officer working in arbitral tribunal in the ongoing arbitration cases as per clause 64.(3)(a)(i) and clause 64.(3)(a)(ii) above, can continue as arbitrator in the tribunal even after his retirement.

64.(3)(b): Appointment of Arbitrator where applicability of Section 12 (5) of Arbitration and Conciliation Act has not been waived off:

(i) In cases where the total value of all claims in question added together does not exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Retired Railway Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrator. For this purpose, the Railway will send a panel of at least four (4) names of retired Railway Officer(s) empanelled to work as Railway Arbitrator duly indicating their retirement dates to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager. Contractor will be asked to suggest to General Manager at least 2 names out of the panel for appointment as arbitrator within 30 days from the date of dispatch of the request by Railway. The General Manager shall appoint at least one out of them as the arbitrator.

(ii) In cases where the total value of all claims in question added together exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Panel of three (3) retired Railway Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the Railway will send a panel of at least four (4) names of retired Railway Officer(s) empanelled to work as Railway Arbitrator duly indicating their retirement date to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager. Contractor will be asked to suggest to 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 shall appoint at least one out of them as the Contractor’s nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the ‘Presiding Arbitrator’ from amongst the 3 arbitrators so appointed. General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of Contractor’s nominees. While nominating the arbitrators, it will be necessary to ensure that one of them has served in the Accounts Department.

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 fails to act without undue delay, the 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 Arbitrator(s):

(a) Serving Gazetted Railway Officers of not below JA Grade level.
(b) Retired Railway Officers not below SA Grade level, one year after his date of retirement.
(c) Age of arbitrator at the time of appointment shall be below 70 years.
(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)(i), 64.(3)(a)(ii), 64.(3)(b)(i) & 64.(3)(b)(ii) 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 his/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 therefrom.
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): In case of the Tribunal, comprising of three members, 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. The cost shall inter-alia include fee of the arbitrator(s), as per the rates fixed 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 condition after/ while referring these disputes to Arbitration. Further, the fee payable to the arbitrator(s) would be governed by the instructions issued on the subject by Railway Board from time to time irrespective of the fact whether the arbitrator(s) is/are appointed by the Railway Administration or by the court of law unless specifically directed by Hon’ble court otherwise on the matter.

64.(7) Subject to the provisions of the aforesaid Arbitration and Conciliation Act 1996 and the rules thereunder and relevant para of General Conditions of Contract (GCC) and any statutory modifications thereof shall apply to the appointment of arbitrators and arbitration proceedings under this Clause.
PROFORMA FOR TIME EXTENSION

No. _______________________       Dated:     _________________

Sub: (i) _____________________________________________________       (name of work).

(ii) Acceptance letter no. _____________________________________________________

(iii) Understanding/Agreement no. __________________________________________

Ref:  _______________________________________

___________________________________________

Dear Sir,

1. The stipulated date for completion of the work mentioned above is _______________.
   From the progress made so far and the present rate of progress, it is unlikely that the work will be completed by the above date (or ‘However, the work was not completed on this date’).

2. Expecting that you may be able to complete the work if some more time is given, the competent authority, although not bound to do so, hereby extends the time for completion from _____________ to _______________.

3. Please note that an amount equal to the liquidated damages for delay in the completion of the work after the expiry of _________________ (give here the stipulated date for completion with/without any liquidated damage fixed earlier) will be recovered from you as mentioned in Clause 17-B of the Standard General Conditions of Contract for the extended period, notwithstanding the grant of this extension. You may proceed with the work accordingly.

4. The above extension of the completion date will also be subject to the further condition that no increase in rates on any account will be payable to you.

5. Please intimate within a week of the receipt of this letter your acceptance of the extension of the conditions stated above.

6. Please note that in the event of your declining to accept the extension on the above said conditions or in the event of your failure after accepting or acting upto this extension to complete the work by ________________ (here mention the extended date), further action will be taken in terms of Clause 62 of the Standard General Conditions of Contract.

Yours faithfully
For and on behalf of the President of India

ANNEXURE – VIII
Reference Para 60.(2)

CERTIFICATE OF FITNESS

1. (a) Serial Number______________
   (b) Date ______________
2. Name of person examined ______________________________
3. Father’s Name: son/daughter of ______________________
   Residing at ______________________________
4. Sex ______________________________
5. Residence: ______________________________
6. Physical fitness
7. Identification marks ______________
8. Date of birth, if available, and/or certified age ____________
   I certify that I have personally examined (name) _______________
   who is desirous of being employed in a factory or on a work requiring manual labour and that his/her age as nearly as can be ascertained from my examination, is ______ years.

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

9. Reasons for :
   (a) Refusal to grant certificate, or ______________
   (b) Revoking the certificate ________________

   Signature or left hand
   Thumb impression of the person examined.

   Signature of Certifying Surgeon

Note: In case of physical disability, the exact details and cause of the physical disability should be clearly stated.
ANNEXURE – IX

(Reference Clause 62.(1)
Registered Acknowledgement Due

PROFORMA OF 7 DAYS NOTICE FOR WORKS AS A WHOLE/ IN PARTS

(DETAILS OF PART OF WORK TO BE MENTIONED)

___________ RAILWAY

(Without Prejudice)

To

M/s _____________________________

Dear Sir,

Contract Agreement No. _____________________________________________

In connection with _________________________________________________

In spite of repeated instructions to you by the subordinate offices as well as by this office through various letters of even no. ________________, dated __________; you have failed to start work/show adequate progress and/or submit detailed programme for completing the work/ part of work (details of part of work to be mentioned).

2. Your attention is invited to this office/Chief Engineer’s office letter no. __________ __________, dated __________ in reference to your representation, dated __________.

3. As you have failed to abide by the instructions issued to commence the work /to show adequate progress of work you are hereby given 7 days’ notice in accordance with Clause 62 of Standard General Conditions of Contract to commence works / to make good the progress, failing which further action as provided in Clause 62 of the Standard General Conditions of Contract viz. to terminate your Contract and complete the balance work without your participation will be taken.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India
To

M/s _____________________________

______________________________

Dear Sir,

Contract Agreement No. ________________________________

In connection with ________________________________

Seven days’ notice under Clause 62 of Standard General Conditions of Contract was given to you under this office letter of even no., dated ____________; but you have taken no action to commence the work/show adequate progress of the work.

2. You are hereby given 48 hours’ notice in terms of Clause 62 of Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above contract will be rescinded and the work under this contract will be carried out independently without your participation and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed and any other consequences which may please be noted.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India
PROFORMA OF TERMINATION NOTICE

_________________ RAILWAY

(Without Prejudice)

No. ________________________________                 Dated ____________

To

M/s _____________________________

________________________________

Dear Sir,

Contract Agreement No. ________________________________

In connection with ________________________________

Forty eight hours (48 hrs.) notice was given to you under this office letter of even no., dated ______________; but you have taken no action to commence the work/show adequate progress of the work.

Since the period of 48 hours’ notice has already expired, the above contract stands rescinded in terms of Clause 62 of Standard General Conditions of Contract and the balance work under this contract will be carried out independently without your participation. Your participation as well as participation of every member/partner in any manner as an individual or a partnership firm/JV is hereby debarred from participation in the tender for executing the balance work and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India
 ANNEXURE – XII 
Reference Para 62.(1) 
Registered Acknowledgement Due 

PROFORMA OF 48 HRS. NOTICE FOR PART OF THE WORK………………. 
(DETAILS OF PART OF WORK TO BE MENTIONED) 
__________ RAILWAY 

(Without Prejudice)

To 
M/s _____________________________  

Dear Sir,

Contract Agreement No. _____________________________________________  
In connection with _________________________________________________  

1. Seven days’ notice under Clause 62 of Standard General Conditions of Contract was given to you under this office letter of even no., dated __________; but you have taken no action to commence the work/show adequate progress of the part of work…………………..(details of part to be mentioned).

2. You are hereby given 48 hours’ notice in terms of Clause 62 of Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above part of work………………….. (Details of part to be mentioned) in contract will be rescinded and the work will be carried out independently without your participation.

3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be issued any completion certificate for the contract. However, no additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract.

4. The contract value of part terminated contract shall stands reduced to …………………

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India
ANNEXURE – XIII
Reference Para 62.(1)
Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE FOR PART OF THE WORK………………
(DETAILS OF PART OF WORK TO BE MENTIONED)

______________ RAILWAY
(Without Prejudice)

No. ________________________________                 Dated ____________

To

M/s _____________________________
_________________________________

Dear Sir,

Contract Agreement No. _____________________________________________

In connection with _________________________________________________

1. Forty eight hours (48 hrs.) notice was given to you under this office letter of even no.,
dated _______________; but you have taken no action to commence the work/show
adequate progress of the part of work…………………………..(details of part to be
mentioned).

2. Your above part of work in contract ………………….(details of part to be mentioned)
stands rescinded in terms of Clause 62 of Standard General Conditions of Contract and
the same will be carried out independently without your participation. Your
participation as well as participation of every member/partner in any manner as an
individual or a partnership firm/JV is hereby debarred from participation in the tender
for executing the balance work

3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be
issued any completion certificate for the contract. However, no additional Performance
Guarantee shall be required for balance of work being executed through the part
terminated contract.

4. The contract value of part terminated contract stands reduced to
…………………………………..

Kindly acknowledge receipt.

Yours faithfully
For and on behalf of the President of India
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 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 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: ______________
ANNEXURE-XV

Reference Para 64.3 & 64.6

Agreement towards Waiver under Section 12(5) and Section 31A (5) of Arbitration and Conciliation (Amendment) Act

I/we.............. (Name of agency/Contractor) with reference to agreement no.................. raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims:

Brief of claim:

(i) Claim 1 - Detailed at Annexure-
(ii) Claim 2 –
(iii) Claim 3 –

I/we.............. (post of Engineer) with reference to agreement no............. hereby raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims:

I/we...........do/do not agree to waive off applicability of section 12(5) of Arbitration and Conciliation (Amendment) Act.

Signature of Claimant_______________________ Signature of Respondent_____________________

Agreement under Section 31(5)

I/we....... (Name of claimant) with reference to agreement no............... hereby waive off the applicability of sub section 31-A (2) to 31-A (4) of the Arbitration and Conciliation (Amendment Act. We further agree that the cost of arbitration will be shared by the parties as per Clause 64(6) of GCC.

Signature of Claimant_________________ Signature of Respondent_____________________

*Strike out whichever not applicable.
Certification by Arbitrators appointed under Clause 63 & 64 of Indian Railways General Conditions of Contract

1. Name:

2. Contact Details:

3. Prior experience (Including Experience with Arbitrations):

4. **I do not have more than ten on-going Arbitration cases with me.**

5. I hereby certify that I have retired from Railways w.e.f. _____ and empanelled as Railway Arbitrator as per ‘The Arbitration and Conciliation Act- 1996’.

6. I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind.

   Or

   I have past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. The list of such interests is as under:

7. 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 in terms of The Arbitration and Conciliation Act-1996.

   Or

   I have 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 in terms of The Arbitration and Conciliation Act-1996. The details of such relationship or interests are as under:

8. There are no concurrent Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months.

   Or

   There are Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months. The list of such circumstances is as under:
GENERAL TECHNICAL SPECIFICATION

1. SPECIFICATIONS:

(I) All the works shall be carried out in accordance with the specifications contained in these documents.

(II) Any specifications, not covered by these documents, shall be in accordance with relevant IRS Codes, IS codes and MORTH specifications read in the said order or as stipulated/approved by the Railway.

1.1 Priority of Specification:

The work shall be carried out in terms of specifications of latest editions (and up-to-date correction/amendment) of IRS (India Railways Standards), IRC (Indian Road Congress) and BIS (Bureau of Indian Standard), BS Specification, RDSO & other relevant international codes, wherever applicable and as directed by the Employer/Client.

Where there is any conflict between the various applicable specifications (including latest revisions and correction slip) to the work in the contract the following order of priority shall be followed i.e. the specification appearing earlier shall override the specification appearing subsequently.

a- Technical Specifications
b- IRS Specifications
c- IRC Specifications
d- Unified Standard Specifications for Works and Materials (USSWM)
e- BIS Specifications
f- Provisions in DSR and other international Codes

In case of contradictory specifications, the specification given in the IRS Codes, shall be prime governing. In case of any deviation required from the specification given in IRS codes, specific approval of RAILWAY has to be obtained.

2. General

2.1.1 These specifications for certain items contained herein are the Employer’s minimum and specific requirements. These specifications are based on the provisions of various Codes and Employer’s Requirements for the Works required to be undertaken by the Contractor under this Contract and for better understanding of the Contractor. However, for details, the respective Codes shall be referred to.

2.1.2 The Contractor shall also develop Method Statements and Test Procedures / Work Procedures / Plans and Manuals / Construction Drawings / Sketches etc. for all the items of
Work, based on the Specifications, applicable Codes & Standards, best Engineering practices etc. and shall submit to the Engineer for his consent.

2.1.3 The Materials and workmanship specification as follows has been based on Indian Standards and International Standards as scheduled below. Apart from the basic data, specifications etc. all items of works shall be governed by the Codes & Specifications as detailed hereunder and as revised / corrected / amended up to 28 days before the due date of submission of the Bid Proposal.

2.1.4 The Contractor will be responsible for detailing in his specification of the standards on which his materials and workmanship will be based, and these will be of similar or higher standard than those listed below.

2.1.5 The Contractor shall also be responsible for getting the approval from Engineer for the International Standards which are not specifically included herein below and the Contractor intends to apply the same for the detailing of his specification, additionally.

2.1.6 The Contractor is required to review in the first instance the relevant Indian Standards and other Standards / Codes as mentioned. The specifications will be primarily based on the said standards to the extent that they are applicable. However, in case the Contractor intends to use any other International Standards, he should indicate the same in his proposal for consideration of the Employer. Usage of the same shall be subject to approval of the Engineer.

2.1.7 Relevant Standards

2.1.8 Apart from the basic books of reference mention in para 3.0 of SCC, Specifications and specific requirements listed in the Bid document, all items of works shall be governed by the latest versions of the following Codes, Specifications as revised/corrected/amended (with latest correction slip) up to the time of bidding. Notwithstanding the precedence specified above, the Contractor shall always seek advice from the Engineer and Employer in the event of any conflict, immediately for a final decision. Relevant standards are scheduled as below:

1. Indian Railway Standard Codes and Specifications (IRS)
2. Indian Railway Schedule of Dimensions for Board Gauge
5. IRS Standard Code of Practice for design of Sub-structure & Foundation.
6. IRS: Manual on the design and construction of well and pile foundation.
11. Indian Standard Specifications
12. IS : 875 (all 5 parts) – Design loads (other than earthquakes) for buildings and structures.
15. IS : 8112 43 Grade OPC.
16. IS : 383 Coarse and fine aggregates from natural sources for concrete.
17. IS : 2386 (all 8 parts) – Tests for aggregates for concrete
18. IS : 3025 (all 49 parts) – Methods of sampling and test for water and waste water.
21. IS :7320 Concrete slump test apparatus.
22. IS : 5515 Compaction factor apparatus.
23. IS : 1791 Batch type concrete mixers.
25. IS : 2722 Indian Standard Specifications for Portable Swing Weight batches for concrete (Single and Double Bucket type)
27. IS : 9103 Admixtures for concrete.
29. IS : 4031 (all 15 parts) – Physical tests for hydraulic cement.
30. IS : 5513 Vicat apparatus.
31. IS : 10080 Vibration machine for casting standard cement mortar cubes.
32. IS : 10262 Concrete mix design.
33. IS: 4926 Indian Standard Specifications for Ready Mixed Concrete.
34. IS : 1892 Subsurface investigations.
35. IS : 2720 (all 41 parts) – method of tests for soil.
36. IS : 2132 Thin walled tube sampling of soils.
38. IS : 2911 ( Part I to IV) - Code of practice for design and construction of pile Foundations
39. IS : 5624 Foundation bolts
40. IS: 1786-1985-High Strength Deformed Steel Bars & Wires for Concrete Reinforcement (Third Revision).
42. IS: 280 Mild steel wire for general purposes
43. IS: 2502 Code of practice for bending and fixing of Bars for concrete reinforcement.
44. IS: 4082 Recommendations of stacking and storage of construction materials at site.
45. IS : 800 General Construction in steel.
46. IS: 2062-1992-Steel for General Structural Purposes – Specifications (Fourth Revision
47. IS: 1261 – 1959 – Seam Welding in Mild Steel (Reaffirmed 1998)
48. IS: 1367 – Technical Supply conditions for Threaded steel fasteners
49. IS: 102 Ready mixed paints, brushing, red lead, non-settling priming.
50. IS: 123 Ready mixed paints, brushing, finishing, semi-gloss, for general purposes to Indian
51. IS: 104 Ready mixed paint, brushing, zinc chrome, priming.
52. IS: 2074 Ready mixed paint, air drying, red oxide-zinc chrome.
53. IS: 34 White lead for paints.
54. IS: 2339 Aluminum paints for general purposes, in dual container.
55. IS: 2751 Code of Practice for Welding of Mild Steel Bars used for reinforced concrete construction.
56. IS: 3400 (all 22 parts) – Methods of tests for vulcanized rubbers.
58. IS: 3764 Safety code for excavation work.
59. IS: 4081 Safety code for blasting and related drilling operations.
60. IS: 7293 Safety code for working with construction machinery.
65. IS: 1852 Rolling and cutting tolerances for hot rolled steel products.
66. IS: 817 Training and testing of metal arc welders.
67. IS: 1270 Metric steel tape measure.
68. IS: 1200 (all relevant parts) – Method of measurement of building and civil Engineering works.
69. IS: 786 Conversion factors and conversion tables.
70. IS: 57 Red lead for paints and other purposes
71. IS: 75 Linseed oil, raw and refined
72. IS: 77 Linseed oil, boiled for paints
73. IS: 1182 Radiographic examination of butt joints in steel plates
74. IS: 2595 Radiographic testing
75. IS: 487 Brush, paint and varnish
76. IS: 6586 Metal spraying for protection of iron steel
77. IS: 5666 Etch primer
78. IS: 887 Animal tallow
79. IS: 816 Metal arc welding for general construction in mild steel
80. IS: 1493 Design of Bored and Cast in Situ Piles Founded in Rock.- Guide lines
81. IS: 1785 Part 1 High Tensile Steel Wire
82. IS: 1080-1985 Code of practice for design and construction of shallow foundations in soils (other than raft, ring and shell)
The tendered shall be responsible for close scrutiny of the approval drawings supplied by the Railway. For any discrepancies, error or omissions in the drawings or in other particulars indicated therein, the contractor shall approach the Engineer immediately for rectification of such discrepancies, errors and omissions. If any dimensions/ figure/ features etc. on approved drawings or plans differ from those drawings or plans issued to the tenderers at the time of calling of the tender, the dimensions as figured upon the approved drawings or plans shall be taken as correct. No claim shall be entertained on this account and decision of Engineers shall be final, binding and conclusive on the contractor.

3.1 MEASUREMENT
3.1.1 All measurement shall be made in the metric system. Different items of works shall be measured in accordance with the procedures set forth in the relevant sections read in conjunction with GCC and special conditions of the contract.

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

- Length and breadth-10 mm,
- Height depth or thickness-05 mm,
- Area -0.01 Sqm.
- Cubic Contents-0.01 Cum.

3.1.3 Site clearance wherever involved shall be undertaken and the same shall be considered incidental to the earthwork and Blanketing works and rates for the same shall be deemed to be inclusive of all clearing operations.
4 Technical specification

4.1 Earthwork in filling:
For details of the execution of above work the agency may refer Guidelines and Specification for Design of Formation for Heavy Axle Load GE: 0014 along with Guideline for Earthwork in Railway Project GE:1.

4.2 Blanketing:

4.3 Turfing with Sods:
For details of the method of execution of above work the agency may refer sub-section 307 Turfing with SODS of section Earthwork, Erosion Control and Drainage of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.4 Granular Sub-base with Well Graded Material:
For details of the method of execution of above work the agency may refer sub-section 401 Granular Sub-base of section Sub-Bases, Bases (Non-Bituminous) And Shoulders of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.5 Water Bound Macadam Sub-Base:
For details of the method of execution of above work the agency may refer sub-section 404 Water Bound Macadam Sub-Base/Base of section Sub-Bases, Bases (Non-Bituminous) And Shoulders of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.6 Prime Coat:
For details of the method of execution of above work the agency may refer sub-section 502 Prime Coat over Granular Base of section Bases and Surface Courses (Bituminous) of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.7 Tack Coat:
For details of the method of execution of above work the agency may refer sub-section 503 Tack Coat of section Bases and Surface Courses (Bituminous) of Specification for Road and Bridges Works, MORTH by Indian Road Congress.
4.8 **Dense Graded Bituminous Macadam:**
For details of the method of execution of above work the agency may refer sub-section 505 Dense Bituminous Macadam of section Bases and Surface Courses (Bituminous) of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.9 **Bituminous Concrete:**
For details of the method of execution of above work the agency may refer sub-section 507 Bituminous Concrete of section Bases and Surface Courses (Bituminous) of Specification for Road and Bridges Works, MORTH by Indian Road Congress.

4.10 **Providing and laying factory made kerb stone/ edge strip:**
For details of the method of execution of above work the agency may refer Specification for Road and Bridges Works, MORTH by Indian Road Congress along with Indian Standard 456:2000 Plain & Reinforced Cement Concrete.

4.11 **60 mm thick factory made CC interlocking paver block of M-30 Grade.**
For details of the method of execution of above work the agency may refer Specification for Road and Bridges Works, MORTH by Indian Road Congress along with Indian Standard 456:2000 Plain & Reinforced Cement Concrete.

4.12 **Providing and laying 100 mm thick factory made cement concrete interlocking paver block of M-30.**
For details of the method of execution of above work the agency may refer Specification for Road and Bridges Works, MORTH by Indian Road Congress along with Indian Standard 456:2000 Plain & Reinforced Cement Concrete.

Refer Particular Technical Specification.

4.14 **Geomat**
Refer Particular Technical Specification.

4.15 **Green Facia Unit with Biodegradable Mat as erosion control Blanket**
Refer Particular Technical Specification.

5.0 **CHAIN FENCING**
5.1 **Earthwork in Excavation**
For details of the method of execution of above work the agency may refer Sub Head 2.0: Earthwork of CPWD Specification Volume 01.
5.2 **Concreting Grade M15 (1:2:4) with 40 mm nominal size aggregate**
   For details of the method of execution of above work the agency may refer Sub Head 4.0:
   Concrete Work of CPWD Specification Volume 01.

5.3 **Structural Steel Work**
   For details of the method of execution of above work the agency may refer Sub Head 10.0:
   Steel Work of CPWD Specification Volume 01.

5.4 **Painting Work**
   For details of the method of execution of above work the agency may refer Sub Head 10.0:
   Finishing of CPWD Specification Volume 02.

5.5 **GI Chain Link Fabric Fencing**
   For details of the method of execution of above work the agency may refer Sub Head 16.0:
   Road Work of CPWD Specification Volume 02.

6.0 **BARBED FENCING**
6.1 **Earthwork in Excavation**
   For details of the method of execution of above work the agency may refer Sub Head 2.0:
   Earthwork of CPWD Specification Volume 01.

6.2 **Concreting Grade M15 (1:2:4) with 40 mm nominal size aggregate**
   For details of the method of execution of above work the agency may refer Sub Head 4.0:
   Concrete Work of CPWD Specification Volume 01.

6.3 **Centering and Shuttering**
   For details of the method of execution of above work the agency may refer Sub Head 5.0:
   Reinforced Cement Concrete Work of CPWD Specification Volume 01.

6.4 **Steel Reinforcement upto Plinth**
   For details of the method of execution of above work the agency may refer Sub Head 5.0:
   Reinforced Cement Concrete Work of CPWD Specification Volume 01.

6.5 **Steel Reinforcement above Plinth**
   For details of the method of execution of above work the agency may refer Sub Head 5.0:
   Reinforced Cement Concrete Work of CPWD Specification Volume 01.

6.6 **Concreting Grade M25 (Design Mix) with 20 mm nominal size aggregate upto Plinth**
   For details of the method of execution of above work the agency may refer Sub Head 5.0:
   Reinforced Cement Concrete Work of CPWD Specification Volume 01.

6.7 **Concreting Grade M25 (Design Mix) with 20 mm nominal size aggregate above Plinth**
   For details of the method of execution of above work the agency may refer Sub Head 5.0:
   Reinforced Cement Concrete Work of CPWD Specification Volume 01.
6.8  **Structural Steel Work**  
For details of the method of execution of above work the agency may refer Sub Head 10.0: Steel Work of CPWD Specification Volume 01.

6.9  **Turn Buckles**  
For details of the method of execution of above work the agency may refer Sub Head 16.0: Road Work of CPWD Specification Volume 02.

6.10  **Fencing with RCC Post**  
For details of the method of execution of above work the agency may refer Sub Head 16.0: Road Work of CPWD Specification Volume 02.

6.11  Reinforcement and Structural steel has to be procured only from SAIL, RINL Vizag, TATA Tiscon, Jindal Panther, Electrosteel Vedanta or Shyam Steel.
Technical Specifications of Hydraulically-Applied Erosion Control:  
High Performance-Flexible Growth Medium (HP-FGM)

1. GENERAL

1.1 SUMMARY

A. This section specifies a hydraulically-applied, 100% biodegradable, High Performance-Flexible Growth Medium (HP-FGM) that is composed of 100% recycled, thermally refined (within a pressurized vessel) virgin wood fibers, crimped interlocking biodegradable fibers, mineral activators, naturally derived crosslinked biopolymers and water absorbents. The HP-FGM is phytosanitized, free from plastic netting, requires no curing period and upon application forms an intimate bond with the soil surface to create a continuous, porous, absorbent and flexible erosion resistant blanket that allows for rapid germination and accelerated plant growth.

B. Related Guidance:

MORT&H (Fifth Revision) – Section 308 – Seeding & Mulching
IRC 56- 2011

1.2 SUBMITTALS

A. Product Data: Submit manufacturer’s product data and installation instructions. Include required substrate preparation, list of materials and application rate.

B. Certifications: Manufacturer shall submit a letter of certification that the product meets or exceeds all technical and packaging requirements.

1.3 DELIVERY, STORAGE AND HANDLING

Deliver materials and products in UV and weather-resistant factory labeled packages. Store and handle in strict compliance with manufacturer’s instructions and recommendations. Protect from damage, weather, excessive temperatures and construction operations.

2. PRODUCTS

2.1 MATERIALS

The HP-FGM shall be MacFlex or (Higher or equivalent specifications) and conform to the following property values when uniformly applied at a rate of 3,900 kilograms/hectare under laboratory conditions.
**Physical**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Tested Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Per Unit Area</td>
<td>ASTM D6566&lt;sup&gt;1&lt;/sup&gt;</td>
<td>≥ 390 g/m&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Thickness</td>
<td>ASTM D6525&lt;sup&gt;1&lt;/sup&gt;</td>
<td>≥ 5.6 mm.</td>
</tr>
<tr>
<td>Ground Cover</td>
<td>ASTM D6567&lt;sup&gt;1&lt;/sup&gt;</td>
<td>≥ 99%</td>
</tr>
<tr>
<td>Water Holding</td>
<td>ASTM D7367</td>
<td>≥ 1,700%</td>
</tr>
<tr>
<td>Material Color</td>
<td>Observed</td>
<td>Green</td>
</tr>
</tbody>
</table>

**Performance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Tested Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Factor</td>
<td>Large Scale</td>
<td>≤ 0.01</td>
</tr>
<tr>
<td>% Effectiveness</td>
<td>Large Scale</td>
<td>≥ 99%</td>
</tr>
<tr>
<td>Cure time</td>
<td>Observed</td>
<td>0 - 2 hours</td>
</tr>
<tr>
<td>Vegetation</td>
<td>ASTM D7322&lt;sup&gt;1&lt;/sup&gt;</td>
<td>≥ 800 %</td>
</tr>
<tr>
<td>Functional Longevity</td>
<td>ASTM D5338</td>
<td>≤ 18 months</td>
</tr>
</tbody>
</table>

**Environmental**

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Tested Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity</td>
<td>EPA 2021.0</td>
<td>48-hr LC₅₀ &gt; 100%</td>
</tr>
<tr>
<td>Effluent Turbidity</td>
<td>Large Scale</td>
<td>≤ 250 NTU</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>ASTM D5338</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**NOTE:**

1. ASTM test methods developed for Rolled Erosion Control Products and have been modified to accommodate Hydraulically-Applied Erosion Control Products.
2. Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface.
3. % Effectiveness = One minus Cover Factor multiplied by 100%.
4. Large scale testing conducted at Utah Water Research Laboratory.
5. Functional Longevity is the estimated time period, based upon ASTM D5338 testing and field observations, that a material can be anticipated to provide erosion control and agronomic benefits as influenced by composition, as well as site-specific conditions, including; but not limited to – temperature, moisture, light conditions, soils, biological activity, vegetative establishment and other environmental factors.

### 2.2 COMPOSITION

All components of the HP-FGM shall be pre-packaged by the Manufacturer to assure both material performance and compliance with the following values. No chemical additives with the exception of fertilizer, soil pH modifiers, extended-term dyes and biostimulant materials should be added to this product.

- Thermally Processed<sup>1</sup> (within a pressurized vessel) Wood Fiber – 80% ± 3%
  *Heated to a temperature greater than 193 degrees Celsius for 5 minutes at a pressure greater than 345 kPa
- Crosslinked Biopolymers and Water Absorbents – 10% ± 1%
- Crimped, Man-made Biodegradable Interlocking Fibers – 5% ± 1%
- Micro-Pore Granules – 5% ± 1%

### 2.3 PACKAGING

- Bags: Net Weight – 22.7kg, UV and weather-resistant plastic film
- Pallets: Weather-proof, stretch-wrapped with UV resistant pallet cover
- Pallet Quantity: 40 bags/pallet or 1000 kg/pallet

### 2.4 ACCEPTABLE SOULTION PROVIDER & SUPPLIER

Maccaferri Environmental Solutions Pvt. Ltd, D-40, MIDC Ranjangaon, Tal-Shirur, Dist. Pune
www.maccaferri.com/in
3.EXECUTION

3.1 SOIL TESTING

A. Soil Samples shall be taken and sent to a third-party, independent lab for analysis.

B. The tests shall include analysis and interpretation of results.

C. The soil testing methods used shall be compliant with recognized agronomic testing standards, for revegetation of disturbed sites.

D. Soil Analysis shall include results for:
   1. Soil pH
   2. Soluble Salts
   3. Excess Carbonate
   4. Organic Matter
   5. Nutrient readings for:
      i. Nitrogen, Phosphorus, Potassium
      ii. Magnesium, Calcium, Sodium, Manganese, Sulfur, Zinc, Copper, Iron, Boron
   6. Cation Exchange Capacity
   7. Percent Base Saturation Sodium

3.2 BIOTIC SOIL MEDIA & OTHER SOIL AMENDMENTS

Biotic Soil Media (BSM) of equal or higher specification of MacGanics can be adopted where the organic matter is found to be deficient in the soil substrate to increase Organic Matters and to boost soil fertility as an alternate to Top soil. This blend is naturally derived and renewable, and engineered to optimize moisture retention, growth and establishment of vegetation which shall be added as per their recommended application rate & specifications.

Soil Amendments be added BioPrime for slow release / rejuvenates, Jump Start to accelerate germination and establishment, Soil PH Modifiers – equal or higher specifications of Aqua-pHix or NeutraLime and other amendments shall also be applied with the hydro-seeding slurry at Manufacturer recommended rates based on soil test results.

3.3 VEGETATION SPECIES SELECTION

A. Once soils have been analyzed for agronomic potential and amendment recommendations, selection of suitable plant species for achieving sustainable growth and effective erosion control shall be determined by a qualified seed supplier, consulting professional and/or regulatory agency.

B. Site and project specific information considered for species selection shall include:
   1. Project Location and Planning
      i. Climate
      ii. Elevation
      iii. Aspect
      iv. Slope/Gradient
      v. Permanent or Temporary Planting
      vi. Installation Date(s)
   2. Soil Conditions
      i. Soil Texture
      ii. Soil pH
      iii. Toxicities/Deficiencies noted in the previous section.
3. Site Maintenance Requirements
   i. Mowing
   ii. Irrigation
   iii. Animal grazing preference

4. Preferred Vegetation
   i. Drought Tolerant
   ii. Native Vegetation
   iii. Shrub Species
   iv. Turf Grasses
   v. Cool Season
   vi. Warm Season
   vii. Blend of Cool and Warm Season
   viii. Legume Species
   ix. Cover Crops

3.4 SUBSTRATE AND SEEDBED PREPARATION

A. Examine substrates and conditions where materials will be applied. Apply products to
   geotechnically stable slopes that have been designed and constructed to divert runoff away from
   the face of the slope. Do not proceed with installation until satisfactory conditions are established.

B. Depending upon project sequencing and intended application, prepare seedbed in compliance
   with other specifications under Section 1.1 B

3.5 INSTALLATION

A. Strictly comply with equipment manufacturer's installation instructions and recommendations. Use
   approved hydroteching machines with fan-type nozzle (50-degree tip). To achieve optimum soil
   surface coverage, apply HP-FGM from opposing directions to soil surface. Rough surfaces (rocky
   terrain, cat tracked and ripped soils) may require higher application rates to achieve 100% cover.
   Slope interruption devices or water diversion techniques are recommended when slope lengths
   (3H:1V) exceed 100 feet (30 m). Slope interruption intervals may need to be decreased based on
   steeper slopes or other site conditions. HP-FGM is not recommended for channels or areas with
   concentrated water flow unless used in conjunction with a rolled erosion control product designed
   to accommodate the anticipated hydraulic conditions. Unless approved by the Manufacturer, no
   chemical additives with the exception of fertilizer, soil neutralizers and biostimulant materials
   should be added to this product.

B. For Erosion Control and Revegetation:
   To ensure proper application rates, measure and stake area. For maximum performance, apply
   HP-FGM in a two-step process*:
   
   1. Step One: Apply fertilizer with specified prescriptive agronomic formulation, BSM & soil
      amendments mentioned under section 3.2 and typically 50% of specified seed mix with a
      small amount of HP-FGM for visual metering. Do not leave seeded surfaces unprotected,
      especially if precipitation is imminent.
   2. Step Two: Mix balance of seed and apply HP-FGM at a rate of 22.7 kg/475 litres of water
      over freshly seeded surfaces. Confirm loading rates with equipment manufacturer.

*Depending upon site conditions HP-FGM may be applied in a one-step process where all
components may be mixed together in single tank loads. Consult with Manufacturer for further
details. Best results and more rapid curing are achieved at temperatures exceeding 15°C. Curing
times may be accelerated in high temperature, low humidity conditions with product applied on dry
soils. Over-application of product may inhibit germination and plant growth.
C. **Mixing**: A mechanically agitated hydroseeding machine is strongly recommended:

1. Fill 1/3 of mechanically agitated hydroteeder with water. Turn pump on for 15 seconds and purge and pre-wet lines. Turn pump off.
2. Turn agitator on and load low density materials first (i.e. seed).
3. Continue slowly filling tank with water while loading fiber matrix into tank.
4. Consult application and loading charts to determine number of bags to be added for desired area and application rate. Mix at a rate of 22.7 kg of HP-FGM per 475 litres.
5. All HP-FGM should be completely loaded before water level reaches 75% of the top of tank.
6. Top off with water and mix until all fiber is fully broken apart and hydrated (minimum of 10 minutes — increase mixing time when applying in cold conditions). This is very important to fully activate the bonding additives and to obtain proper viscosity.
7. Add fertilizer and any other remaining amendments.
8. Shut off recirculation valve to minimize potential for air entrainment within the slurry.
9. Slow down agitator and start applying with a 50-degree fan tip nozzle.
10. Spray in opposing directions for maximum soil coverage.

D. **Typical Application Rates**:
These application rates are for standard conditions. Application rates may need to be increased to accommodate very rough based on actual site conditions.

<table>
<thead>
<tr>
<th>Slope Gradient / Condition</th>
<th>Rate (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 4H to 1V</td>
<td>2,800</td>
</tr>
<tr>
<td>&gt; 4H to 1V and ≤ 3H to 1V</td>
<td>3,400</td>
</tr>
<tr>
<td>&gt; 3H to 1V and ≤ 2H to 1V</td>
<td>3,900</td>
</tr>
<tr>
<td>&gt; 2H to 1V and ≤ 1H to 1V</td>
<td>4,500</td>
</tr>
<tr>
<td>&gt; 1H to 1V</td>
<td>5,100</td>
</tr>
<tr>
<td>Below RECP</td>
<td>1,700</td>
</tr>
</tbody>
</table>

*Use only approved and tested MacMat R® - RECP Three Dimensional Erosion control Mat / rolled erosion control Products

3.6 CLEANING AND PROTECTION

A. After application, thoroughly flush the tank, pumps and hoses to remove all material. Wash all material from the exterior of the machine and remove any slurry spills. Once dry, material will be more difficult to remove.

B. Clean spills promptly. Advise owner of methods for protection of treated areas. Do not allow treated areas to be trafficked or subjected to grazing.

3.7 INSPECTION AND MAINTENANCE

A. All inspections and maintenance recommendations shall be conducted by qualified professionals consistent with the owner, engineer/specifier and regulatory entity(ies) expectations.

B. Initial inspections shall insure installations are in accordance with the project plans and specifications with material quantities and activities fully documented.

C. Subsequent inspections shall be conducted at pre-determined time intervals and corrective maintenance activities directed after each significant precipitation or other potentially damaging weather or site event.
Technical Specifications of Hydraulically-Applied Erosion Control:  
Biotic Soil Media (BSM)

1. GENERAL

1.1 SUMMARY

A. This section specifies a hydraulically-applied Biotic Soil Media- MacGanics (BSM). It is designed as an alternative to topsoil so as to increase organic matters and boost soil fertility in depleted soils/substrates with low organic matter, low nutrient levels and limited biological activity. It is a combination of recycled Thermally Refined bark and wood fibers with a proprietary blend of biopolymers, biochar, seaweed extract, humic acid, endomycorrhizae and other beneficial constituents. These components work synergistically to create a holistic solution to improve the agronomic potential in the rhizosphere. Unlike peat harvested from fragile wetlands, all components of the Biotic Soil Media blend are naturally derived and renewable, and engineered to optimize moisture retention, growth and establishment of vegetation.

B. Related Guidance:

MORT&H (Fifth Revision) – Section 308 – Seeding & Mulching
IRC 56 - 2011

1.2 SUBMITTALS

A. Product Data: Submit manufacturer’s product data and installation instructions. Include required substrate preparation, list of materials and application rate.

B. Certifications: Manufacturer shall submit a letter of certification that the product meets or exceeds all technical and packaging requirements.

1.3 DELIVERY, STORAGE AND HANDLING

Deliver materials and products in UV and weather-resistant factory labeled packages. Store and handle in strict compliance with manufacturer’s instructions and recommendations. Protect from damage, weather, excessive temperatures and construction operations.

2. PRODUCT

2.1 MATERIALS

PROPERTIES: The Biotic Soil Media BSM shall be MacGanics or Higher or equivalent specifications and conform to the following property values when uniformly applied at a rate of 3,920 kilograms/hectare under laboratory conditions.
<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Tested Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic Material</td>
<td>ASTM D586</td>
<td>≥ 94%</td>
</tr>
<tr>
<td>Mass Per Unit Area</td>
<td>ASTM D6566¹</td>
<td>≥ 392 g/m²</td>
</tr>
<tr>
<td>Ground Cover</td>
<td>ASTM D6567¹</td>
<td>≥ 99%</td>
</tr>
<tr>
<td>Water Holding Capacity</td>
<td>ASTM D7367</td>
<td>≥ 900%</td>
</tr>
<tr>
<td>pH</td>
<td>ASTM D1293</td>
<td>6.0 ± 0.3</td>
</tr>
<tr>
<td>Carbon : Nitrogen (C:N) Ratio</td>
<td>ASTM E1508 &amp; EPA Method 1687</td>
<td>50:1</td>
</tr>
<tr>
<td>Material Color</td>
<td>Observed</td>
<td>Green</td>
</tr>
<tr>
<td>Performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover Factor²</td>
<td>Large Scale Testing³</td>
<td>≤ 0.01</td>
</tr>
<tr>
<td>% Effectiveness³</td>
<td>Large Scale Testing³</td>
<td>≥ 99%</td>
</tr>
<tr>
<td>Vegetation Establishment</td>
<td>ASTM D7322¹</td>
<td>≥ 850%</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecotoxicity</td>
<td>EPA 2021.0</td>
<td>48-hr LC₅₀ &gt; 100%</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>ASTM D5338</td>
<td>Yes</td>
</tr>
<tr>
<td>EPA Metal Limits</td>
<td>EPA 40 CFR 503</td>
<td>Pass</td>
</tr>
<tr>
<td>Pathogen Reduction</td>
<td>EPA 40 CFR 503</td>
<td>Pass</td>
</tr>
</tbody>
</table>

1. Cover Factor is Cover Factor is calculated as soil loss ratio of treated surface versus an untreated control surface.
2. % Effectiveness = One minus Cover Factor multiplied by 100%.
3. Large scale testing conducted at Utah Water Research Laboratory (UWRL). BSM was applied at 3,920 kg/ha and covered with Engineered Fibre Matrix (EFM), a Bonded Fiber Matrix, at 3,920 kg/ha and tested under uniform conditions.

### 2.2 COMPOSITION

All components of the BSM shall be pre-packaged by the manufacturer to assure both material performance and compliance with the following values. No chemical additives with the exception of fertilizer, soil neutralizers and bio-stimulant materials should be added to this product.

1. Thermally Refined* Organic Fibers (within a pressurized vessel) – 89%
   *Heated to a temperature greater than 193 degrees Celsius for 5 minutes at a pressure greater than 345 kPa
2. Proprietary Blend of Polysaccharide Biopolymers, Biochar, Seaweed Extract, Humic Acid, and Endomycorrhizae – 11%
3. Moisture Content – 12%

### 2.3 PACKAGING

- Bags: Net Weight –22.7 kg, UV and weather-resistant plastic film
- Pallets: Weather-proof, stretch-wrapped with UV resistant pallet cover
- Pallet Quantity: 40 bags/pallet or 1 ton/pallet
2.4 ACCEPTABLE SOLUTION PROVIDER & SUPPLIER

Maccaferri Environmental Solutions Pvt. Ltd,
D-40, MIDC Ranjangaon, Tal-Shirur, Dist. Pune
www.maccaferri.com/in

3. EXECUTION

3.1 SOIL TESTING

A. Soil Samples shall be taken and sent to a third-party, independent lab for analysis.

B. The tests shall include analysis and interpretation of results.

C. The soil testing methods used shall be compliant with recognized agronomic testing standards, for revegetation of disturbed sites.

D. Soil Analysis shall include results for:
   1. Soil pH
   2. Soluble Salts
   3. Excess Carbonate
   4. Organic Matter
   5. Nutrient readings for:
      i. Nitrogen, Phosphorus, Potassium
      ii. Magnesium, Calcium, Sodium, Manganese, Copper, Sulfur, Zinc, Copper, Iron, Boron
   6. Cation Exchange Capacity
   7. Percent Base Saturation Sodium

3.2 HYDRAULICALLY APPLIED EROSION CONTROL PRODUCTS & OTHER SOIL AMENDMENTS

Optional Hydraulically Applied erosion control Products - equal or higher specification of MacFlex- High Performance Flexible Growth Medium (HPFGM) or MacCoco – Extended Term Flexible Growth Medium (ET-FGM) or MacMatrix – Engineered Fibre Matrix (EFM) or Mac Wood - Hydraulic Mulch (HM) with/without tack - shall be added as per their recommended application rate & specifications,

Other Soil Amendments like BioPrime for slow release / rejuvenates, Jump Start to accelerate germination and establishment, Soil PH Modifiers – equal or higher specifications of Aqua-pHix or NeutraLime and other amendments shall also be applied with the hydro-seeding slurry at Manufacturer recommended rates based on soil test results.

3.3 VEGETATION SPECIES SELECTION

A. Once soils have been analyzed for agronomic potential and amendment recommendations, selection of suitable plant species for achieving sustainable growth and effective erosion control shall be determined by a qualified seed supplier, consulting professional and/or regulatory agency.
B. Site and project specific information considered for species selection shall include:

1. Project Location and Planning
   i. Climate
   ii. Elevation
   iii. Aspect
   iv. Slope/Gradient
   v. Permanent or Temporary Planting
   vi. Installation Date(s)

2. Soil Conditions
   i. Soil Texture
   ii. Soil pH
   iii. Toxicities/Deficiencies noted in the previous section.

3. Site Maintenance Requirements
   i. Mowing
   ii. Irrigation
   iii. Animal grazing preference

4. Preferred Vegetation
   i. Drought Tolerant
   ii. Native Vegetation
   iii. Shrub Species
   iv. Turf Grasses
   v. Cool Season
   vi. Warm Season
   vii. Blend of Cool and Warm Season
   viii. Legume Species
   ix. Cover Crops

3.4. SUBSTRATE PREPARATION

A. Examine substrates and conditions where materials will be applied. Apply product to geotechnically stable slopes that have been designed and constructed to divert runoff away from the face of the slope. Do not proceed with installation until satisfactory conditions are established.

B. Depending upon project sequencing and intended application, prepare seedbed in compliance with other specifications under Section 1.01 B

3.5 INSTALLATION

A. Strictly comply with equipment manufacturer’s installation instructions and recommendations. Use approved hydroseeding machines. To achieve optimum soil surface coverage, apply BSM from opposing directions to soil surface. Hydraulically Applied Erosion control products mentioned under section 3.2, slope interruption devices or water diversion techniques should be used in conjunction with this product. No chemical additives with the exception of fertilizer, soil neutralizers and biostimulant materials should be added to this product.

B. For Revegetation: To ensure proper application rates, measure and stake area.

For best results, allow BSM to dry slightly prior to application/installation of erosion control products; more rapid drying will occur when temperatures exceed 60°F (15°C).
Drying times may be accelerated in high temperature, low humidity conditions with product applied on dry soils. Use caution to insure overspray of hydraulic erosion control product does not cause movement of the BSM. When installing rolled erosion control products over BSM, take caution to minimize disturbance of the treated surface and avoid excessive foot traffic.

C. **Mixing:** A mechanically agitated hydroseeding machine is strongly recommended:

1. Fill mechanically agitated hydroSeeder with water to at least 1/3 of displacement. Turn pump on and thoroughly purge pump and pre-wet lines. Turn pump off.
2. Turn agitator on and load low density materials first (i.e. seed).
3. Continue slowly filling tank with water while loading BSM and soil amendments.
4. Consult application and loading charts to determine number of bags to be added for desired area and application rate. Mix at a rate of 45.4 kg/379 litres in machines equipped with gear or positive displacement pumps and 34.0 kg/379 litres in machines with centrifugal pumps. Contact Equipment manufacturer to confirm optimum mixing rates.
5. All BSM should be completely loaded before water level reaches 75% of the top of tank.
6. Add fertilizer and other heavier materials and continue mixing.
7. Top off with water and mix until all material is fully broken apart and hydrated (minimum of 10 minutes — increase mixing time when applying in cold conditions). This is very important to allow the BSM to fully hydrate.
8. Shut off recirculation valve to reduce potential for air entrainment within the slurry.
9. Slow down agitator to very low speed and start applying with optimum nozzle.
10. Spray in opposing directions for maximum soil coverage.
11. Return to water source as quickly as possible to purge pump and lines, then repeat mixing and application process.

D. **Typical Application Rates:** These application rates are for standard conditions. Designers may need to increase application rates on rough or rocky surfaces based on actual site conditions.

<table>
<thead>
<tr>
<th>% Organic Matter</th>
<th>Rate (kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.75</td>
<td>5,600</td>
</tr>
<tr>
<td>≥ 0.75 &amp; &lt; 1.5</td>
<td>5,040</td>
</tr>
<tr>
<td>≥ 1.5 &amp; &lt; 2.0</td>
<td>4,480</td>
</tr>
<tr>
<td>≥ 2.0 &amp; &lt; 3.0</td>
<td>3,920</td>
</tr>
</tbody>
</table>

3.6 **CLEANING AND PROTECTION**

A. After application, thoroughly flush the tank, pumps and hoses to remove all material. Wash all material from the exterior of the machine and remove any slurry spills. Once dry, material will be more difficult to remove.

B. Clean spills promptly. Advise owner of methods for protection of treated areas. Do not allow treated areas to be trafficked or subjected to grazing.
3.7 INSPECTION AND MAINTENANCE

A. All inspections and maintenance recommendations shall be conducted by qualified professionals consistent with the owner, engineer/specifier and regulatory entity(s) expectations.

B. Initial inspections shall insure installations are in accordance with the project plans and specifications with material quantities and activities fully documented.

C. Subsequent inspections shall be conducted at pre-determined time intervals and corrective maintenance activities directed after each significant precipitation or other potentially damaging weather or site event.
Technical Specifications for Supplying and Installation of Synthetic Erosion Control Mat

1. Description
This work shall consist of supplying and lying of approved Synthetic Erosion Control Mat or equivalent over the prepared slope which will protect the slope from erosion.

2. Eligibility Criteria
The manufacturing unit of Synthetic Erosion Control Mat should have ISO 9001:2015 accreditation from an internationally accredited organization for its quality procedures. Manufacturer/Supplier of synthetic erosion control mat shall have proven experience in supply and designing of erosion control work using erosion control blanket works in Asia. Manufacturer / Supplier shall have supplied synthetic erosion control mat for highway project at least 10,000 sqm during last five years anywhere in the world. Manufacturer / Supplier shall have existence more than 5 years in Asia from date of this tender notice. Manufacturer / Supplier shall have in-house design team for designing erosion control works. The Manufacturer / Supplier should not have a history of poor performance such as abandoning the works, financial failures, blacklisting. If it is observed, Manufacturer / Supplier will be automatically disqualified.

3. Material Properties
Synthetic Erosion Control Mat is three dimensional erosion control mat which consists of a three-dimensional geo-mat composed of UV stabilized; non-degradable synthetic fibers (polypropylene). Mat is supplied in roll form and anchored to the surface, to be protected, using staple/pins. Synthetic Erosion Control Mat shall conform to properties listed in Table 1.

4. Equipment
The equipment required to install the Synthetic Erosion Control Mat shall vary as per the site condition. All necessary equipments shall be decided as per the project requirement and site condition. It shall be approved before the work begins by Engineer in Charge.

5. Construction Requirements
Prior to laying of Synthetic Erosion Control Mat on the slope, the surface shall be properly prepared, cleaned and dressed to the specified lines and levels as shown on the drawings. Specified trench keys along the crest and at the bottom of slope area shall be provided to fix the Synthetic Erosion Control Mat in the ground. In case the soil is not fertile, it shall be mixed with suitable amount of fertilizer or seeds. Contractor shall conduct agronomic test on soil for determining supplement to be provided.
Installation of Synthetic Erosion Control Mat shall be in accordance with the manufacturer’s instructions. The supplier shall provide a method of statement detailing installation procedure.

Table 1 Properties of Synthetic Erosion Control Mat

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>TEST METHOD</th>
<th>UNIT</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Polymer Properties</td>
<td></td>
<td>POLYPROPYLENE</td>
<td></td>
</tr>
<tr>
<td>Polymer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point</td>
<td>ISO 306</td>
<td>°C</td>
<td>150</td>
</tr>
<tr>
<td>Density</td>
<td>ISO 1183</td>
<td>kg/m³</td>
<td>900</td>
</tr>
<tr>
<td>Inflammability</td>
<td>EN ISO 11925-2</td>
<td>class</td>
<td>F</td>
</tr>
<tr>
<td>UV Resistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength - length direction</td>
<td>EN ISO 10319</td>
<td>kN/m</td>
<td>2</td>
</tr>
<tr>
<td>Strain at max strength-length</td>
<td>EN ISO 10319</td>
<td>%</td>
<td>60</td>
</tr>
<tr>
<td>direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tensile strength - cross direction</td>
<td>EN ISO 10319</td>
<td>kN/m</td>
<td>1.0</td>
</tr>
<tr>
<td>Strain at max strength-cross</td>
<td>EN ISO 10319</td>
<td>%</td>
<td>50</td>
</tr>
<tr>
<td>direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nominal physical properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mass per unit area</td>
<td>EN ISO 9864</td>
<td>g/m²</td>
<td>450</td>
</tr>
<tr>
<td>PP single filament diameter</td>
<td></td>
<td>µm</td>
<td>400</td>
</tr>
<tr>
<td>Nominal Thickness at 2 KPa</td>
<td>EN ISO 9863-I</td>
<td>mm</td>
<td>9</td>
</tr>
<tr>
<td>Color</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roll Length</td>
<td></td>
<td>m</td>
<td>50</td>
</tr>
<tr>
<td>Roll Width</td>
<td></td>
<td>m</td>
<td>4.2</td>
</tr>
</tbody>
</table>

Values indicated in the table are typical values

6. Method of Measurement
The Synthetic Erosion Control Mat shall be measured by the square meter or fraction thereof in place. Excavation, backfill, bedding and cover material are separate pay items.

7. Basis of Payment
Unless otherwise noted in the Plans, the accepted quantity of Synthetic Erosion Control Mat complete in place shall be paid for at the contract unit price per square meter.
SECTION - VII
TECHNICAL SPECIFICATION.

Attached separately. However, these tender documents are to be read with the followings books/ codes/ manuals with versions updated/corrected/modified up to the date of tender opening:

A. RAILWAY/IRS BOOKS OF REFERENCE:


2. NF Railway Engineering Department Unified Standard Schedule of Rates Engineering Department 2012”, as amended by updated correction slips (termed USSR, 2012) up to the date of tender dropping.

3. CPWD Specifications latest edition with correction slips published from time to time.


5. Indian Railway Standard (IRS) Bridge sub-structure and foundations code-code of practice for the design of the substructure and foundation of Bridges adopted 1936 – Revised – 1985 (Hereinafter referred to as “Substructure Code”) with up to date correction slips.


7. MORTH, Fifth Revision 2013 by Indian Road Congress, New Delhi


9. All Relevant Indian Standards Codes & Specifications:

10. Note: The books of reference shall also include further references mentioned in above mentioned books of references.
<table>
<thead>
<tr>
<th>SL No</th>
<th>Material</th>
<th>Brands</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cement (OPC 43/53)</td>
<td>Ambuja, Ultratech, Birla, L&amp;T, Star, Dalmia</td>
</tr>
<tr>
<td>2</td>
<td>Re-inforcement steel</td>
<td>TATA/SAIL/RINL/JINDAL</td>
</tr>
<tr>
<td>3</td>
<td>Structural Steel</td>
<td>IS Standard</td>
</tr>
<tr>
<td>4</td>
<td>GI Wire</td>
<td>TATA Wiron or as approved by Engineer in Charge</td>
</tr>
<tr>
<td>5</td>
<td>Bitumen</td>
<td>IOCL/HPCL</td>
</tr>
<tr>
<td>6</td>
<td>Emulsion</td>
<td>STP/SAPCO/HINDCOLAS</td>
</tr>
</tbody>
</table>
PAVEMENT SECTION OF 60MM PAVERS

60 mm M 30 -Concrete Block
150 mm - Water Bound Macadam
150mm - Granular Sub Base
Earth Filling + PVD
500mm - Subgrade (Earth Filling)
CBR > 5  WITH 3 LAYERS OF GEOGRIDS GEOCOMPOSITE DRAIN

TURFING WITH SOD
Geomat & hydraulically applied seeds

SECTION THROUGH 100MM PAVER BLOCK

100 mm M 50 -Concrete Block
300 mm - Water Bound Macadam
300mm - Granular Sub Base
PAVEMENT SECTION OF 100MM PAVERS
Earth Filling + PVD
500mm - Subgrade (Earth Filling)
CBR > 5  WITH 3 LAYERS OF GEOGRIDS GEOCOMPOSITE DRAIN

150 mm GSB
40 mm
75 mm
225 mm
150 mm

EMBANKMENT IN YARD