



ರೈಲು ಮೂಲಸೌಲಭ್ಯ ಅಭಿವೃದ್ಧಿ ಕಂಪನಿ (ಕರ್ನಾಟಕ) ನಿಯಮಿತ

ರೇಲ ಇನ್‌ಫ್ರಾಸ್ಟ್ರಕ್ಚರ್ ಡೆವಲಪ್‌ಮೆಂಟ್ ಕಂಪನಿ (ಕರ್ನಾಟಕ) ಲಿಮಿಟೆಡ್

Rail Infrastructure Development Company (Karnataka) Limited

K-RIDE

(A Joint Venture of Govt. of Karnataka and Ministry of Railways)

TENDER NO. KRIDE/2023-24/OW/WORK_INDENT4

DATE: 06/06/2023

TENDER DOCUMENT

NAME OF WORK:

Detailed Design Consultancy (DDC) Services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP)

RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

Samparka Soudha, 1st Floor,
Dr. Rajkumar Road,
Opposite Orion Mall,
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| LIST OF ABBREVIATIONS | |
|-----------------------|---|
| ABBREVIATION | FULL FORM |
| AC | ALTERNATING CURRENT |
| AFC | AUTOMATIC FARE COLLECTION |
| AMF | AUTO MAINS FAILURE |
| APS | AUXILLARY POWER SUPPLY |
| ASS | AUXILLARY SUB STATION |
| ATO | AUTOMATIC TRAIN OPERATION |
| ATP | AUTOMATIC TRAIN PROTECTION |
| ATS | AUTOMATIC TRAIN SUPERVISION |
| AWP | AUTOMATIC COACH WASHING PLANT |
| BBMP | BRUHAT BENGALURU MAHANAGARA PALIKE |
| BCC | BACKUP CONTROL CENTRE |
| BESCOM | BANGALORE ELECTRICITY SUPPLY COMPANY LIMITED |
| BG | BANK GUARANTEE |
| BLT | BALLAST-LESS TRACK |
| BOQ | BILL OF QUANTITIES |
| BSRP | BENGALURU SUBURBAN RAILWAY PROJECT |
| BTS | BOGIE TESTING MACHINE |
| BWSSB | BENGALURU WATER SUPPLY & SEWAGE BOARD |
| CAD | COMPUTER AIDED DESIGN |
| CATC | CONTINUOUS AUTOMATIC TRAIN CONTROL |
| CBTC | COMMUNICATIONS BASED TRAIN CONTROL |
| CC | CONDITIONS OF CONTRACT |
| CC | CONTROL CENTRE |
| CCA | CONTROLLER OF CERTIFYING AUTHORITY |
| CCTV | CLOSED CIRCUIT TELEVISION |
| CER | CENTRAL EQUIPMENT ROOM |
| CI | CONVERTER INVERTER |
| CIP | CO-ORDINATED INSTALLATION PROGRAMME |
| CPCB | CENTRAL POLLUTION CONTROL BOARD |
| CPWD | CENTRAL PUBLIC WORKS DEPARTMENT |
| CRD | CONSTRUCTION REFERENCE DRAWINGS |
| CSD | CIVIL STRUCTURAL DRAWINGS |
| CV | CURRICULLUM VITAE |
| CWR | CONTINUOUS WELDED RAIL |
| DCC | DATE OF COMPLETION OF CONSTRUCTION |
| DDC | DETAILED DESIGN CONSULTANCY |
| DG | DIESEL GENERATOR |
| DGM | DEPUTY GENERAL MANAGER |
| DIPP | DEPARTMENT OF INDUSTRIAL POLICY AND PROMOTION |
| DLP | DEFECT LIABILITY PERIOD |
| DMC | DRIVING MOTOR CAR/COACH |
| DPIIT | DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE |
| DPR | DETAILED PROJECT REPORT |
| DQAP | DESIGN QUALITY ASSURANCE PLAN |
| DSC | DIGITAL SIGNATURE CERTIFICATE |

| | |
|----------------|--|
| DTO | DRIVERLESS TRAIN OPERATION |
| E&M | ELECTRICAL AND MECHANICAL |
| EIA | ENVIRONMENTAL IMPACT ASSESSMENT |
| EIB | EUROPEAN INVESTMENT BANK |
| EMD | EARNEST MONEY DEPOSIT |
| EMU | ELECTRIC MULTIPLE UNIT |
| EOT | ELECTRIC OVERHEAD TRAVELLING |
| EPC | ENGINEERING, PROCUREMENT AND CONSTRUCTION |
| ESHS | ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY |
| ESIC | EMPLOYEES' STATE INSURANCE CORPORATION |
| ETP | EFFLUENT TREATMENT PLANT |
| ETU | ENGINE TUNE UP |
| FIP | FEDERATION INTERNATIONALE DE LA PRECONTRAINTTE |
| FTP | FULL TECHNICAL PROPOSAL |
| FY | FINANCIAL YEAR |
| GAD | GENERAL ARRANGMENT DRAWING |
| GCC | GENERAL CONDITIONS OF CONTRACT |
| GFC | GOOD FOR CONSTRUCTION |
| GIR | GEOTECHNICAL INTERPRETATIVE REPORT |
| GM | GENERAL MANAGER |
| GoA | GRADE OF AUTOMATION |
| GOI | GOVERNMENT OF INDIA |
| GOK | GOVERNMENT OF KARNATAKA |
| GPS | GLOBAL POSITIONING SYSTEM |
| GST | GOODS AND SERVICE TAX |
| HFL | HIGH FLOOD LEVEL |
| HIPOT | HIGH POTENTIAL |
| HR | HUMAN RESOURCES |
| HT | HIGH TENSION |
| HVAC | HEATING, VENTILATION AND AIR CONDITIONING |
| IBL | INSPECTION BAY LINE |
| IBMS | INTEGRATED BUILDING MANAGEMENT SYSTEM |
| ICD | INTERFACE COORDINATION DRAWINGS |
| IFT | INVITATION FOR TENDERS |
| IGBC | INDIAN GREEN BUILDING COUNCIL |
| IGBT | INSULATED GATE BIPOLAR TRANSISTORS |
| IISC | INDIAN INSTITUTE OF SCIENCE |
| IITM | INDIAN INSTITUTE OF TECHNOLOGY, MADRAS |
| INR | INDIAN RUPEE |
| IOH | INTERMEDIATE OVERHAUL |
| IPC | INTERIM PAYMENT CERTIFICATE |
| IR | INDIAN RAILWAYS |
| IRP | INTERIM RESOLUTION PROFESSIONAL |
| IRS | INDIAN RAILWAY STANDARDS |
| IS | INDIAN STANDARD |
| ISO | INTERNATIONAL ORGANIZATION FOR STANDARDIZATION |
| IST | INDIAN STANDARD TIME |
| IT | INFORMATION TECHNOLOGY |

| | |
|------------|---|
| ITT | INSTRUCTIONS TO TENDERERS |
| JAG | JUNIOR ADMINISTRATIVE GRADE |
| JPEG | JOINT PHOTOGRAPHIC EXPERTS GROUP |
| JV | JOINT VENTURE |
| KD | KEY DATE |
| KFW | KREDITANSTALT FÜR WIEDERAUFBAU |
| KPTCL | KARNATAKA POWER TRANSMISSION CORPORATION LIMITED |
| KPWD | KARNATAKA PUBLIC WORKS DEPARTMENT |
| K-RIDE | RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED |
| K-RIDE SOD | K-RIDE SCHEDULE OF DIMENSIONS |
| KTPP | KARNATAKA TRANSPARENCY IN PUBLIC PROCUREMENTS |
| LCS | LEAST COST SELECTION |
| LD | LIQUIDATED DAMAGES |
| LED | LIGHT EMITTING DIODE |
| LHD | LINEAR HEAT DETECTION |
| LLP | LIMITED LIABILITY PARTNERSHIP |
| LOA | LETTER OF ACCEPTANCE |
| LOI | LETTER OF INVITATION |
| LPB | LETTER OF PRICE BID |
| LT | LOW TENSION |
| LTB | LETTER OF TECHNICAL BID |
| LV | LOW VOLTAGE |
| MC | MOTOR CAR |
| MD | MANAGING DIRECTOR |
| MEP | MECHANICAL, ELECTRICAL AND PLUMBING |
| MIG | METAL INERT GAS |
| MOR | MINISTRY OF RAILWAYS |
| MOST | MINISTRY OF SURFACE TRANSPORT |
| NAAQS | NATIONAL AMBIENT AIR QUALITY STANDARDS |
| NCLT | NATIONAL COMPANY LAW TRIBUNAL |
| NIT | NOTICE INVITING TENDER |
| OEM | ORIGINAL EQUIPMENT MANUFACTURER |
| OH | OVER HEAD |
| OHE | OVERHEAD EQUIPMENT |
| P WAY | PERMANENT WAY |
| P&M | PLANT AND MACHINERY |
| PA | PUBLIC ANNOUNCEMENT |
| PAN | PERMANENT ACCOUNT NUMBER |
| PCC | PARTICULAR CONDITIONS OF CONTRACT |
| PDF | PORTABLE DOCUMENT FORMAT |
| PF | PROVIDENT FUND |
| PG | PERFORMANCE GUARANTEE |
| PH | POTENTIAL OF HYDROGEN |
| PIDS | PERIMETER INTRUSION DETECTION SYSTEMS |
| PIS | PUBLIC INFORMATION SYSTEM |
| PMC | PROJECT MANAGEMENT CONSULTANT |
| POA | POWER OF ATTORNEY |
| POH | PERIODIC OVERHAUL |

| | |
|------------------|---|
| PPIO | PLANNING, PROGRESS AND INVESTIGATION ORGANISATION |
| PSD | PLATFORM SCREEN DOOR |
| PSS | PACKET SWITCHED SERVICE |
| PSU | PUBLIC SECTOR UNDERTAKING |
| PVC | PRICE VARIATION CLAUSE |
| PWM | PULSE WIDTH MODULATION |
| RFP | REQUEST FOR PROPOSAL |
| BITES | RAIL INDIA TECHNICAL AND ECONOMIC SERVICES |
| RRM | RAIL RESOURCE MANAGEMENT |
| RRV | RAIL CUM ROAD VEHICLE |
| RS | ROLLING STOCK |
| S&T | SIGNALLING AND TELECOMMUNICATION |
| SBL | STABLING BAY LINE |
| SCC | SPECIAL CONDITIONS OF CONTRACT |
| SCADA | SUPERVISORY CONTROL AND DATA ACQUISITION |
| SD | SECURITY DEPOSIT |
| SEM | STRUCTURAL ELECTRICAL MECHANICAL |
| SER | SIGNALLING EQUIPMENT ROOM |
| SFMS | STRUCTURE FINANCIAL MESSAGING SYSTEM |
| SIV | PERFORMANCE REVIEW STATIC CONVERTER |
| SMR | SIGNALLING MAINTENANCE ROOM |
| STROD | STRUCTURAL OPENING DRAWING |
| SPV | SPECIAL PURPOSE VEHICLE |
| SRJ | STOCK RAIL JOINT |
| STP | SEWAGE TREATMENT PLANT |
| SWR | SOUTH WESTERN RAILWAY |
| TC | TRAILER CAR |
| TDS | TOTAL DISSOLVED SOLIDS |
| TDS | TAX DEDUCTION AT SOURCE |
| TDS CLOCK | TIME DISTRIBUTION SYSTEM CLOCK |
| TER | TELECOM EQUIPMENT ROOM |
| TIG | TUNGSTEN INERT GAS |
| TMR | TELECOM MAINTENANCE ROOM |
| TOP | TRAIN OPERATION PLAN |
| TOR | TERMS OF REFERENCE |
| TSS | TRACTION SUBSTATION |
| UPS | UNINTERRUPTED POWER SUPPLY |
| USSOR | UNIFIED STANDARD SCHEDULE OF RATES |
| VAC | VENTILATION AND AIRCONDITIONING |
| VC | VIDEO CONFERENCING |
| VCB | VACCUM CIRCUIT BREAKER |
| VES | VERTICAL ELECTRICAL SOUNDING |
| VRF | VARIABLE REFRIGERANT FLOW |
| VRV | VARIABLE REFRIGERANT VOLUME |
| VVVF | VARIABLE VOLTAGE VARIABLE FREQUENCY |
| WPI | WHOLESALE PRICE INDEX |
| WSL | WORK SHOP LINE |

SECTION – 1

INVITATION FOR TENDERS (IFT)

K- RIDE [Rail Infrastructure Development Company (Karnataka) Limited]

INVITATION FOR TENDERS

(Through e-tendering mode)

Tender Notice No. KRIDE / 2023-24 / OW / WORK_INDENT4

Date: 06/06/2023

RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED (K-RIDE), a Joint Venture of Government of Karnataka and Ministry of Railways with its corporate office, at #8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall, Rajajinagar 1st Block, Bengaluru-560010, India, invites Bids from eligible Bidders for the Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP) as detailed below under Single stage Two Packet system (Technical Bid and Financial Bid in separate packets) on Least Cost Selection (LCS) Mode.

| NAME OF WORK | BID SECURITY / EMD | PERIOD OF COMPLETION |
|--|--|----------------------|
| Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP) | Bid Security / EMD as mentioned in Section 2 and as per form BDF-1 shall be submitted. (Bids without Tender Security / EMD will be summarily rejected) | 30 Months |

NOTES

1. The Selected Bidder (Consultant) shall be responsible for Detailed Design of Two Maintenance Depots of BSRP at Akkupete and Soladevanahalli, for providing Detailed Design support during construction of these depots and for providing solutions to all interface issues encountered during construction.
2. The detailed terms and conditions of the Project, including the scope of the works, services and obligations are mentioned in Terms of Reference, Conditions of Contract (CC, PCC and Contract Data) and all other related documents in the Bid Document.
3. The tenderers are advised to examine the Project in greater detail, and to carry out, at their cost, all such studies and analysis as may be required for submitting their respective Bids for award of the contract.
4. The tenderers shall submit the tender through e - procurement portal. The tenderers shall submit scanned copies of their registration certificates, work done certificates and any other documents online. More information can be had from the website www.eproc.karnataka.gov.in or www.kppp.karnataka.gov.in
5. On the scheduled date of opening of tenders, initially, only the Technical Bids will be opened through Karnataka Public Procurement Portal. The Technical Bids will be evaluated by K-RIDE in accordance with the stipulated Qualification and Evaluation criteria. No amendments or changes to the Bids would be permitted after the opening of Bids.
6. Financial Bids of tenderers, qualified in the Technical Evaluation, will be opened on the date and at the time advised by K-RIDE through e-tendering portal. The Financial Bids are evaluated, and the Contract is awarded to the tenderer, whose tender has been determined to be the lowest evaluated substantially responsive tender.
7. The tenderers are advised to note the eligibility and minimum qualifying criteria specified in the Instruction to Tenderers.
8. Tenders must be accompanied by a Bid Security / EMD as per the relevant clause in any one of the forms as specified. The Bid Security / EMD shall have to be valid for 45 days beyond the validity of the tender, specified in the tender documents. Any tenders received without Bid security will be summarily rejected
9. Incomplete tenders will be considered non-responsive and such tenders will not be considered for further evaluation.
10. Tender Documents can be downloaded free of cost from Karnataka Public Procurement Portal i.e., <https://eproc.karnataka.gov.in> or www.kppp.karnataka.gov.in from 09/06/2023 and the tenders must be submitted online via Karnataka Public Procurement Portal only.
11. Deleted.

12. It will be the responsibility of the tenderers, who are submitting their tender based on the tender documents downloaded by them on a particular date, to check for any Addendum/Corrigendum issued in this regard after the date of their downloading, from the relevant website from time to time and to ensure submission of their bids along with all Addenda/Corrigenda issued till the date of closing of bids. Bids submitted without all Addenda/Corrigenda will be treated as incomplete.
13. **Validity** of the tender: The tenders shall remain valid for a period of **180 days** after the submission deadline prescribed by the Employer. A tender valid for a shorter period will be summarily rejected as non-responsive.
14. In case of need, K-RIDE may request the tenderers to extend the period of validity of their tenders. The request will be made in writing. If a Bid security is requested in accordance with the relevant clause, it shall also be extended up to the date mentioned in the letter of request for extension. The tenderers may refuse the request without forfeiting their Bid Security. Tenderers extending the validity of their tenders shall not be either required or permitted to modify their tender.
15. **Pre-Bid meeting**: A Pre- Bid meeting will be held on **20/06/2023 at 15:30 hrs. IST** in the office of K-RIDE, Bengaluru to understand the queries / discuss the issues with regard to the Bid Document, if any, as stated in Clause - 8 of ITT of the Tender document. The queries may, however, be answered subsequent to the pre-bid meeting, based on their merits. However, the **queries** shall be sent to K-RIDE by bidders **on or before 15:30 hrs. IST on 17/06/2023** through E-mail (gm@kride.in) or through hard copy addressed to:

General Manager (Land, Project Coordination & Corridor4),
K-RIDE [Rail Infrastructure Development Company (Karnataka) Limited],
#8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall,
Rajajinagar 1st Block, Bengaluru-560010

Queries received after the deadline will not be entertained.

Prospective bidders shall keep checking the websites for any change in the above dates and times.

16. REGISTRATION IN E-TENDERING PORTAL:

- The tenderers are required to enroll on the e-tendering Portal (<https://eproc.karnataka.gov.in>) or (www.kppp.karnataka.gov.in) by clicking on the link "Tenderers Registration" on the e-tender Portal by paying requisite registration fee, as applicable.
- As part of the enrolment process, the tenderers will be required to choose a unique user name and assign a password for their accounts.
- The tenderers are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the tenderer.
- Upon enrolment, the tenderers will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing & encryption key) issued by any Certifying Authority recognized by CCA, India with their profile.
- Only one valid DSC should be registered by a tenderer. Please note that the tenderers are responsible to ensure that they do not lend their DSCs to others, which may lead to misuse.
- The tenderers shall then login to the site through the secured log-in process by entering their user ID/password and the password of the DSC / e-Token.
- Once the tenderers have searched and selected the proposals, they are interested in, they can pay nonrefundable processing fee as mentioned in the Karnataka Public Procurement Portal.
- The scanned copies of all original documents shall be uploaded on e-tendering Portal (<https://eproc.karnataka.gov.in>) or (www.kppp.karnataka.gov.in).
- For any query regarding e-procurement on the Karnataka Public Procurement Portal, the tenderers can contact helpdesk number **+91-8046010000, +91-8068948777, support@eprochelpdesk.com**

17. PRECAUTIONS FOR SUBMITTING/PREPARATION OF PROPOSALS THROUGH E-TENDERING PORTAL

- The tenderers, in advance, shall make ready the proposal documents to be submitted, as indicated in the proposal documents / schedule and they shall be in PDF / JPEG formats.
- The tenderers, without waiting till last minute, shall log into the website, well in advance, for the submission of the proposal, so that it gets uploaded well in time i.e., on or before the deadline of the proposal submission time. The bidders themselves will be responsible for any delay in the last minute due to any issues whatsoever viz., server issues, connectivity issues etc.
- The tenderer has to digitally sign and upload the required proposal documents as indicated in the Bid Document.

- d. The server time (which is displayed on the Employer's dashboard) will be considered as the standard time for referencing the deadlines for submission of the proposals by the bidders, opening of proposals etc.
18. The tenderers shall furnish the Name of the individual / firm / Company with address and telephone number with place of registration, year of incorporation etc.
19. Tenders by a joint venture of contractors is not permitted.
20. The application made by the firm / company shall be signed by a person holding the Power of Attorney, in which case the tenderer shall furnish a copy of Power of Attorney.
21. Bids submitted through any other mode will not be entertained.
22. Deleted.
23. All necessary certificates/documents in support fulfilling qualifying criteria stipulated shall be scanned separately and attached to bid document. The original documents if required by the Employer shall be produced whenever asked by Employer on Technical Bid/ Financial Bid.
24. Deleted.
25. Site visit and verification of information:
- The tenderers are, in their own interest, encouraged to submit their respective Bids after visiting the Project site and ascertaining for themselves the site conditions, all applicable laws and regulations, and any other matter considered relevant by them. The tenderers are advised to visit the site and familiarize themselves with the Project within the stipulated time of submission of the bids. No extension of deadline either for submission of pre-bid queries or for submission of bids is likely to be considered on this pretext.
- It will be deemed that by submitting a bid, the tenderers have:
- made a complete and careful examination of the Bidding Documents, Schedules annexed to the bid document.
 - received all relevant information.
 - accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by or on behalf of the Authority relating to any of the matters referred to in Clause 25 above (The scope of work provided in the Bid Document is tentative and for indicative purpose. No claim will be admissible at any stage on this account).
 - satisfied themselves about all matters, things, and information, including matters referred to in Clause 25 herein above, necessary and required for submitting an informed Bid in the interest of complete execution of the Depot Design in accordance with the Bidding Documents and performance of all obligations there under.
 - acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any of the matters referred to in Clause 25 herein above shall not be a basis for any claim for compensation, damages, extension of time for performance of their obligations, loss of profits etc. from the Authority, or a ground for termination of the Agreement by the Contractor.
 - acknowledged that there is no Conflict of Interest, and
 - agreed to be bound by the undertakings provided by them under and in terms hereof.
26. K-RIDE will not be liable for any omission, mistake, or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the Tender document, including any error or mistake therein or in any information or data given in this bid document.
27. The qualification criteria as indicated in bid document shall be met by the tenderers intending to submit bids.
28. The tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the Govt. of Karnataka, Govt of India, and any PSUs thereof.
29. Conditional Tenders will not be accepted and will be summarily rejected.
30. K-RIDE will not be responsible for any delay by the bidder in accessing Karnataka Public Procurement Portal.
31. The rates quoted by the tenderer shall be inclusive of all Taxes, Duties etc.
32. Deleted.

33. **Last Date of Receipt and opening of Bids:** The tenders, complete in all respects, shall be submitted through Karnataka Public Procurement Portal <https://eproc.karnataka.gov.in> or <https://kppp.karnataka.gov.in> not later than **15.00 hrs. IST on 11/07/2023** and will be opened on **12/07/2023 at 15.30 hrs. IST**. If the office of K-RIDE happens to be closed on the date of opening of tender, the tenders will be opened on the next working day at the same time and venue.
34. K-RIDE will not be responsible for any delays in the receipt of tenders by K-RIDE. Late Tenders (received after stipulated date and time of submission of Tenders) will not be accepted under any circumstances. K-RIDE reserves the right to accept/reject any or all the proposals without assigning any reason thereof.
35. K-RIDE reserves the right to either postpone or to cancel the entire process of tender.
36. Any suit or application, arising out of any dispute or differences on account of this tender shall be filed in a competent court at Bengaluru, Karnataka only and no other court or any other district of the country or any other country shall have any jurisdiction in the matter.
37. For any **Query regarding e-tendering portal / tender submission**, the following **helpdesk numbers** can be contacted **on any working day from 10:30 am to 05:00 pm**, till closing date and time of bids:
- +91-8046010000, +91-8068948777**
Email: support@eprochelpdesk.com
38. **Address for Communication:** Interested eligible tenderers may obtain further information (with regard to the bid document) required, if any, from the address given below **on any working day from 10:30 am to 05:30 pm**, till the last date for submission of queries / closing date, as applicable for the information sought.

Pre-bid queries - in the guise of information, will not be entertained after the deadline for their submission.

Queries regarding e tendering portal, tender submission and related minor issues shall NOT be addressed to the address below and shall be got clarified from helpdesk mentioned above.

General Manager (Land, Project Coordination & Corridor-4)
K-RIDE [Rail Infrastructure Development Company (Karnataka) Limited],
#8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall
Rajajinagar 1st Block, Bengaluru-560010
Tel.: 080-24482800, +91-6364890801
E-mail: gm@kride.in

SECTION – 2

INSTRUCTIONS TO TENDERERS (ITT)

SECTION 2: INSTRUCTIONS TO TENDERERS (ITT)

A. GENERAL

1. SCOPE OF THE TENDER

1.1 RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED (K-RIDE), a Joint Venture of Government of Karnataka and Ministry of Railways, with its corporate office at #8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall, Rajajinagar 1st Block, Bengaluru-560010, India, invites tenders from eligible tenderers, for the works detailed in the invitation for the Tenders (IFT).

2. ELIGIBLE TENDERERS

2.1 The tenderers, who wish to participate, shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by Govt. of Karnataka / Govt of India / PSUs.

2.2 **Joint Ventures:** Joint Ventures are not allowed for this work.

3. QUALIFICATION OF THE TENDERER.

3.1 **All the tenderers shall provide the requested information accurately and the details mentioned in section 3: Qualification information.**

Pre-qualification will be based on tenderers meeting all the following minimum pass–fail criteria regarding their general and particular consultancy experience, financial position, personnel and other relevant information as demonstrated by the tenderer's responses in the Information Forms attached to the Letter of Technical Bid.

3.2 **The following qualification criteria should be met by the intending tenderers.**

a) Required average annual turnover (In all classes of civil, architectural, E&M system design work only): The intending tenderer / firm / company should have achieved a MINIMUM AVERAGE ANNUAL TURNOVER of ₹ 3 Crore in Five Financial Years from 2018-19 to 2022-23 (both inclusive)

NOTE: The tenderers shall submit certificates to this effect which may be attested certificates from the concerned Departments/Client or Audited balance sheet duly certified by the statutory Auditor / certificate from Chartered Accountant duly supported by audited balance sheet. The Turnover certificate duly certified by statutory Auditor should be uploaded. Financial turnover of previous years will be given a weightage of 10% per year or part thereof up to the month previous to the Bid submission month as indicated in qualification information (Tender Forms) Form FIN-2 based on the rupee value to bring them to FY: 2023-24 price level.

b) The tenderer / Firm / Company should have satisfactorily completed at least one/two/three similar work(s) of the value not less than that mentioned in clause 3.3 a (at FY: 2022-23 price level) in the five financial years (from FY 2018-19 to FY 2022-23 - both inclusive) and till the last day of the month previous to the month of bid submission in FY 2023-24.

NOTE: The above criteria apply to the Individual tenderer/Firm/company also. Certificate regarding the same duly signed by an officer not below the rank of the Executive Engineer shall be submitted along with the Technical Bid. The certificate from Project Manager of Client/Concessionaire OR Independent Engineer (Project Management Consultant of Client/Concessionaire) duly validated by the Employer/SPV/Corporation can also be considered.

3.3 Technical Eligibility Criteria:

a Work Experience: The bidders will be qualified only if they have successfully completed similar work/works as defined in clause 3.3 b during the period mentioned in clause 3.2 b, of value as given below:

(i) At least three **Similar Works** each of value ₹ 1,00,00,000/- or more.

Or

(ii) At least two **Similar Works** each of value ₹ 1,50,00,000/- or more

Or

(iii) At least one **Similar Work** of value ₹ 2,50,00,000/- or more

NOTE: Value of successfully completed phases of any ongoing Depot design work within the period mentioned above, will also be considered towards qualification of work experience criteria, provided these phases have been tested, commissioned and put into operation.

b Similar Work is defined as below:

“Detailed Design for Depot of Urban Rail-based Mass Rapid Transit System”

The work shall generally include design of major components of the Depot.

The various activities in the work shall generally include Structural Design of Buildings and Workshops/Sheds, Inspection Bays, Mechanical, Electrical, Plumbing works, Fire-fighting Design, HVAC Design, Architectural Design, Track Alignment (horizontal and vertical) layout, System Integration and Interface Design etc. A work with important/major ones of the above activities can be considered as similar work.

NOTES

1. The contract is considered as satisfactorily completed if 80% or more of the work is physically completed which is to be substantiated by a certificate from the Employer, who has awarded the contract to the Bidder and the contract amount so received should be equal to or more than the minimum value as per eligibility criteria 3.3 (a). The certificate from Project Manager of Client/Concessionaire OR Independent Engineer (Project Management Consultant of Client/Concessionaire) duly validated by the Employer/SPV/Corporation shall also be considered.
2. For completed works, the value of work done shall be updated to current FY 2022-23 price level assuming 10% inflation for Indian rupees every year or part thereof up to the month previous to the Bid submission month. The value of work done shall be inclusive of taxes, GST, duties and Price Variations. Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under: Bids will be compared in Indian Rupees only. The exchange rate of foreign currency shall be applicable 28 days before the tender submission date. For conversion of foreign currency to Indian Rupee exchange rates published by Financial Benchmarks India Private limited (www.fbil.org.in) 28 (twenty-eight) days before the date of bid submittal will be considered. In case the particular day happens to be a holiday the exchange rate published on the next working day will be considered. In case of works in foreign currency the effect of inflation is considered as included, as the exchange rate prevailing 28 (twenty-eight) days before tender submission is being considered for conversion to Indian Rupees.
3. Deleted.

3.4 Evaluation:

The intending tenderer / firm/ company should have completed the similar work(s) mentioned above within five financial years (from FY 2018-19 to FY 2022-23 - both inclusive) and till the last day of the month previous to the month of bid submission.

The client certificates along with work orders are mandatory for establishing the detailed design consultancy experience of the consultant. In case any of the required documents are not submitted in the required form, the work experience will not be considered as a qualifying work experience.

NOTES:

1. The criteria above apply to the Individual tenderer / Firm / company also. Certificate regarding the same duly signed by an officer not below the rank of the Executive Engineer should be submitted along with the technical Tender. The certificate from Project Manager of Client/Concessionaire OR Independent Engineer duly validated by the Employer / SPV / Corporation shall also be considered.
2. Deleted.
3. Deleted.
 - a) Deleted.

b) Liquidity:

It is necessary that the firm can withstand cash flow that the contract will require until payments are received from the Employer. Liquidity therefore becomes an important consideration.

This shall be seen from the balance sheets and/or from the banking reference. Net current assets and / or documents including banking reference, should show that the applicant has access to or has available liquid assets, lines of credit and other financial means to meet cash flow of ₹ 80 Lakh for this contract, net of applicant's commitments for other Contracts. In case the Net Current Assets (as seen from the Balance Sheets) are negative, only the Banking references will be considered. Otherwise, the aggregate of the Net Current Assets and submitted Banking references will be considered for working out the Liquidity

The banking reference should be from a Scheduled Bank in India or in case of foreign parties from an international bank having operations in India as acceptable to K-RIDE and it should not be more than 3 months old as on date of submission of Bids.

c) List of minimum key technical personnel & support staff: List of Minimum Key Technical personnel required for the work is given in Appendix B of Section-8 (Terms of Reference). The Consultant shall have a competent team of personnel so as to complete the work satisfactorily as per various requirements of the contract.

3.5 To qualify for a package of contracts made up of this and other contracts for which tenders are invited in this IFT, the tenderer must demonstrate having experience and resources to meet the aggregate of the qualifying criteria for the individual contracts.

3.6 Deleted.

3.7 Deleted.

3.8 NETWORTH:

The Bidder's net worth for the last Financial Year calculated as the difference between **total** assets and **total** liabilities **should be Positive.**

The Bidder's net worth for the last Financial Year calculated as the difference between **current** assets and **current** liabilities **should be Positive.**

3.9 Even though the tenderers meet the above criteria, they are subject to be disqualified if they have:

- a) made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- b) record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
- c) participated in the previous Tender for the same work and had quoted unreasonably high tender prices and could not furnish rational justification.

3.10 Deleted

3.11 Deleted

4. ONE TENDER PER TENDERER:

4.1 Each tenderer shall submit only one tender. A tenderer who submits or participates in more than one Tender will cause all the proposals with the tenderer's participation to be disqualified.

5. COST OF TENDERING:

5.1 The tenderer shall bear all costs associated with the preparation and submission of his tender, and the Employer will in no case be responsible and liable for those costs.

6. SITE VISIT:

6.1 The tenderer at his own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for design of the Works. The cost of visiting the Site shall be at the tenderer's own expense.

B -TENDER DOCUMENTS

7. CONTENT OF TENDER DOCUMENTS

7.1 The set of tender documents shall have all the Sections given in content page.

8. CLARIFICATION OF TENDER DOCUMENTS

8.1 A prospective tenderer requiring any clarification of the tender documents may notify the Employer in writing at the Employer's address or through e-mail indicated in the invitation to tender. Depending on the merits of the query, the Employer may respond to any query/request for clarification which he receives earlier than the date mentioned in the Karnataka Public Procurement Portal for queries. The response of the Employer may, depending on the merits of the query/clarification, be sent to the concerned tenderer.

8.2 Pre-Bid meeting:

8.2.1 The tenderer or his authorized representative may attend a pre-bid meeting (physically or online), which will take place in the office of K-RIDE Bengaluru on the date and at the time mentioned in Section-1 of the bid document.

Venue:

#8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road,
Opposite Orion Mall, Rajajinagar 1st Block,
Bengaluru-560010
Tel.: 080-24482800, +91-6364890801

Prospective bidders shall keep checking the website kride.in for any change in the above date/time/both.

8.2.2 The tenderer is requested to submit any questions in writing or by e-mail to reach the Employer not later than the date and time mentioned in Section 1. Queries received after the last date will not be entertained.

8.2.3 The purpose of the meeting is to clarify certain general issues commonly raised by a group of prospective bidders and not to answer each and every query raised by the bidders.

8.2.4 Any modification of the tender documents listed above, which may become necessary as a result of the pre-bid meeting, will be made by the Employer exclusively through the issue of a Corrigendum/Addendum pursuant to the clause below and not through the minutes of the pre-tender meeting.

8.2.5 Attending Pre-Bid meeting is not mandatory for the tenderers. Non-attendance in the Pre-Bid meeting will not be a cause for disqualification of any tenderer.

9. AMENDMENT OF TENDER DOCUMENTS

9.1 Before the deadline for submission of Tenders, the Employer may modify the tender documents by issuing addendum/corrigendum.

9.2 Any corrigendum / addendum issued shall be part of the tender documents and shall be made available on the website or e-portal. The Provisions in corrigenda / addenda shall take priority over the Tender Documents issued previously.

9.3 Deleted.

C. PREPARATION OF TENDERS

10. DOCUMENTS COMPRISING THE TENDER

10.1 Deleted.

10.2 Deleted.

11. TENDER PRICES

- 11.1 The contract shall be for the whole works as described in relevant clause, based on the Price Schedule submitted by the tenderer.
- 11.2 The tenderer shall fill the total amount (both in figures and words) for each schedule of the Works described in the Price Schedule along with total tender price (both in figures and words). Schedules for which no amount or lumpsum price is entered by the tenderer will not be paid by the Employer when executed and shall be deemed to be covered in the Priced schedule. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- 11.3 All duties, taxes (including prevailing rate of GST) and other levies payable by the Consultant under the contract, or for any other cause, shall be included in the Price schedule, prices and total Tender Price submitted by the tenderer.
- 11.4 The amount quoted by the tenderer shall be subject to adjustment during the performance of the Contract in accordance with the provisions of Clause of the Conditions of Contract.

12. TENDER VALIDITY

- 12.1 The tenders shall remain valid for a period not less than **180 (one hundred and eighty) days** after the deadline for tender submission specified. A tender valid for a shorter period will be rejected by the Employer as non-responsive.
- 12.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the tenderers may extend the period of validity for a specified additional period. The request and the tenderers' responses shall be made in writing or by cable. A tenderer may refuse the request without forfeiting his earnest money deposit. A tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit till the period of the extension, and in compliance with Clause 13 in all respects.

13. EARNEST MONEY DEPOSIT (TENDER/BID SECURITY)

- 13.1 Earnest Money Deposit/Tender security (as per Karnataka Public Procurement Portal). The tenderer shall furnish, as part of his tender, earnest money deposit as shown in the clause 13.7 of this section for this particular work. This earnest money deposit shall be in favour of Rail Infrastructure Development Company (Karnataka) Limited Payable at Bengaluru and may be in the form of Banker's cheque/ Demand draft/Pay Order or Specified small saving instruments pledged to K-RIDE, Bengaluru/ unconditional Bank guarantee, in favour of Rail Infrastructure Development Company (Karnataka) Limited Payable at Bengaluru.
- 13.2 Instruments having fixed validity issued as earnest money deposit for the tender shall be valid for 45 days beyond the validity of the tender.
- 13.3 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses 13.1 and 13.2 above shall be rejected by the Employer as non-responsive.
- 13.4 The earnest money deposit of unsuccessful tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 12.1.
- 13.5 The earnest money deposit of the successful tenderer will be discharged when the tenderer has signed the Agreement and furnished the required Performance Security.
- 13.6 The earnest money deposit may be forfeited:
- (A) If the tenderer withdraws the Tender after tender opening during the period of tender validity;
 - (B) If the tenderer does not accept the correction of the Tender Price, pursuant to Clause 24; or
 - (C) In the case of a successful tenderer, if the tenderer fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Performance Security.

14. FORMAT AND SIGNING OF TENDER

The tenderer shall submit the Tender electronically before the submission date and time published in Karnataka Public Procurement Portal. The tenderer must submit Technical and Financial Tender as described in ITT.

| | |
|--|--|
| Language of Tender | The language of the Tender: English |
| Technical Tender | Alternative technical solutions are not permitted. |
| Technical Tender Documents | All the Forms of Section 3: Qualification Information/Bidding Forms. |
| Alternative Bids/Tenders | Alternative Bids are not permitted. |
| Currencies of Tender and Payment | The amount (Lumpsum Price) shall be quoted by the tenderer entirely in Indian Rupees (INR) only. The rates quoted by the bidder in schedule through Karnataka e-procurement portal will only be considered for Evaluation and comparison purposes, the currencies of the Tender shall be converted in to Indian Rupees. |
| Any amendments such as interlineations, erasures, or overwriting on any documents shall be valid only if they are signed or initialed by the Person signing the Tender | <p>The written confirmation of authorization to sign on behalf of the tenderer shall consist of:</p> <ol style="list-style-type: none"> In case of Private / Public Companies, a POA from the Director of the Company who has been authorized by the Board of Directors through resolution to sign on behalf of the Company. Copy of Board Resolution shall also be submitted. In case of proprietorship tenderers, Power of Attorney by the Proprietors. Deleted In case of Limited Liability Partnership (LLP), a POA from the Director of the Company who has been authorized by the Board of Directors through resolution to sign on behalf of the Company. Copy of Board Resolution shall also be submitted. Deleted |

The Bid shall be digitally signed by using class-III digital signature of a person who is duly authorized to sign on behalf of the bidder. This authorization shall consist of a written confirmation and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature.

- If the Tender is submitted by proprietary firm, it shall be signed by the proprietor above his full name and full name of his firm with his current address.
- If the Tender is submitted by a firm in partnership, it shall be signed by a partner holding the power of Attorney for the firm. A certified copy of the Partnership deed and power of attorney shall accompany the Tender; Alternatively, it shall be signed by all the partners.
- If the Tender is submitted by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney for the firm. A certified copy of the power of attorney shall accompany the Tender.
- Deleted.
- Any amendments such as interlineations, erasures, or overwriting on any document shall be valid only if they are signed or initialed by the person signing the Tender.

D. SUBMISSION OF TENDERS

15. SEALING AND MARKING OF TENDERS

The tenderer shall submit the Tender electronically before the submission date and time published.

16. DEADLINE FOR SUBMISSION OF THE TENDERS

16.1 Tenders must be submitted online through Karnataka Public Procurement Portal to the Employer on or before the date as specified in the Karnataka Public Procurement Portal and the submission of tender is the responsibility of the tenderer.

16.2 The Employer may extend the deadline for submission of tenders by issuing an amendment, if necessary, in the opinion of Employer, in which case all rights and obligations of the Employer and the tenderers previously subject to the original deadline will then be subject to the new deadline.

17. LATE TENDERS

17.1 In online e-procurement system, the tenderer shall not be able to submit the Tender after the Tender submission time and date as the icon for the task in the Karnataka Public Procurement Portal will not be available. Any Tender received by the Employer after the deadline prescribed in Clause 16 will be rejected.

17.2 The tenderers are responsible to ensure that their tender is submitted in the Karnataka public procurement portal within the last date and time specified for the receipt of the tenders.

18. MODIFICATION AND WITHDRAWAL OF TENDERS

18.1 Tenderer may modify and correct or upload any relevant document in the portal till tender submission date and time, as published in the Karnataka Public Procurement Portal.

18.2 No Tender may be modified after the deadline for submission of Tenders.

18.3 Withdrawal or modification of a Tender between the deadline for submission of Tenders and the expiration of the original period of Tender validity specified in Clause 12.1 above or as extended pursuant to Clause 12.2 may result in the forfeiture of the earnest money deposit pursuant to Clause 13.

18.4 Deleted.

E. TENDER OPENING AND EVALUATION

19. Opening of Technical Bids: Opening of Technical Bids of all Tenderers and evaluation to determine qualified tenderers:

19.1 The Employer will open the Technical Bids of all the Tenders received (except those received late or withdrawn), including modifications for Technical Bids made pursuant to Clause 18, in the presence of the tenderers or their representatives who choose to attend as per Karnataka Public Procurement Portal on the date and the place specified in Clause 16. In the event of the specified date of Tender opening being declared a holiday for the Employer, the Tenders will be opened at the appointed time and location on the next working day.

19.2 Deleted.

19.3 The name of the tenderer, the presence or absence of earnest money deposit (amount, format and validity), the submission of qualification information and such other information as the Employer may consider appropriate will be announced by the Employer at the opening.

19.4 Deleted.

19.5 Deleted.

19.6 The Employer will evaluate the tenders after deliberations by a committee.

20. OPENING OF FINANCIAL BIDS OF QUALIFIED TENDERERS AND EVALUATION:

20.1 The Employer will inform all the Qualified tenderers the time, date and venue fixed for the opening of the Financial Bids containing the priced Tenders published in Karnataka Public Procurement Portal. The Employer will open the Financial Bids of Qualified tenderers at the appointed time and date in the presence

of the tenderers or their representatives who choose to attend. In the event of the specified date of financial Tender opening being declared a holiday for the Employer, the Financial Bids will be opened at the appointed time and location on the next working day.

20.2 Deleted.

20.3 The names of tenderers, the Tender prices, the total amount of each Tender, any discounts / rebate, Tender modifications and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening.

20.4 The Employer will evaluate the Financial Bids through a committee.

21. PROCESS TO BE CONFIDENTIAL

21.1 Information relating to the examination, clarification, evaluation, and comparison of Tenders and recommendations for the award of a contract shall not be disclosed to tenderers or any other persons not officially concerned with such process until the award to the successful tenderer has been announced. Any effort by a tenderer to influence the Employer's processing of Tenders or award decisions may result in the rejection of her/his/their Tender.

22. CLARIFICATION OF TENDERS

22.1 To assist in the examination, evaluation, and comparison of Tenders, the Employer may, at his discretion, ask any tenderer for clarification of his Tender, including breakdowns of Lumpsum Price. The request for clarification and the response shall be in writing or by e-mail, but no change in the price or substance of the Tender shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Tenders in accordance with Clause 24.

22.2 No tenderer shall contact the Employer on any matter relating to its Tender from the time of the Tender opening to the time the contract is awarded.

If they have any query/clarification related to e-Procurement on the Karnataka Public Procurement Portal, contact e-Procurement Help desk from 10:30 AM to 5:00 PM on any working day. Ph. No.: +91-8046010000/ 8068948777 or support@eprochelpdesk.com Karnataka Public Procurement Portal through query option on or before specified time.

22.3 Any effort by the tenderer to influence the Employer in the Employer's Tender evaluation, Tender comparison or contract award decisions may result in the rejection of the tender.

23. EXAMINATION OF TENDERS AND DETERMINATION OF RESPONSIVENESS

23.1 Prior to the detailed evaluation of Tenders, the Employer will determine whether each tender; (a) has been properly signed; and (b) is substantially responsive to the requirements of the Tender documents.

23.2 A Substantially Responsive Tender is one which conforms to all the terms, conditions, and specifications of the Tender documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the tender documents, the Employer's rights or the tenderer's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other tenderers presenting Substantially Responsive Tenders.

23.3 If a tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

24. CORRECTION OF ERRORS

24.1 Tenders determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

a) where there is a discrepancy between the amount in figures and in words, the lower of the two will govern.

24.2 The amount stated in the Tender will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, with the concurrence of the tenderer, shall be considered as binding upon

the tenderer. If the tenderer does not accept the corrected amount the Tender will be rejected, and the earnest money deposit may be forfeited in accordance with Sub-Clause 13.6 (b).

25. EVALUATION AND COMPARISON OF TENDERS

- 25.1** The Employer will evaluate and compare only the Tenders determined to be substantially responsive in accordance with Clause 23.
- 25.2** In evaluating the Tenders, the Employer will determine for each Tender the evaluated Tender Price by adjusting the Tender Price as follows:
- (a) Making any correction for errors pursuant to Clause 24; and
 - (b) Deleted.
- 25.3** The Employer reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Tender evaluation.
- 25.4** Deleted.
- 25.5** If the tender of the successful tenderer is seriously unbalanced in relation to the Employer's estimate of the cost of the work to be performed under the contract, the Employer may require the tenderer to produce detailed price analyses for any or all items of Priced Schedule, to demonstrate the internal consistency of those prices with the design methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 29 be increased at the expense of the successful tenderer to a level sufficient to protect the Employer against financial loss in the event of default of the successful tenderer under the contract.

F. AWARD OF CONTRACT

26. AWARD CRITERIA

- 26.1** Subject to Clause 27, the Employer will award the Contract to the tenderer whose Tender has been determined to be substantially responsive to the Tender documents and who has offered the lowest evaluated Tender Price, provided that such tenderer has been determined to be (a) eligible in accordance with the provisions of Clause 2, and qualified in accordance with the provisions of Clause 3.

27. EMPLOYER'S RIGHT TO ACCEPT ANY TENDER AND TO REJECT ANY OR ALL TENDERS

- 27.1** Notwithstanding Clause 26, the Employer reserves the right to accept or reject any Tender, and to cancel the Tender process and reject all Tenders, at any time prior to the award of Contract, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Employer's action.

28. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT

- 28.1** The tenderer whose Tender has been accepted will be notified of the award by the Employer prior to expiration of the Tender validity period by cable, telex, e-mail or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Consultant in consideration of the Design Works by the Consultant as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 28.2** The notification of award will constitute the formation of the Contract, subject only to the furnishing of Performance Security in accordance with the provisions of Clause 29. Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 28.3** The Agreement will incorporate all agreements between the Employer and the successful tenderer. It will be kept ready for signature of the successful tenderer in the office of Employer within 30 days following the notification of award along with the Letter of Acceptance. Within 20 days of receipt, the successful tenderer will sign the Agreement and deliver it to the Employer.
- 28.4** Upon the furnishing by the successful tenderer of the Performance Security, the Employer will promptly notify the other tenderers that their Tenders have been unsuccessful.

29. PERFORMANCE SECURITY

- 29.1 Within 28 days of receipt of the Letter of Acceptance, the successful tenderer shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to **3% of the Contract price plus additional security for unbalanced tenders (additional security at 50% of the estimated cost of the unbalanced component)** in accordance with Clause 25.5 of ITT and New Clause 4.19 of the PCC.
- E-Bank Guarantee / Demand draft / Pay Order / BG in favour of K-RIDE, Bangalore or
 - A bank guarantee in the form given in Section 10.
- 29.2 If the Performance Security deposit is provided by the successful tenderer in the form of Bank Guarantee, it shall be issued either by a Nationalized / Scheduled Bank.
- 29.3 The Performance Security deposit if furnished in the form of E-Bank guarantee, demand draft if requested, be converted to interest bearing securities at the cost of the Consultant.
- 29.4 Failure of the successful tenderer to comply with the requirements of sub-clause 29.5 of additional ITT, shall constitute sufficient grounds for cancellation of the tender award and forfeiture of the Earnest Money Deposit.

30. ADVANCE PAYMENT AND SECURITY:

- 30.1 The Employer will provide Special Acceleration Advance payment on the contract price as stipulated in the Particular Condition of Contract subject to the maximum as stated in the contract data.

31. CORRUPT OR FRAUDULENT PRACTICES

- 31.1 "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution;
- "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procurement Entity, and includes collusive practice among the tenderers either prior to or after tender submission, designed to establish tender prices at artificial non-competitive levels and to deprive the Procurement Entity of the benefits of free and open competition;". The debarment action shall be taken as per KTPP Act.
- 31.2 K-RIDE requires that the tenderers/Suppliers/Consultants observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, K-RIDE:
- will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a K-RIDE contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a K-RIDE contract.
- 31.3 Furthermore, tenderers shall be aware of the provision stated in sub-clause 49.7 of the Particular Conditions of Contract.

32. PURCHASE PREFERENCE TO MAKE IN INDIA:

The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide letter no. P-45021/2/2017-PP (BE-II) dated 28.05.2018 shall be applicable to the tendering process and award of the contract shall be done accordingly. In this connection, the minimum local content shall be 50% and the margin of purchase preference shall be 20%. For award of contract, para 3.c. of the revised 'Public Procurement (Preference to Make in India) Order 2017' shall be applicable in addition to the other provisions in the tendering documents in this regard.

33. APPEAL:

The tenderer shall submit online appeal within 30 days period from the date of receipt of order to the Employer through the Karnataka Public Procurement Portal. The Employer may after giving opportunity to the parties pass such order as it deems fit and such order shall be final.

ADDITIONAL INSTRUCTIONS TO TENDERERS
(THIS SHOULD BE READ IN CONTINUATION OF ITT)

| ITT Clause Ref. | Description |
|-----------------------|---|
| 2.3 | <p>The Tenderer's Technical Proposals shall comply, or subject to reasonable development, be capable of complying with the Client's Requirements in all respects. The Tenderer's Technical Proposals shall demonstrate compliance. The Tenderer's Technical Proposals shall confirm intended design and specifications of the permanent works.</p> <p>The Tenderers Technical Proposal shall include:</p> <ol style="list-style-type: none"> I. Introduction of the Consultant's organization II. Design quality assurance plan III. General Approach and methodology; work plan: IV. Understanding and comprehension of the work involved V. Details of design facilities, together with their location |
| 2.4 | <p>The tenderer shall submit a Certificate using the appropriate Performa given in Section 3 - Form 3C1.</p> <p>Tenderers having a conflict of interest will be disqualified. The conflict of interest is detailed below.</p> <p>A tenderer or any of its constituents shall not have conflict of interest. All tenderers found to have a conflict of interest shall be disqualified. A tenderer may be considered to be in a conflict of interest with one or more parties in this Tendering process, if, including but not limited to:</p> <ol style="list-style-type: none"> (a) they have controlling shareholders in common; or (b) they receive or have received any direct or indirect subsidy from any of them; or (c) they have the same legal representative for purposes of this Tender; or (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Tender of another tenderer, or (e) Deleted (f) Deleted (g) a tenderer participated as a consultant in the preparation of the design or specifications of the contract that is the subject of the Tender; or (h) A tenderer was affiliated for any period(s) during last two years before the date of issue of Invitation for Tenders with a firm or entity that has been hired (or is proposed to be hired) by the Employer as Engineer for the contract. |
| 2.5 | <p>The tenderer will be disqualified if,</p> <ol style="list-style-type: none"> (a) The tenderer or any of its constituents has been blacklisted/ banned from business dealings with all Government Departments by the Government of Karnataka or by Ministry of Railways or by K-RIDE at any time till finalization of Tenders, except in cases where such blacklisting/ banning has been withdrawn by Competent Authority or has ceased or expired on the deadline for submission of the Tenders, for which satisfactory evidence is to be produced. (b) Deleted. (c) The tenderer or any of its constituents has been imposed delay damages of 5% or more of contract value by K-RIDE due to delay in the implementation of any previous contract within the period of last 2 years before the deadline for submission of Tenders (Period of 2 years shall be reckoned from the date on which the total accrued amount of Delay Damages has reached 5% or more of the contract price) or such accrued delay damages has not been fully recovered before the deadline for submission of Tenders on account of Consultant's request for deferring recovery to maintain cash flow and K-RIDE has acceded to the same in the interest of the project or the work under the previous contract in question has not been completed before the deadline for submission of Tenders, unless imposition of such delay damages has been set aside by the Competent Authority. |

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| | <p>(d) The tenderer or any of its constituents:</p> <p>(i) has suffered bankruptcy/insolvency or</p> <p>(ii) has any ongoing case of insolvency before the NCLT / any applicable Court where Interim Resolution Professional (IRP) has been appointed or is at any later stage of the insolvency process, as on the deadline of submission of Tenders or thereafter till finalization of Tenders.</p> <p>(e) The tenderer is found ineligible by the Employer, in accordance with ITT - 3.</p> <p>(f) The tenderer or its constituent(s) has been declared by K-RIDE to be a poor performer and the period of poor performance is still in force on the deadline for submission of Tenders.</p> <p style="text-align: center;">OR</p> <p>The tenderer or its constituent(s) has been declared by K-RIDE to be a poor performer at any time after the deadline for submission of Tenders and upto one day before the date of opening of price Tenders.</p> <p>(g) The tenderer or any of its constituents has changed its name or created a new business entity as covered by the definition of "Allied Firm" under para 1102 (iii) of Chapter XI of Vigilance Manual of Indian Railways (available on website of Indian Railways), consequent to having been banned from business dealings or suspended from business dealings or having been declared poor performer.</p> <p>The tenderer shall submit an affidavit stating that they are not liable to be disqualified as per this sub clause using the Form PS3 given in Section-3: Qualification and Information/Bidding Forms. Non-submission of an affidavit by the tenderer shall result in summary rejection of his Tender.</p> <p>Tenderers shall immediately inform the Employer in case they cease to fulfil eligibility in terms of ITT clause 2 above. In case the tenderer fails to inform the Employer or submits a false affidavit, his Tender shall be summarily rejected and Tender security shall be forfeited. The tenderer shall also be liable for Banning of Business dealings for a period up to five years.</p> |
| 2.6 | <p>PARTNERS IN CASE OF JV/CONSORTIUM</p> <p>Deleted.</p> |
| 3.3(a) | <p>The following para is added:</p> <p>Design Services</p> <p>The design services to be supplied under the Contract shall be as specified in Section 8: Terms of Reference and Price Schedule Section-9.</p> |
| 7.3 | <p>The following para is added:</p> <p>The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.</p> <p>The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all the information or documentation required by the Bidding Document may result in the rejection of the bid.</p> |
| 8.1.1 | <p>Additional Para</p> <p>The Employer shall endeavour to respond to the questions raised or clarifications sought by the Bidders. However, the Employer reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Employer to respond to any question or to provide any clarification.</p> <p>The Employer may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by the Employer shall be deemed to be a part of the Bidding Documents. Verbal clarifications and information given by the Employer, or its employees or representatives shall not in any way or manner be binding on the Employer.</p> |

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| 8.3 | <p>The following para is added:</p> <p>The Pre-Bid meeting may also be attended through video conferencing (VC). Those tenderers who wish to join the meeting through Video Conferencing shall send a request email on the email id (i.e., gm@kride.in) till 3 working days before the scheduled date of pre-bid meeting up to 15:00 hours IST. A link for Video Conferencing will be sent by K-RIDE to such tenderers only. Any request for VC received after the given date and time for sending the link for VC will not be entertained.</p> <p>Please note that the request received from the tenderers (With details of the Company, its address, and the name and designation of the person attending the VC) will only be entertained. They shall also mention the email id through which VC is desired to be joined. K-RIDE may allow a maximum of two email IDs for one company to participate in the VC. Only one person will be allowed through one Email ID. The tenderers can join the VC through the link provided to them on Email ID.</p> <p>During the pre-bid meeting, the prospective tenderers may clarify/explain their queries submitted by them earlier (before the time limit as mentioned in Section-1), if the Employer desires. The clarifications/answers may not be given in the pre-bid meeting itself. The responses of K-RIDE will be intimated to the concerned tenderers (who sought the clarification) in due course, depending upon the merits of the query. K-RIDE reserves the right not to respond to any question/query or to provide any clarification, in its sole discretion, without assigning any reason thereof.</p> |
| 10.0 | <p>Document comprising Technical and Financial Bid:</p> <p>The following para to be read as:</p> <p>The Bidders shall submit the Technical Bid & Financial Bid online through e-procurement portal (https://eproc.karnataka.gov.in) or (https://kppp.karnataka.gov.in) only comprising of the following documents along with supporting documents as appropriate.</p> |
| 10.3 | <p>The following para is added:</p> <p>Documents Comprising the Tender</p> <ol style="list-style-type: none"> i. The Tender shall comprise of Tender Security / Tender Security Declaration, Technical Tender and Price Tender. The tenderer shall submit the Tender through Karnataka Public Procurement Portal. ii. On the stipulated date of opening of Tenders, initially, only the Technical Tenders are opened through Karnataka Public Procurement Portal. The Technical Tenders shall be evaluated by the Employer in accordance with the stipulated Qualification and Evaluation criteria. No amendments or changes to the tenders would be permitted after the opening of the tenders. iii. The tenderers who are qualified in the technical evaluation, their price Tender shall be opened at a date and time advised by the Employer (K-RIDE) through e-tendering portal. The Price Tenders are evaluated and the Contract is awarded to the tenderer whose Tender has been determined to be the lowest evaluated substantially responsive Tender. <p>The Technical Tender shall contain the following:</p> <ol style="list-style-type: none"> i. All the Forms of Section-3: Qualification Information / Bidding Forms including letter of technical Bid (LTB) shall be scanned and uploaded. ii. The tenderer shall furnish a commitment in Letter of Technical Bid (LTB) for deployment of key personnel as stipulated in Section 2 of ITT. iii. The tenderer shall furnish commitment in LTB for submitting design method statement for all major activities and get this approved from the Employer prior to the commencement of work on that activity in case of award of contract. iv. The tenderer shall furnish a commitment in Letter of Technical Bid (LTB) for adhering to mobilisation and design schedule as stipulated in Section 8: Terms of Reference. v. The tenderer should note that non-submission of the Letter of Technical Bid (LTB) by the tenderer will result in summary rejection of his/her Tender. vi. The tenderer shall submit the Approach and Methodology for performing the assignment by using appropriate Performa given in Section 3: Qualification Information/Bidding Forms. vii. Scanned copy of Tender Security / Tender Security Declaration form (Section - 3), in accordance with ITT Clause 13; |

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| | <p>viii. Scanned copy of written confirmation authorizing the signatory of the Tender to commit the tenderer, any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the Tender.</p> <p>ix. Scanned copy of documentary evidence with establishing the tenderer's qualifications to perform the contract; To establish its qualifications to perform the Contract in accordance with Section 2: ITT the tenderer shall submit as part of its technical Tender the information requested in the corresponding information sheets included in Section 3: Qualification Information / Bidding Forms.</p> <p>x. Domestic tenderers individually applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility.</p> <p>xi. Scanned copy of Approach and Methodology - Performa given in Section-3: Qualification Information / Bidding Forms</p> <p>xii. Deleted.</p> <p>The Price Tender shall contain the following:</p> <p>i. Scanned copy of Letter of Price Bid</p> <p>ii. All documents mentioned in Section-3 shall be scanned and submitted.</p> <p>iii. Filled / completed schedules as required including Price Schedule in accordance with ITT Clauses should be submitted through Karnataka Public Procurement Portal only;</p> <p>iv. The tenderer shall submit through Karnataka Public Procurement Portal, separate Technical Proposal and Price Proposal, using the appropriate Submission Sheets furnished in Section-3: Qualification Information / Bidding Forms. These Forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p> <p>v. The tenderer shall submit, as part of the Price Tender, the Schedules, including the Price Schedule through Karnataka Public Procurement Portal only.</p> |
| 11.5 | <p>Tender Prices and Discounts</p> <p>The following para to be read as:</p> <p>i. The prices quoted by the tenderer in the Letter of Price Tender (LPB) and in the price schedule shall conform to the requirements specified below.</p> <p>ii. In the Price Schedule, the amount against each schedule shall be quoted. From this, price of such schedules has been worked out and indicated in the summary sheet in the Price Schedule. The tenderer shall quote lumpsum amount in figures and words as per format for such schedule in the summary sheets. (No rate and amount shall be quoted in technical bid.)</p> <p>iii. The tenderer shall fill in the amount against each schedule (wherever applicable) of the price schedule, if there is more than one schedule. Wherever separate rates are supposed to be quoted for each item, items against which no amount or price is entered by the tenderer will not be paid for by the Employer when executed and shall be deemed to be covered by the lumpsum amount quoted in the price schedule.</p> <p>iv. The price to be quoted in the letter of Price Tender, in accordance with ITT, shall be the total price of the Tender.</p> <p>v. The tenderer can modify his / her Tender and resubmit it any number of times through Karnataka Public Procurement Portal before the deadline for submission of Tenders. Any other correspondence in connection with the Tender is not permissible and shall not be considered in Tender evaluation.</p> <p>vi. Unless otherwise provided in the ITT and the Contract, the lumpsum amount quoted by the tenderer are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract. In such a case, the indices and weightages for the price adjustment formulae shall be as specified in the Tables of Adjustment Data included in Contract Data.</p> <p>vii. All duties, taxes including GST, royalties, cess and other levies payable by the Consultant under the Contract, or for any other cause (including standard specifications), as of the date shall be included in the lumpsum amount of Price Schedule and the total Tender Price submitted by the tenderer.</p> <p>viii. GST shall be paid by the tenderer as applicable in accordance with the prevailing rules of Government of India.</p> |

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| | <p>ix. The tenderers should note that during the progress of the works, the foreign currency requirements of the outstanding balance of the Contract Price may be adjusted by agreement between the Employer and the Consultant in order to reflect any changes in foreign currency requirements for the Contract, in accordance with Sub-Clause 14 / ITT (Currencies of Bid and Payment) of the Conditions of Contract. Any such adjustment shall be affected by comparing the percentages quoted in the Tender with the amounts already used in the Works and the Consultant's future needs for imported items.</p> <p>x. The tenderer should note that non-submission of the Letter of Price Bid (LPB) by the tenderer shall result in summary rejection of his Tender.</p> <p>xi. Online alternative price tender corresponding to the alternative Technical Tender, If permissible, in accordance with ITT Clause 14;</p> |
| 13.7 | <p>The following para is added:</p> <p>In this tender, a tender security/ EMD of ₹ 5,00,000/- (Rupees Five lakh only) shall have to be paid.</p> <p>The part of the EMD amount of ₹ 1,00,000/- is accepted in the form of electronic cash (not through DD/BG) and will be maintained in the pooling account provided in the e-procurement portal until the contract is closed. The payment method for electronic cash and offline modes is as under:</p> <ol style="list-style-type: none"> 1. Credit Card. 2. Debit Card. 3. National Electronic Fund Transfer (NEFT). 4. Over the Counter (OTC) <p>The balance required EMD of ₹ 4,00,000/- (Rupees Four Lakh only) shall be furnished in the form of Bank Guarantee(BG) of any Nationalized bank/Scheduled Bank (as per RBI guidelines) payable to – Managing Director/K RIDE, Bengaluru. The EMD shall have to be valid for 45 days beyond the validity of the tender.</p> <p>For offline modes i.e. OTC, the bidder has to complete the payment as per the user manual given in Karnataka Public Procurement Portal and shall mention the bank transaction reference number in the Karnataka Public Procurement Portal to complete the bidding procedures.</p> <p>For further details, Click on the link, https://kppp.karnataka.gov.in and in downloads tab click on User Manuals for Tenderers & Refer e-payment.</p> <p>The scanned copy of the BG should be uploaded to the tender in the e-procurement platform. The Original Bank Guarantee shall compulsorily be produced & submitted for verification after the bid submission closing time but before the opening of the technical bid date and time as specified in e-portal to General Manager / L, PC & C4 in K-RIDE office. The bidder shall note that the Original Bank Guarantee submitted through post/in person, if it does not reach before the opening of the technical bid date and time as specified in e-portal to the concerned GM in K-RIDE office, the bid will not be considered for technical evaluation. The bids of the Consultants who have failed to produce and submit the original bank guarantee of earnest money deposit of tender before the opening of the technical bid date and time as specified in e-portal to the concerned GM, the bids will not be opened. Even if they are opened by default/manual/electronic error, the bids will not be considered for technical evaluation and the bids will be rejected. In case of non-reconciliation of tender earnest money deposit receipt of payment in Government of Karnataka central pooling account held at the ICICI Bank, the bid gets rejected.</p> <p>Bank Guarantee Format</p> <p>(a) An unconditional bank guarantee using the Form given in Section 3: Qualification Information and Bidding Forms. The bank guarantee shall be from a bank having minimum net worth of over INR 500 million from the specified banks as under:</p> <ol style="list-style-type: none"> (i) a Scheduled Bank in India, or (ii) a Foreign Bank having their operations in India, or (iii) a Foreign Bank which do not have operations in India is required to provide a |

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| | <p>counter-guarantee by State Bank of India,</p> <p>(b) The Scheduled Bank issuing the Bank Guarantee must be on “Structure Financial Messaging System (SFMS)” platform. A separate advice of the BG shall be invariably be sent by the issuing bank to the Employer’s Bank through SFMS and only after this the BG shall become operative and acceptable to the Employer.</p> <p>Further, the Tender Security in Original form along with a copy of “MT760COV (in case of Bank Guarantee message) / MT767COV (in case of Bank Guarantee amendment message) Report” sent by the BG issuing Bank Sealed in an envelope shall be submitted, as stated in ITT 15.</p> <p>The Issuing Bank shall send the SFMS to:</p> <p>Beneficiary: Rail Infrastructure Development Company (Karnataka) Limited (K-RIDE) Bank Name: Canara Bank Branch: Prime Corporate Branch Account No. 0430201012110 IFSC Code: CNRB0002636</p> <p>The Tender security shall be valid up to 45 days beyond tender validity, or up to the date mentioned in the letter of request for extension, if any under ITT 12.</p> <p>In case the tenderer has opted for Tender security in the form of an unconditional Bank Guarantee, the tenderer should upload the scanned copy of Bank Guarantee with the Tender. Non submission of scanned copy of Bank Guarantee with the tender on e-tendering portal and non-submission of original Bank Guarantee within the specified period shall lead to summary rejection of tender. The details of the BG, physically submitted should match with the details available in the uploaded scanned copy and the data entered during Tender submission time, failing which the Tender will be rejected.</p> <p>a. Unless otherwise specified in the BDS, any Tender not accompanied by an enforceable and compliant Tender security as required in accordance with ITT, will be summarily rejected by the Employer as non-responsive.</p> <p>b. The Tender security of the tenderer who have been determined to be unqualified for opening of their financial Tender will be returned within 15 working days after the opening of financial Tender. The Tender security of unsuccessful tenderers will be returned within 15 working days after issue of LOA to the successful tenderer.</p> <p>c. Deleted.</p> <p>d. The Tender security may be forfeited:</p> <p>i) If a tenderer withdraws its Tender during the period of Tender validity specified by the tenderer on the Letter of Tenders, except as provided in ITT Clause 12 or</p> <p>ii) if a tenderer misrepresents or omits the facts in order to influence the procurement process;</p> <p>iii) if the successful tenderer fails to:</p> <p>sign the Contract in accordance with ITT Clause 28; furnish a performance security in accordance with ITT 29; accept the correction of its Tender Price pursuant to ITT 24; or furnish a domestic preference security if so required</p> <p>iv) if the undertaking of the affidavit submitted by the tenderer or its constituents in pursuance to ITT clause 2 or any of the declarations of Letter of Technical Tender or Letter of Price Tender submitted by the tenderer has been found to be false at any stage during the process of Tender evaluation.</p> <p>e. Deleted.</p> |
| 14 | <p>The following para is added:</p> <p>The Tender, as well as all correspondence and documents relating to the Tender exchanged by the tenderer and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate</p> |

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| | translation of the relevant passages in English in which case, for purposes of interpretation of the Tender, such translation shall govern. |
| 15 | <p>Sealing and Marking of Tenders</p> <p>The following para to be read as:</p> <p>The tenderer shall submit the technical Tender, Price Tender and the Tender Security/Tender Security Declaration through Karnataka Public Procurement Portal i.e., https://eproc.karnataka.gov.in or https://kppp.karnataka.gov.in. The original of the Technical Proposal, which will contain all Forms of Section - 3 except Price Schedule of Section 9 and all other relevant data specified in the Tender document.</p> <p>The Price Bid, shall be submitted through Karnataka Public Procurement Portal only. This "PRICE BID" will contain only Price Schedule and all other relevant data specified in this Tender document. All forms should be typed on the tenderer's' letter head as per the exact format of the Forms.</p> <p>The above forms should be scanned and submitted through Karnataka Public Procurement Portal.</p> <p>No details about price proposal shall be disclosed directly or indirectly in the technical proposal failing which the Tender shall be rejected. Only Electronic Tender submission and opening procedure are permitted.</p> <p>In addition to above, the bidder shall submit the copy of one complete set of technical proposal document (signed and stamped uploaded technical proposal documents including page numbers through Karnataka Public Procurement Portal) to K-RIDE office within 2 (two) working days of bid submission date. However, the evaluation of tender will be based on the technical proposal documents uploaded in Karnataka Public Procurement Portal only.</p> |
| 19.7 | <p>The following para is added:</p> <p>Tender Opening</p> <ol style="list-style-type: none"> The Employer shall conduct the opening of Technical Tenders through Karnataka Public Procurement Portal i.e., https://eproc.karnataka.gov.in or https://kppp.karnataka.gov.in on the date and at the time mentioned. At the end of the evaluation of the Technical Tenders, the Employer will intimate the tenderers who have submitted substantially responsive technical proposals and who have been determined as being qualified for award to attend the opening of the price Proposals. The date and time, of the opening of Price Tenders will be advised through email. The tenderers shall be given reasonable notice for the opening of Price Tenders. The Employer will notify tenderers in writing who have been rejected on the grounds of being substantially non-responsive to the requirements of the Tendering Document and who have been determined as being not qualified as a result of evaluation of technical proposal and their Price Tender shall not be opened. The Tender Security of the tenderers shall be returned after due process. The Employer shall conduct the opening of Price Tenders through Karnataka Public Procurement Portal i.e., https://eproc.karnataka.gov.in or https://kppp.karnataka.gov.in of all tenderers who have submitted substantially responsive Technical Tenders and who have been determined qualified as a result of technical evaluation. |
| 23.4 | <p>The following para is added:</p> <p>Deviations, Reservations, and Omissions</p> <p>During the evaluation of Tenders, the following definitions apply:</p> <ol style="list-style-type: none"> "Deviation" is a departure from the requirements specified in the Tendering Document; "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Tendering Document; and "Omission" is the failure to submit part or all of the information or documentation required in the Tendering Document. |

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| 24.3 | <p>The following para is added:</p> <p>Non-conformities, Errors, and Omissions</p> <ol style="list-style-type: none"> i. Provided that a Tender is substantially responsive, the Employer may waive any non-conformities in the Tender that do not constitute a material deviation, reservation or omission. ii. Provided that a Tender is substantially responsive, the Employer may request the tenderer to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Tender related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Tender. Failure of the tenderer to comply with the request may result in the rejection of its Tender. |
| 24.4 | <p>The following para is added:</p> <p>Correction of Arithmetical Errors and Omissions in Tender and Evaluation of Tender Price</p> <ol style="list-style-type: none"> 1. Provided that the Tender is substantially responsive, the Employer shall correct arithmetical errors and omissions in the Tender and then arrive at the Evaluated Tender Price on the following basis: <ol style="list-style-type: none"> (a) If there is a discrepancy between the price mentioned in the summary sheet of the Price Schedule and the price that is obtained by calculation i.e., addition of each schedule in the summary sheet of Price Schedule, then the quoted amount of each schedule shall prevail and the price shall be corrected accordingly. (b) if the amount has been quoted both in words and in figures and there is a discrepancy in such amount, then the lower of the two shall prevail and shall be considered for evaluation of the price of the schedule. (c) If the amount has been quoted either in words or in figures only, then the same shall be considered for evaluation of the price of the schedule. (d) If no amount has been indicated for any particular schedule in words, as well as in figures, irrespective of the fact whether the tenderer has written or not written, in such cases, the lumpsum amount of the schedule shall be considered as zero and shall be calculated accordingly; (e) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected. (f) Deleted. 2. If the tenderer has submitted the lowest evaluated Tender does not accept the correction of errors and omissions as per above provisions, its Tender shall be disqualified and its Tender security shall be forfeited or its Tender-Securing Declaration executed. |
| 25.6 | <p>The following para is added:</p> <p>Conversion to Single Currency</p> <p>For evaluation and comparison purposes the currencies of the Tender shall be converted into Indian Rupees as stated in BDS.</p> <p>An Abnormally Low Tender is one in which the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the tenderer to perform the contract at the offered price. The Employer may in such cases seek written clarifications from the tenderer, including detailed price analysis of its Tender price in relation to scope, schedule, allocation of risks and responsibilities, and any other requirements of the Tender document. If, after evaluating the price analyses, the Employer determines that the tenderer has substantially failed to demonstrate its capability to deliver the contract at the offered price, the Employer may reject the Tender/proposal.</p> <p>Additional Performance Security in case of abnormally low Tenders will have to be submitted.</p> <p>The calculation sheet is as below:</p> <p>If the bid, which results in the lowest Evaluated Bid Price is substantially on lower side and/or seriously unbalanced in the opinion of the Employer as per criteria defined below, the Employer may require the bidder to submit additional performance security as under: -</p> <ol style="list-style-type: none"> a) If overall price quoted by the L1 bidder is below the engineer's estimated price by more than 10% and the difference between overall price quoted by the L1 and L2 is more than 5% of the estimated price, |

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| | <p>then the bid price of L1 bidder shall be treated as substantially on lower side and such bidder shall be bound to furnish additional performance security equal to the $(0.9 \times \text{engineer's estimated price} - \text{L1 price})$ or $(0.95 \times \text{L2 price} - \text{L1 price})$ whichever is lower, on this account. Example below demonstrates the method of calculation to arrive at additional performance security:</p> <p>Suppose overall price quoted by the L1 bidder is 17% below the estimated price and the overall price quoted by L2 bidder is 8% below the estimated price. In this case the overall price quoted by the L1 bidder is lower by more than 10% of the estimated price and also the difference between overall price quoted by the L2 and L1 bidder is more than 5% of the estimated price, hence the L1 bidder shall be required to furnish additional performance security for an amount equal to $\{0.9 \times \text{engineer's estimated price} - (1-17/100) \times \text{engineer's estimated price}\} = \{0.07 \times \text{engineer's estimated price}\} = 7\%$ of engineer's estimated price or $\{0.95 \times (1-8/100) \times \text{engineer's estimated price} - (1-17/100) \times \text{engineer's estimated price}\} = \{0.044 \times \text{engineer's estimated price}\} = 4.4\%$ of engineer's estimated price; whichever is lower.</p> <p>As per the above L1 bidder shall be required to submit additional performance security of 4.4% of engineer's estimated price.</p> <p>b) If for any bill/schedule of quantities % age above or below quoted by the bidder on the estimated price is beyond 15% below the overall % age difference between the quoted contract price and the engineers estimated price, then the price for that particular schedule shall be treated as seriously unbalanced and bidder shall be bound to furnish additional performance security for such unbalanced price. Example below demonstrates the method of calculation to arrive at unbalanced price and additional performance security:</p> <p>Suppose for the L1 bidder overall % age difference between quoted contract price and the engineers estimated price;</p> $(\text{Overall contract price} - \text{Overall estimated price}) \times 100 \div \text{overall estimated price} = +4\%$ <p>Maximum % age below permitted over estimated price of any bill / schedule in this case = $+4 - 15 = -11\%$</p> <p>Suppose for the L1 bidder has quoted 20% below estimated price then the pricing shall be treated as unbalanced and the bidder shall be required to furnish additional performance security for an amount equal to $(20 - 11)\%$ of the estimated price.</p> |
| 26.2 | <p>The following para is added:</p> <p>Award Criteria</p> <p>i. The Employer will award the contract to the tenderer, whose tender is substantially responsive to the Tendering Document, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily and whose offer has been determined to be the lowest evaluated subject to ITT below. In case of more than one Tenders are evaluated to be lowest, the contract will be awarded to the tenderer with higher average annual design turnover (calculated as total certified payments received for contracts in progress or completed) in equivalent INR within the last two financial years.</p> <p>ii. The Employer has the right to review at any time prior to award of contract that the qualification criteria as specified in Section - 3: Qualification Information and Bidding Forms are still being met by the tenderer whose offer has been determined to be the lowest evaluated Tender. A tender shall be rejected if the qualification criteria as specified in Section - 3: Qualification Information and Bidding Forms are no longer met by the tenderer whose offer has been determined to be the lowest evaluated Tender. In this event the Employer shall proceed to the next lowest evaluated Tender to make a similar reassessment of that tenderer's capabilities to perform satisfactorily.</p> |
| 29.5 | <p>The following para is added:</p> <p>Performance Security</p> <p>The successful tenderers shall have to submit a Performance Guarantee (PG) Within Twenty-Eight (28) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond</p> |

| | |
|----------------------------|--|
| | <p>28 days 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 28 days, i.e. From 29th day after the date of issue of LOA. Further if the 60th day happens to be declared holiday in the office of K-RIDE, submission of PG can be accepted on the next working day.</p> <p>In all other cases if the Consultant fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminate. In case contract is terminated, K-RIDE will be entitled to forfeit the Tender security and other dues payable against to the contract. In case the tenderer has not submitted by security on the strength of their registration as a start-up recognized by the Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect. The failed Consultant shall be debarred from participating in re-tender for that work.</p> <p>Failure of the successful tenderer to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender security or execution of the Tender - Securing Declaration.</p> <p>The above provision shall also not apply to the furnishing of a Domestic Preference Security, if so required.</p> |
| <p>New Clause-1</p> | <p>LITIGATION HISTORY: (Please see Annexure Tendering Forms)</p> <p>The tenderer / tenderers should provide accurate information on any litigation or arbitration resulting from contracts completed or under its execution over the five years as on date of submission of this tender.</p> <p>If the litigation started by the tenderer without recourse to measures of Dispute Resolution and Arbitration as provided in the Contract or the litigation in respect of challenge of award of Arbitration by the tenderer, will be treated as Litigation case indulged by the tenderer for this Para of Litigation History. A consistent history of awards against the Applicant or any partner of a joint venture may result in failure of the application.</p> |
| <p>New Clause-2</p> | <p>Jurisdiction of Courts</p> <p>The Tendering process shall be governed by and construed in accordance with the laws of India and the Courts as indicated in Tender Data Sheet shall have exclusive jurisdiction over all the disputes / issues arising under, pursuant to and / or in connection with the Tendering process. The Jurisdiction of Courts is Bengaluru, Karnataka</p> |
| <p>New Clause-3</p> | <p>Stamp duties and charges:</p> <p>The Consultant has to bear the stamp duties and charges for agreements / registration.</p> |

SECTION-3

QUALIFICATION INFORMATION & BIDDING FORMS

INDEX

SECTION-3: QUALIFICATION INFORMATION & BIDDING FORMS

This Section contains the forms which are to be completed by the Bidder and to be submitted as part of this Bid.

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A) QUALIFICATION INFORMATION/BIDDING FORMS**1. QUALIFICATION INFORMATION**

The information to be filled in by the Tenderer hereunder will be used for purposes of computing Tender capacity as provided for in Clause 2 of the Instructions to Tenderers. This information will not be incorporated in the Contract.

1.1. Constitution or legal status of Tenderer

Place of Registration: _____ [Attach copy]

Principal place of business: _____ [Attach Copy]

Total value of consultancy works executed and payments received in the following five Financial Years (attach certificate from Statutory Auditors)

2018-2019: _____

2019-2020: _____

2020-2021: _____

2021-2022: _____

2022-2023: _____

K-RIDE

1.2. Work performed as consultant (in the same name) on works of similar nature over during the five financial years specified in 1.2 below. (Refer para 3.2 a of section :2 ITT).

Refer para 3.2 a of section:2 ITT).

| Project Name | Name of Employer | Description of Work | Contract Number | Value of Contract ₹. Cr. | Date of Issue of Work Order | Specified Period of Completion | Actual Date of Completion | Remarks Explaining Reasons for Delay in Completion of Work |
|--------------|------------------|---------------------|-----------------|--------------------------|-----------------------------|--------------------------------|---------------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

Refer para 3.2 a of section :2 ITT).

| Project Name | Name of Employer | Description of Work | Contract Number | Value of Contract ₹. Cr. | Date of Issue of Work Order | Specified Period of Completion | Actual Date of Completion | Remarks Explaining Reasons for Delay in Completion of Work |
|--------------|------------------|---------------------|-----------------|--------------------------|-----------------------------|--------------------------------|---------------------------|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | |

1.3 Value of similar nature of work completed shall be updated to 2022-23 price level as per table given below.

| Financial year | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|------------------|---------|---------|---------|---------|---------|
| Indian Currency | | | | | |
| Foreign Currency | | | | | |

For completed works, the value of work done shall be updated to FY 2022-23 price level assuming 10% inflation for Indian rupees every year or part thereof up to the month previous to the Bid submission month. Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under: Bids will be compared in Indian Rupees only. The exchange rate of foreign currency shall be applicable 28 days before the tender submission date. For conversion of foreign currency to Indian Rupee exchange rates published by Financial Benchmarks Private limited (www.fbil.org.in) 28 days before the date of bid submission will be considered. In case, the particular day happens to be a holiday, the exchange rate published on the next working day will be considered. In case of works in foreign currency, the effect of inflation is considered as included, as the exchange rate prevailing 28 days before tender submission is being considered for conversion to Indian Rupees,

The bidder shall attach a copy of the Certificate(s) issued by the employer in support of the information being furnished in the above form, failing which the claim of the bidder shall be liable to be rejected

(SEAL AND SIGNATURE OF THE BIDDER)

1.4 Deleted

1.5 Information on works for which Tenders have been submitted and works which are yet to be completed as on the date of this Tender.

(A) Existing commitments and on-going works:

| Description of Work | Place & State | Contract No. & Date | Name and Address of Employer | Value of Contract (₹. in Crores) | Stipulated Period of Completion | Value of Works Remaining to be Completed (₹. In Crores) (Attach Certificate from Engineer in charge) | Anticipated Date of Completion |
|---------------------|---------------|---------------------|------------------------------|----------------------------------|---------------------------------|--|--------------------------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | | | | | | | |

(B) Works for which Tenders already submitted:

| Description of Work | Place & State | Name and Address of Employer | Estimated Value of Works (₹. In Crores) | Stipulated Period of Completion | Date when Decision is Expected | Remarks if Any |
|---------------------|---------------|------------------------------|---|---------------------------------|--------------------------------|----------------|
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | | | | |

1.6 Deleted.

1.7 Reports on the financial standing of the tenderer, such as profit and loss statements and auditor's reports for the five years;

1.8 Qualification and experience of the key technical and management personnel in permanent employment with the tenderer and those that are proposed to be deployed on this contract, if awarded.

1.9 Name, address and telephone, telex and fax numbers of the Tenderers' bankers who may provide references if contacted by the Employer.

1.10 Evidence of access to financial resources to meet the qualification requirement specified in ITT Clause 3.3 (b): Cash in hand, Letter of Credit etc. List them and attach certificate from the Banker in the suggested format given in Section 3, Form No.CL3 & CL4.

1.11 Deleted

1.12 Information on litigations in which the Tenderer is involved:

Litigation History

(This has reference to Eligibility cum Qualification Criteria document)

| |
|----------------------------|
| Name of Tenderer: - |
|----------------------------|

| Sl. No. | Name of the Employer/ Client | Name of the Work | No. of Cases in the Work | Cause of Litigation/ Arbitration/ Details of Disputes | Year | Litigation/ Arbitration Initiated by | Award in Favor of Tenderer/ Client | Disputed Amount | Remarks Showing Present |
|---------|------------------------------|------------------|--------------------------|---|------|--------------------------------------|------------------------------------|-----------------|-------------------------|
| | | | | | | | | | |
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Note:

The Tenderer should provide information on any history of litigation or Arbitration resulting from contracts executed in the 05 years and ending last day of the month previous to the month of bid submission.

- 1.3 The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

APPROACH & METHODOLOGY PROPOSED FOR PERFORMING THE ASSIGNMENT

Name of Project: “_____”

The approach and methodology will be detailed precisely under the following topics:

1. Understanding of the assignment
2. Work Breakdown structure/ Work plan.
3. Composition of the Team
4. Organizational set up and methodology for execution of the design as outline in Section 8
5. Documentation and procedures to be prepared, adopted and furnished to K-RIDE (Rail Infrastructure Development Company (Karnataka) Limited.)
6. Reporting Procedure

Note:

The approach and methodology shall be precise and relevant to the assignment. Bar charts shall be included.

K-RIDE

B) ADDITIONAL QUALIFICATION INFORMATION / BIDDING FORMS

Form: PS 1

LETTER OF TECHNICAL BID

Date _____

Invitation for Bid No.: _____

To,

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Tenderer (ITT).
- (b) We offer to execute the Works in conformity with the Bidding Documents.
- (c) Our bid shall be valid for a period of 180 days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (d) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents.
- (e) If our bid is accepted, we commit to deploy key equipment and key personnel consistent with the requirements stipulated in Section 8: Terms of Reference.
- (f) If our bid is accepted, we commit to submit the procedures in carrying out design of all major components and get these approved from the employer prior to commencing design work. We also understand that the work shall be executed as per the approved procedures and time frame without any deviations and delay in completion.
- (g) Deleted.
- (h) We declare that we are not participating, as a Bidder or as a sub-consultant, in more than one bid in this bidding process and submit the bid in accordance with ITT clause 14.
- (i) We declare that we are not liable to be disqualified in Accordance with ITT additional clause 2.5, and we are enclosing the affidavit for the same as per the Performa given in the bid document.
- (j) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (k) We have not made any deviations from the requirement of the bidding document and we have also not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and invocation of bid security declaration, the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
- (l) We understand that we will be considered for participating for which we have submitted the bid security(ies) declaration form and we will be considered for award, subject to fulfilling the eligibility criteria as given in bidding document.
- (m) If our bid is accepted, we opt to take payment into the bank account, nominated by us.
- (n) We declare that the submission of this bid confirms that no agent, middleman, or any intermediary has been, or will be engaged to provide any services or any other item of work related to the award and performance of this contract. We further confirm and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the bid price does not include any such amount. We acknowledge the right of the Employer, if he finds to the contrary, to declare our bid to be noncompliant and if the contract has been awarded to declare the contract null and void.

- (o) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (p) A Power of Attorney to sign and submit this letter is attached.
- (q) Having inspected the site, examined the complete bid document including Terms of Reference, Conditions of Contract, Special Conditions of Contract, Particular Conditions of Contract, Technical Specifications, Eligibility Cum Qualification Criteria, Instructions to Bidder and Addenda/Corrigendum etc., thereto (if any) for above mentioned work and prepared the bid entirely in accordance with all the requirements of the bid document and agree entirely with them.
- (r) We hereby confirm that we have visited the sites of work and have become conversant with the local conditions of working.
- (s) For the purpose of your evaluation, study, review and decision-making we are ready to let you inspect our business premises / site, etc.
- (t) We authorize K-RIDE or any of their authorized representative to approach, enquire, verify and check the matter furnished in our submission with the concerned client / owner of the Project / Contract and the concerned Banker of reference provided by us.
- (u) We undertake to hold in confidence all documents and information whether Technical or Commercial supplied to us at any time by or on behalf of K-RIDE in connection with this bid and without your written authority or as otherwise required by law not to publish or otherwise disclose the same.
- (v) If our bid is accepted, we agree to establish our project office in Bengaluru and will ensure all key staff availability.
- (w) We have submitted the Statement of Integrity, Eligibility, Social, and Environmental Responsibility signed and abide by the same.
- (x) We understand that this Bid shall be governed by and construed in all respects according to the laws for the time being force in India and that the courts at Bengaluru will have exclusive jurisdiction in the matter.
- (y) We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby confirm that this Tender complies with the Tender validity and Earnest money deposit required by the Tender documents.

- (z) We confirm and declare that by virtue of our signature below, to the best of knowledge and belief that the information provided by us as required in this Bid Document, all supporting and explanatory information is truthful and exact.

Name _____
_____ In the capacity of _____

Signed _____

Duly authorized to sign the Bid for and on behalf of _____

Date: _____

(SEAL AND SIGNATURE OF THE BIDDER)

LETTER OF PRICE BID

(To be separately given for each package on the Letter head of the Firm)

(Centre of E-governance has disabled submission of documents pertaining to financial proposal in e-portal. Bidders are requested to enter the Financial Proposal in the respective cell provided in the e-portal. This format of Financial Proposal is only for reference).

Date _____

Invitation for Bid No _____

To,

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Clause no. 9, Section - 2 Instructions to Tenderers (ITT).
- (b) We offer to execute the work in conformity with the Bidding Documents.
- (c) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (d) The total price of our Bid is indicated in the price schedule in e-procurement portal.
- (e) We have not made any deviations from the requirement of the bidding document and we have also not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security / the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
- (f) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name: _____

In the capacity of: _____

Signed: _____

Duly authorized to sign the Bid for and on behalf of _____

Date: _____

Seal:

FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY BIDDER ALONGWITH THE BID

(To be separately given for each package)

*(To be executed in presence of Public Notary on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper has to be in the name of the bidder) ***

I _____ (Name and designation) ** _____ appointed as the attorney/authorized signatory of the bidder (including its constituents), M/s. _____ (hereinafter called the bidder) for the purpose of the Bid for the work of _____ as per the bid No. _____ of K-RIDE, do hereby solemnly affirm and state on behalf of the bidder including its constituents as under:

- *1. That the bidder or any of its constituents has not been Blacklisted/ banned for business dealings for all Government Departments or by Ministry of Railways or by K-RIDE at any time and/or no such blacklisting is in force as on the deadline for submission of bids.
- *2. That none of the previous contracts of the bidder or any of its constituents had been terminated/rescinded for consultant failure with forfeiture of its full Performance Security, by Rail Infrastructure Development Company (Karnataka) Limited during the period of last 3 years before the deadline for submission of bids.
(Add Proviso of Clause 2, (ITT) suitably, if any Contract was so terminated).
- *3. The bidder or any of its constituents has not been imposed liquidated damages of 5% or more of contract value by any Government Department or by Ministry of Railways or by K-RIDE due to delay in the implementation of any previous contract within the period of last 2 years before the deadline for submission of bid [2 years shall be reckoned from the date on which imposed L.D. has exceeded 5% of the contract price] and there are no such accrued delay damages which has not been fully recovered before the deadline for submission of bids on account of consultant request for deferring recovery to maintain cash flow and K-RIDE has acceded to the same in the interest of the project and the work under the previous contract in question has been completed before the deadline for submission of bid, unless imposition of such delay damages has been set aside by the Competent Authority.
4. That the Bidder or any of its constituents is neither Bankrupt/Insolvent nor is in the process of winding-up nor is such a case pending before any Court on the deadline of submission of the bid.
- *5. That the name of the Bidder or any of its constituents is not on the list of "Poor Performer" of any Government Department or by Ministry of Railways or by K-RIDE as on the deadline for submission of bid.
6. We declare that the bidder or any of its constituents have not either changed their name or created a new business entity. Consequent to having been banned business dealings for specified period which is not over or suspended business dealings or having been declared as poor performer.
7. We declare and certify that balance sheets for five financial years including that for the latest concluded financial year are being submitted.

OR

We declare and certify that balance sheet for the latest concluded financial year has not been finalized till date and that is why we are furnishing financial data for five financial years ignoring the latest concluded financial year.

*(# - Delete whichever is not applicable) **.*

8. We declare and certify that we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
9. We declare that the information and documents submitted along with the bid by us are correct and we are fully responsible for the correctness of the information and documents, submitted by us.
10. We understand that in case we cease to fulfil the requirements of qualifying and eligibility criteria at any time after opening of bids and till finalization of bids, it will be our bounden duty to inform the Employer of our changed status immediately and in case of our failure to do so, our bid shall be rejected and bid security declaration form shall be forfeited. In case such failure comes to the notice of Employer at any time after award of the contract,

it will lead to termination of the contract and forfeiture of Bid or Performance Security. We shall also be liable for Banning of Business dealings up to a period of five years.

11. We understand that if the contents of the affidavit are found to be false at any stage during bid evaluation, it will lead to rejection of our bid and forfeiture of the bid security. Further, we [*insert name of the bidder*]^{**}_____ and all our constituents understand that we shall be liable for banning of business dealings up to a period of five years.
12. We declare and certify that we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
13. We also understand that our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon us.
14. We declare that the information and the document submitted along with the tender by us are correct and we are fully responsible for the correctness of the information and documents, submitted by us.
15. We undersigned that if the certificate 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 five years in K-RIDE. Further, we (Insert name of the Tenderer)**_____ and all our constituents understand that our offer shall be summarily rejected.
16. We also understand that if the certificate submitted by us are found to be false/forged or incorrect at any time after the award of 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 five years in K-RIDE.

(SEAL AND SIGNATURE OF THE BIDDER)

Verification:

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

(SEAL AND SIGNATURE OF THE BIDDER)

*Modify the contents wherever necessary, in terms of sub-clause 2 ITT.

** The contents in Italics are only for guidance purpose and details as appropriate, are to be filled in suitably by Bidder.

Attestation before Magistrate/Public Notary.

FORMAT OF BID SECURITY (BANK GUARANTEE)

WHERE AS _____ having its registered office at _____ (hereinafter called the Bidder) has submitted his bid dated _____ for the work Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP) (hereinafter called "DDC") KNOW ALL PEOPLE by these presents that we, _____ having its registered office at _____ (hereinafter called the Bank) are bound unto the Managing Director, Rail Infrastructure Development Company Karnataka Ltd (K-RIDE), Bengaluru (hereinafter called "the Employer") in the sum of ₹. _____ (Rupees _____) for which payment well and truly to be made to the said Employer the Bank binds itself, his successors and assigns by these presents; SEALED with the Common Seal of the said Bank this day _____

THE CONDITIONS OF THIS OBLIGATION ARE:

(1) If after Bid opening the Bidder withdraws his Bid during the period of Bids validity specified in the Form of Bid.

OR

(2) If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of Bid Validity.

- a. Fails or refuses to execute the form of Agreement in accordance with the instructions to Tenderers, if required; or
- b. Fails or refuses to furnish the Performance Security, in accordance with the instruction to Tenderers; or
- c. Does not accept the correction of the Bid Price pursuant to clause 24.3 and 24.4

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the conditions of one or both of the two conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 180 days after the deadline for submission of bids as such deadline is stated in the instructions to Bidders of as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE _____

SIGNATURE OF THE BANK _____

WITNESS _____

SEAL _____

BIDDERS QUALIFICATION

To establish its Qualifications to perform the contract in accordance with Section 2 (Qualification Information) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

To establish its qualifications to perform the contract in accordance with Section 2 (Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI - 1: Bidder's Information Sheet

| Bidder's Information | |
|---|--|
| Bidder's Legal Name | |
| Bidder's Country of Constitution | |
| Bidder's Year of Constitution | |
| Bidder's Legal Address in Country of Constitution | |
| Bidder's Authorized Representative (Name, Address, Telephone Numbers, Fax Numbers, e-mail Address) | |

The bidder shall attach copies of the following original documents with the form:

1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITT clause 2.
2. Authorization to represent the firm named in above, in accordance with ITT clause 14.

(SEAL AND SIGNATURE OF THE BIDDER)

FORM FIN-1: FINANCIAL DATA FOR LAST 5 YEARS

(Each Bidder must fill in this form separately)

Applicant's legal nameDate

Page.....of Pages

Applicant must fill in this form

| Sl. No. | Description | Financial Data for 5 Financial Years [Indian National Rupees] | | | | |
|---------|---------------------------------------|---|---------------------|---------------------|---------------------|---------------------|
| | | Year 1 2018-2019 | Year 2 2019-2020 | Year 3 2020-2021 | Year 4 2021-2022 | Year 5 2022-2023 |
| 1 | Total Assets | | | | | |
| 2 | Current Assets | | | | | |
| 3 | Total External Liabilities | | | | | |
| 4 | Current Liabilities | | | | | |
| 5 | Annual Profits Before Taxes | | | | | |
| 6 | Annual Profits After Taxes | | | | | |
| 7 | Net Worth [= 1 – 3] | | | | | |
| 8 | Liquidity [= 2 - 4] | | | | | |
| 9 | Annual turnover (from consultancy) | | | | | |
| 10 | Gross Annual turnover | | | | | |

1. The bidder shall attach copies of the following original documents with the form

Copies of the audited balance sheets, including all related notes, and income statements for the five years, as indicated above, complying with the following conditions.

- i. All such documents reflect the financial situation of the Bidder and not sister or parent companies.
- ii. Historic financial statements must be audited by a certified accountant.
- iii. Historic financial statements must be complete, including all notes to the financial statements.
- iv. Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).
- v. Foreign applicants, in whose country calendar year is also the financial year, may submit all relevant data for the last 5 years i.e., 2018, 2019, 2020, 2021 and 2022.

2. Contents of this form should be certified by a Statutory Auditor

- i. In the event that the audited accounts for the latest concluded Financial Year are not available, the Bidder shall furnish information pertaining to the five financial years after ignoring the latest concluded financial year. In case, the bidder submits audited financial information for the last six or more years, only the figures for the five years (from FY 2018-19 to FY 2022-23) shall be considered for evaluation.
- ii. Financial data for last five financial years has to be submitted by the bidder along with audited balance sheets. The financial information of the Bidder must be certified either by the Independent Financial Auditor (statutory Auditor) of the company appointed under the companies' Act.

- iii. In case any discrepancy in data is found between the balance sheet and the financial information submitted, the data as available in the balance sheet will be considered.
- iv. In case the audited balance sheet of the year 2022-23 is not made available by the Bidder, he has to submit an affidavit certifying that 'The Balance Sheet has actually not been audited so far'. In such a case the financial data of '4' audited financial years (i.e., 2018-19, 2019-20, 2020-21, 2021-22) will be taken into consideration for evaluation. If audited balance sheet of any year other than the year 2022-23 is not submitted, then the bid will be considered as non-responsive.
- v. In case the company's financial year is from Jan 19 to Dec 19, then it will be considered under financial year 2019 – 20. Similar procedure will be applicable for other financial years also.

(SEAL AND SIGNATURE OF THE BIDDER)

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

(Signature of Statutory Auditor)

Name of Statutory Auditor: _____

Registration No: _____

(Seal)

FORM FIN-2: ANNUAL CONSULTANCY TURNOVER FOR THE 5 FINANCIAL YEARS.

Deleted

K-RIDE

FORM FIN-3: CURRENT CONTRACT COMMITMENTS / WORKS IN PROGRESS

Bidders should provide information on their current commitments on all contract that have been awarded, or which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Contract Commitments

| Sl. No | Description of Work | Contract No. & Date | Name & address of Employer, Tel./Fax/ Email | Value of Contract in INR | Stipulated Period of Completion | Value of Balance Work | Anticipated Date of Completion |
|--------|---------------------|---------------------|---|--------------------------|---------------------------------|-----------------------|--------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| Total | | | | | | | |

1. Bidder should provide information on their current commitments or all contracts that have been awarded or for which a letter of intent or acceptance has been received or for contracts approaching completion but for which a completion certificate is yet to be issued.
2. The exchange rate of foreign currency shall be applicable 28 days before the tender submission date. For conversion of foreign currency to Indian Rupee exchange rates published by Financial Benchmarks Private limited (www.fbil.org.in) 28 days before the date of bid submittal will be considered. In case the particular day happens to be a holiday the exchange rate published on the next working day will be considered. In case of works in foreign currency the effect of inflation is considered as included, as the exchange rate prevailing 28 days before tender submission is being considered for conversion to Indian Rupees.

Note:

Enclose Certificate(s) from Engineer(s) In charge (not below the rank of Executive Engineer) for Value of outstanding work. In case it is not feasible to furnish certificate from all the units the bidder should record the following certificate on Fin 3:

"Certified that current commitments on all the contracts that have been awarded or for which a letter of intent or acceptance has been received or for the works in progress or the works approaching completion, value of outstanding work has been indicated in the above table correctly. It is further certified that if later on the employer discovers that information provided in the table is incorrect then the employer will treat our bid invalid and it will be liable for rejection"

(SEAL AND SIGNATURE OF THE BIDDER)

CHECKLIST FOR CLAUSES PERTAINING TO SUMMARY**REJECTION OF BID**

We, the undersigned, declare that we have read and understood the content of ITT clauses section:2 mentioned below. We also understand that our bid shall be summarily rejected in case we fail to comply the requirements of undermentioned clauses:

| ITT Clause No. Section 2 | Reason for Summary Rejection | Form No. |
|--------------------------|---|--------------------------|
| 2.5 | Non-submission of Affidavit | Form PS-3 |
| 11.5 & 22 | Non-submission of immediate information to the Employer in case Bidder ceases to fulfill eligibility in terms of ITT. | - |
| ITT | Letter of Technical Bid | Form PS-1 |
| 11.5 | Quoting more than one Lumpsum Amount for any Schedule | Price schedule-Section:9 |
| 11.5 | Non-Submission of the Letter of Price Bid (LPB) | (Form:PS-2) |
| 13 | Bid not Accompanied with bid Security | (BDF/1) |

(SEAL AND SIGNATURE OF THE BIDDER)

FORMAT FOR CERTIFICATE TO BE SUBMITTED BY BIDDER ALONGWITH THE BID*(On the letter head of the Firm)*

We/I, _____, having registered office at _____ do hereby certify that "I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. (Where applicable, evidence of valid registration by the competent Authority shall be attached.)"

Dated this _____ day of _____, 2023

For: _____

Authorized Signatory Signature: _____

Full Name: _____

Place: _____

(SEAL AND SIGNATURE OF THE BIDDER)

Deleted

K-RIDE

Deleted

K-RIDE



KEY PERSONNEL FOR THE WORK

MINIMUM QUALIFICATION AND EXPERIENCE REQUIRED FOR KEY PERSONNEL TO BE DEPLOYED FOR THE WORK (Refer Appendix - B of Section 8 - Terms of Reference)

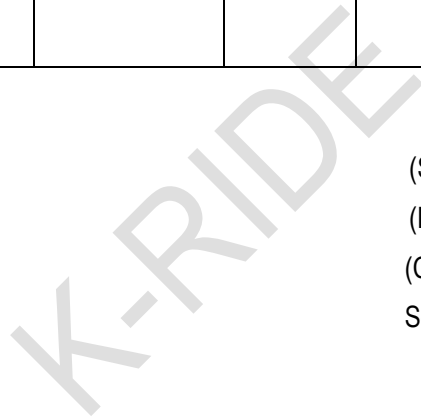
| Sl. No. | Key Personnel | Qualifications & Total Experience | Particular Experience (Minimum requirement) | Minimum Number of Personnel | Name of the key Personnel Proposed | Qualification | Total Number of Years of Experience | Number of Years in Similar Works Experience |
|---------|---------------|-----------------------------------|---|-----------------------------|------------------------------------|---------------|-------------------------------------|---|
| | | | | | | | | |
| | | | | | | | | |

(Signature)

(Name of Signatory)

(Capacity of Signatory)

Seal.....



FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY EXPERTS / PROFESSIONAL STAFF

Proposed Position:

Name of Firm:

Name of Staff:

Profession:

Date of Birth:

Years with Firm/Entity: Nationality:

Membership in Professional Societies:

Detailed Tasks Assigned:

Key Qualifications:

[Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations]

Education:

[Summarize college/university and other specialized education of staff member and degrees obtained.]

Employment Record:

[Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. Also give types of activities performed and client references, where appropriate.]

| Period | Name of Employing Organization | Name of the Project | Title / Position | Activity performed | Location of the Assignment |
|--------|--------------------------------|---------------------|------------------|--------------------|----------------------------|
| | | | | | |

Languages:

[For each language, indicate proficiency: excellent, good, fair, or poor; in speaking, reading, and writing]

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Date:

[Signature of staff member and authorized representative of the Firm] Day/Month/Year

Full name of Staff Member: _____

Full name of the Authorized Representative: _____

**POWER OF ATTORNEY (POA) FOR SUBMITTING BID
(FOR SINGLE ENTITY/SOLE BIDDER ONLY)**

Know all men by these presents, we _____ . (name and address of the registered office) do hereby constitute, appoint and authorize Mr./Ms. _____ (name and residential address) who is presently employed with us and holding the position of _____ as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the Project, including signing and submission of all documents and providing information/responses to K-RIDE, representing us in all matters before K-RIDE, and generally dealing with K-RIDE in all matters in connection with our Bid for the Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall always be deemed to have been done by us.

_____ (Signature)

(Name, Title and address) of the Person issuing the POA.

Notes:

- (i) The bidder should submit the notarized Power of Attorney.
- (ii) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- (iii) The bidder should submit following additional document in support of the POA as case-to-case basis:
 - a) Proprietorship Affidavit in case of Proprietary bidder.
 - b) Partnership deed in case of partnership bidder.
 - c) Board Resolution in case of a Public/Private limited company.
 - d) Memorandum & Article of Association in case of a Public/Private limited company.
 - e) Board Resolution in case of a Limited Liability Partnership.

AVAILABILITY OF FINANCIAL RESOURCES

(SECTION-2, ITT CLAUSE 3.3 (B))

Bidders must demonstrate sufficient financial resources, comprising of Working Capital supplemented by credit line statements or overdraft facilities to meet the Bidder's financial requirements for

- a) its current contract commitments, and
- b) the subject contract.

| Financial Resources | | |
|-------------------------------------|---------------------|---------------------|
| Sl.No. | Source of financing | Amount (equivalent) |
| 1 | Working Capital | |
| 2 | Credit Line | |
| Total Available Financial Resources | | |

To be considered, Credit Line must be substantiated by a letter from the bank issuing the line of credit, specific for the subject contract, as prescribed. Any letter or document not complying with this requirement shall not be considered as supplementary financial resources.

Note:

In case the financial statement data is other than Indian Rupees, the equivalent Indian Rupees with the exchange rates as defined in the Section-2, ITT.

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EVIDENCE OF AVAILABILITY OF CREDIT LINE FINANCIAL RESOURCES**(SECTION-2 ITT, CLAUSE:3)**

[Each Bidder must fill out this form to demonstrate financial resources comprising credit line statements or overdraft facilities.]

Project Name: _____

Bidding Package Name and Identification Number: _____ (to be filled in as indicated in IFT 1) _____

BANK CERTIFICATE

This is to certify that M/s _____ is a reputed company with a good financial standing.

If the contract for the work, namely _____ is awarded to the above firm, we shall be able to provide overdraft / credit facilities to the extent of ₹ _____ to meet their working capital requirements for executing the above contract.

__Sd.____

Name of Bank: _____

Senior Bank Manager _____

Address of the Bank _____

K-RIDE

**WORK EXPERIENCE CERTIFICATE
TO WHOM SO EVER IT MAY CONCERN**

(Issued for the purpose of Quoting in K-RIDE tenders)

M/s/Sri _____ (Name and address of the consultant) is a working consultant of this unit and was awarded the following work. The relevant details of the work are as under:

| Sl. No | Description | Details |
|--------|--|---------|
| 1 | Name of work | |
| 2 | Acceptance Letter No and Date | |
| 3 | Agreement Number, Date and Name of the Agency | |
| 4 | Agreement Value in Rupees (in words and figures) | |
| 5 | Due Date of Completion | |
| 6 | Actual Date of Completion of Work | |
| 7 | Value of Final Bill if Passed (in words) | |
| 8 | Work Completed but Final Measurements Not Recorded. a) Amount Paid so far as in CC bill No. | |
| 9 | Work Completed. Final Measurements Recorded with Negative Variation a) Amount so far Paid as in CC bill No. | |
| 10 | Work Completed. If Final Measurements Recorded with Positive Variation which is not Sanctioned yet. Original Agreement Value of Last Sanctioned Agreement Value whichever is Lower. | |
| 11 | Scope of work (Broad category of Works i.e., the Name of the Work in the Agreement on which Work is | |
| 12 | Details of Values of Major Components/ Works Executed in the Completed Work. | |

Note:

The Certificate to satisfy similar work should be signed by an officer not lower than JAG officer in Railways and Executive Engineer rank or equivalent grade in other department of Govt. of India/State Government/PSUs of Government of India / State Undertaking and Competent Authority of Public Listed Company.

Signature: _____

Name of Officer: _____

Designation: _____

Address: _____

Office Seal:

Phone/FAX No.:

Date: _____

Form for Undertaking for Not Back-listed or Debarred

We do hereby undertake that none of the Central or State Government Organisation/ department/ Public Sector Undertaking/ other Government entity including Metro Rail Corporation and/or other Rail Corporations/ Multilateral/ Bilateral funding agencies have not blacklisted or debarred us (any member in case of JV/ Consortium) as on the date of online tender submission.

Stamp and Signature of Authorized Signatory

Note:

The undertaking shall be signed by authorized signatory of the tenderer.

Form for Undertaking for Not Being Imposed of Liquidated Damages/ Penalty

We do hereby undertake that we have not been imposed liquidated damages of 10% of the contract value in a contract or penalty of 10% (or more) of the contract value executed during last ten years ending 31.03.2023.

Stamp and Signature of Authorized Signatory

Note:

The undertaking shall be signed by respective authorized signatory of constituent members, counter signed by the authorized signatory of tenderer.

Form for Undertaking for Not Being in The Process of Debt Restructuring

We do hereby undertake that we have not applied for/ obtained corporate debt restructuring in immediately preceding 36 months from the last date of online tender submission. A certificate to this effect from our statutory auditors is enclosed herewith.

Enclosures: As above.

Stamp and Signature of Authorized Signatory

Note:

The undertaking shall be signed by respective authorized signatory of constituent members, counter signed by the authorized signatory of tenderer.

SECTION - 4

FORM OF TENDER, LETTER OF ACCEPTANCE AND AGREEMENT FORM

| SL. NO. | TITLE | FORM NUMBER | PAGE NO. |
|---------|----------------------|-------------|----------|
| 1 | LETTER OF ACCEPTANCE | FORM-1 | 65 |
| 2 | AGREEMENT FORM | FORM-2 | 66 |

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FORM OF TENDER (Deleted)

Please refer Form PS-1 of Section 3: Additional Qualification Information / Bidding Forms.

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FORM-1

LETTER OF ACCEPTANCE

(On the Letter head of the Employer)

[Date] _____

To: _____ [name and address of the Consultant]

Dear Sir,

This is to notify you that your Bid dated _____ for the execution of "Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP)", vide Tender No: K-RIDE/2023-24/OW/WORK_INDENT4, Dated: 06/06/2023 for the Accepted Contract Amount of Rupees _____ [amount in words and figures], as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by the Competent Authority of K RIDE.

You are hereby requested to furnish Performance Security plus additional security for unbalanced tenders in accordance with of Clause 29.5 of ITT, in the form detailed in Clause 25.6 of ITT of the Particular conditions of contract for an amount of ₹. _____ (As defined in contract data) within 28 days of the receipt of this letter of acceptance, valid up to 30 days from the date of expiry of Depot Construction Phase i.e., up to _____ and sign the contract.

You are hereby instructed to proceed with the execution of the work.

Yours faithfully,

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

FORM-2

AGREEMENT FORM

This agreement is made on the _____ day of _____ 20_____, between
 _____ (Name and Address of Employer) (herein after called "the Employer") of the one part
 and
 _____ [name and address of consultant] (herein after called "the Consultant") of the other part.

Whereas the Employer is desirous that the Consultant Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP). advertised vide Tender No. K-RIDE/2023-24/OW/WORK_INDENT4, Dated: 06/06/2023 (herein after called "DDC") and the Employer has accepted the Tender by the Consultant for the execution and completion of such Works and the remedying of any defects therein at a contract price of Rupees _____

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Consultant as hereinafter mentioned, the Consultant hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Consultant in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be read and construed as part of this Agreement,

The documents forming the Contract shall be interpreted in the following order of priority:

- i. This Contract Agreement and the Appendices hereto.
- ii. Letter of Acceptance
- iii. Letter of Bid and the Price Schedule submitted by the Consultant.
- iv. Addendums, Corrigendum and Pre-bid clarifications to the Tender
- v. Contract Data, Special provisions (if any)
- vi. Particular Conditions of Contract (PCC)
- vii. General Conditions of Contract (GCC) / Special Conditions of Contract (SCC)
- viii. Terms of Reference including scope of works, the Schedules.
- ix. Technical specification
- x. Design and Drawings
- xi. Any other documents pertaining to tender, issued by the Employer
- xii. Consultant's Technical Proposal
- xiii. Any other documents pertaining to tender, submitted by the Consultant

If an ambiguity or discrepancy is found in the documents, the Employer will issue necessary clarification or instruction, as per the need.



In witness whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____

was hereunto affixed in the presence of: _____

Signed, Sealed and Delivered by the said _____

_____ in the presence of: _____

Binding Signature of Employer _____

Binding Signature of Consultant _____

K-RIDE

SECTION – 5

CONDITIONS OF CONTRACT(CC) AND SPECIAL CONDITIONS OF CONTRACT (SCC)

CONDITIONS OF CONTRACT

A. GENERAL

1. DEFINITIONS

- 1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Bold letters are used to identify defined terms.
- i. **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Tender.
 - ii. The **Completion Date** is the date of completion of the Works as certified by the Employer in accordance with Sub Clause 46.1.
 - iii. The **Contract** is the contract between the Employer and the Consultant to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.2 below.
 - iv. The **Contract Data** defines the documents and other information which comprise the Contract.
 - v. The **Consultant** is a person or corporate body whose Tender to carry out the Works has been accepted by the Employer.
 - vi. The **Consultant's Tender** is the completed Tender document submitted by the Consultant to the Employer.
 - vii. The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
 - viii. **Days** are calendar days; **months** are calendar months.
 - ix. A **Defect** is any part of the Works not completed in accordance with the Contract.
 - x. The **Defects liability period** is the period named in the Contract Data and calculated from the Completion Date.
 - xi. **Employer/Authority** is the party who will employ the Consultant to carry out the works. The terms Employer and K-RIDE used in this Bid Document are synonymous to each other.
 - xii. **Equipment** is machinery and vehicles brought to the site by the Consultant for complete execution of the work. It also includes the equipment provided to the Employer / Engineer for supervision and monitoring.
 - xiii. The **Initial Contract price** is the Contract Price listed in the Employer's Letter of Acceptance.
 - xiv. The **Intended Completion Date** is the date on which it is intended that the Consultant shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time.
 - xv. **"Joint Venture"** Deleted
 - xvi. **Materials** are all supplies, including consumables, used by the Consultant for incorporation in the Works.
 - xvii. **"Notice to Proceed"** Deleted
 - xviii. **Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.
 - xix. The **Site** is the area defined as such in the Contract Data.
 - xx. **Specification** means the Specification of the Works included in the Contract and any modification or addition made shall be certified by the Engineer and approved by Employer.
 - xxi. The **Commencement Date** is given in the Contract Data. It is the date when the Consultant shall commence execution of the works. It does not necessarily coincide with any of the Site access Dates.
 - xxii. **A Sub-Consultant** is a person or corporate body who has a Contract with the Consultant to carry out a part of the work in the Contract which includes work on the Site.
 - xxiii. A **Variation** is any change to the works, which instruction is given by the Employer/Engineer which varies the Works.
 - xxiv. Deleted.

2. INTERPRETATION

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.

2.2 The documents forming the Contract shall be interpreted in the following order of priority:

- i. This Contract Agreement and the Appendices hereto.
- ii. Letter of Acceptance
- iii. Letter of Bid and the Price Schedule submitted by the Consultant.
- iv. Addendums, Corrigendum and Pre-bid clarifications to the Tender
- v. Contract Data, Special provisions (if any)
- vi. Particular Conditions of Contract (PCC)
- vii. General Conditions of Contract (GCC) / Conditions of Contract (CC)
- viii. Terms of Reference including scope of works, the Schedules.
- ix. Technical specification
- x. Design and Drawings
- xi. Any other documents pertaining to tender, issued by the Employer
- xii. Consultant's Technical Proposal
- xiii. Any other documents pertaining to tender, submitted by the Consultant

If an ambiguity or discrepancy is found in the documents, the Engineer will bring the same to the notice of the Employer and the Employer will issue necessary clarification or instruction, as per the need.

3. LAW GOVERNING CONTRACT

3.1 The law governing the Contract is the Laws of India supplanted by the Karnataka Local Acts.

4. EMPLOYER'S DECISIONS

4.1 Except where otherwise specifically stated, the Employer will decide contractual matters between the Employer and the Consultant.

5. DELEGATION

5.1 The Employer may delegate any of his duties and responsibilities to other people after notifying the Consultant and may cancel any delegation after notifying the Consultant.

6. COMMUNICATIONS

6.1 Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. SUBCONTRACTING

7.1 The Consultant may propose to subcontract a part of the work for the approval of the Engineer but shall not assign the part of work to the Sub-Consultant without the approval of the Employer in writing. Subcontracting does not alter the Consultant's obligations.

8. OTHER CONSULTANTS

8.1 The Consultant shall cooperate and share the Site with approval from the Employer with other Consultants, public authorities, utilities, and the Engineer.

9. PERSONNEL

9.1 The Consultant shall employ the technical personnel (of number and qualifications) as may be stipulated by K-RIDE from time to time during the execution of the work. The technical staff so employed shall be available at office / site as may be stipulated by the Employer/Engineer.

9.2 If the Employer asks the Consultant to remove a person who is a member of the Consultant's staff or his work force stating the reasons, the Consultant shall ensure that the person leaves the Site with immediate effect and has no further connection with the work in the Contract.

10. EMPLOYER'S AND CONSULTANT'S RISKS

10.1 The Employer carries the risks which this Contract states are Employer's risks, and the Consultant carries the risks which this Contract states are Consultant's risks.

11. EMPLOYER'S RISKS

11.1 The Employer is responsible for the excepted risks which are:

- (a) Rebellion, riot commotion or disorder unless solely restricted to employees of the Consultant or his Sub Consultants arising from the conduct of the Works; or
- (b) a cause due solely to the design of the Works, other than the Consultant's design; or
 - (i) could not have reasonably foreseen; or
 - (ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures;
 - a. prevent loss or damage to physical property from occurring by taking appropriate measures or
 - b. insure against such loss or damage

12. CONSULTANT'S RISKS

12.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Consultant.

13. INSURANCE:

13.1 The Consultant shall prior to commencing the works, effect and thereafter maintain insurances, in the joint names of the Employer and the Consultant, (cover from the first working day after the Commencement Date to the end date of Contract period), in the amounts stated in the Contract Data:

- (a) for loss of or damage to the Works;
- (b) for liability of both Parties for loss, damage, death and injury to third parties or their property arising out of the Consultant's performance of the Contract including the Consultant's liability for damage to the Employer's property other than the Works and
- (c) for liability of both Parties and of any Employer's representative for death and injury to the Consultant's personnel except to the extent that liability arises from the negligence of the Employer, any Employer's representative or their Employees.

13.2 Policies and certificates for insurance shall be delivered by the Consultant to the Employer for his approval before the Commencement Date. All such insurance shall provide for compensation to be payable to rectify the loss or damage incurred. All payments received from insurers relating to loss or damage shall be held jointly by the Parties and used for the repair of the loss or damage or as compensation for loss or damage that is not to be repaired.

13.3 If the Consultant fails to effect or keep in force any of the insurances referred to in the previous sub-clauses or fails to provide satisfactory evidence, policies or receipts, the Employer may without prejudice to any other right or remedy, effect insurance for the cover relevant to such default and pay the premiums due and recover the same as a deduction from any other monies due to the Consultant. If no payments are due, the payment of the premiums shall be a debt due.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Employer.

13.5 Both Parties shall comply with any conditions of the insurance policies.

14. SITE INVESTIGATION REPORTS:

14.1 The Consultant, in preparing the tender, shall rely on any site investigation reports referred in the Contract data, supplemented by any information available to the Tenderer.

15. QUERIES ABOUT THE CONTRACT DATA

15.1 The Employer will clarify queries on the Contract Data, if any.

16. CONSULTANT TO DESIGN THE WORKS

16.1 The Consultant shall design in accordance with the Specification and Drawings.

17. THE WORKS TO BE COMPLETED BY THE INTENDED COMPLETION DATE

17.1 The Consultant may commence design work on the Commencement Date and shall carry out the designs in accordance with the program submitted by the Consultant, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. APPROVAL BY THE ENGINEER:

18.1 The Consultant shall submit Specification and drawings showing the proposed Temporary Works to Engineer who is to approve them if they comply with the Specifications and Drawings.

18.2 The Consultant shall be responsible for the design of Temporary Works and Permanent works.

18.3 The Engineer's approval does not alter the Consultant's responsibility for design of the Temporary Works and Permanent works.

18.4 The Consultant shall obtain approval of Employer to design the Temporary and Permanent Works.

18.5 All Drawings prepared by the Consultant for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. SAFETY

19.1 The Consultant shall be responsible for safety of their staff involved in any activities on the Site.

DISCOVERIES

19.2 Deleted.

20. ACCESS TO THE SITE

20.1 Deleted

21. ACCESS TO THE SITE

21.1 Deleted

22. INSTRUCTIONS

22.1 The Consultant shall carry out all instructions of the Employer & Engineer which comply with the applicable laws where the Site is located.

23. PROCEDURE FOR RESOLUTION OF DISPUTES:

23.1 If the Consultant is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.

23.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.

23.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. TIME CONTROL**24. PROGRAM**

24.1 Within the time stated in the Contract Data the Consultant shall submit to the Employer for approval of a Program showing the general methods, arrangements, order, and timing for all Design activities.

24.2 The Employer's approval of the Program shall not alter the Consultant's obligations. The Consultant may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

25. EXTENSION OF THE INTENDED COMPLETION DATE

- 25.1 The Employer may extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date, in the opinion of Employer.
- 25.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 28 days of the Consultant asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

26. DELAYS ORDERED BY THE EMPLOYER

- 26.1 The Employer may instruct the Consultant to delay the start or progress of any activity within the Works for any reason, which may not be communicated to the Consultant.

27. MANAGEMENT MEETINGS

- 27.1 The Employer may require the Consultant to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.
- 27.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. QUALITY CONTROL

28. IDENTIFYING DESIGN DEFECTS

- 28.1 The Employer shall check the Consultant's design and notify the Consultant of any Defects that are found. Such checking shall not affect the Consultant's responsibilities. To confirm a Defect, the Employer may instruct the Consultant and to uncover and test any design that the Engineer considers may have a Defect.

29. TESTS

If the Engineer instructs the Consultant to carry out whether the submitted design has a Defect and the check shows that it does, the Consultant shall be responsible for the delays. If there is no Defect the time spent for check shall be a Compensation Event.

30. CORRECTION OF DEFECTS

- 30.1 Deleted
- 30.2 Every time notice of a Design Defect is given, the Consultant shall correct the notified Defect within the length of time specified by the Employer's notice.

31. UNCORRECTED DEFECTS

- 31.1 If the Consultant has not corrected a Design Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Consultant will pay this amount.

D. COST CONTROL

32. PRICE SCHEDULE:

- 32.1 Deleted
- 32.2 The Price Schedule is used to calculate the Contract Price. The Consultant is paid as per stage wise payment of work done as per Price Schedule.

33. VARIATIONS

- 33.1 The Employer shall have power to order the Consultant to do any or all of the following as considered necessary or advisable during the progress of the work by consultant.
- (a) Increase or decrease of any item of design work included in the Price Schedule;
 - (b) Omit any item of design work;
 - (c) Change the character or quality or kind of any item of design work;
 - (d) Deleted;
 - (e) Execute additional items of design work of any kind necessary for the completion of the design works;
and
 - (f) Deleted.
- 33.2 The Consultant shall be bound to carry out the design in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.
- 33.3 Variations shall not be made by the Consultant without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the Price Schedule so long as the work executed conforms to the approved drawings.
- 33.4 The Consultant shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days of request, failing which the design work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied with Price Schedule failing which the Consultant shall be responsible for deviation if any.

34. PAYMENTS FOR VARIATIONS

- 34.1 Payment for change of scope shall be made in accordance with the payment schedule specified in the change of scope order. The Consultant shall execute and be bound for variations of all change of scope of orders till the price does not exceed 25% of the Contract Price as specified in LOA/Original agreement.
- 34.2 The rates for additional, substituted or altered item of work, Consultant shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.
- 34.3 If the Consultant's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Consultant's costs.
- 34.4 Under no circumstances the Consultant shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

35. SUBMISSION OF BILLS FOR PAYMENT

- 35.1 The Consultant shall submit to the Engineer monthly bills of the value of the design work completed less the cumulative amount paid previously.
- 35.2 The Engineer shall check the Consultant's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items as per stage payment of Price Schedule and (ii) valuation of Variations and Compensation Events.
- 35.3 The Engineer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

36. PAYMENTS

- 36.1 Payments shall be adjusted for deductions for payments other than recoveries in terms of contract and taxes, at source as applicable under law. The Employer shall pay the Consultant within 60 days of submission of bill. The Consultant shall be liable to pay liquidated damages for shortfall in progress.
- 36.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed to be covered in lumpsum Price of the Contract.

37. DELETED.**38. DELETED.****39. TAX**

39.1 The rates quoted by the Consultant shall be deemed to be inclusive of the sales Tax, GST and other taxes that the Consultant will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. PRICE ADJUSTMENT

Deleted

41. LIQUIDATED DAMAGES

41.1 The Consultant shall pay liquidated damages to the Employer at the rate per week stated in the Contract Data for each week that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Consultant. Payment of liquidated damages does not affect the Consultant's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Consultant by adjusting the next payment of bill.

42. ADVANCE PAYMENTS

42.1 Deleted

42.2 Deleted

42.3 Deleted

43. SECURITIES

43.1 The Performance Security (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Performance Security as indicated in the contract data shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion. The security deposit will be released against BG.

44. COST OF REPAIRS

44.1 Deleted.

E. FINISHING THE CONTRACT**45. COMPLETION**

45.1 The Consultant shall request the Employer to issue a Certificate of Completion of the Design Works and the Employer will do so upon deciding that the Design is completed.

46. TAKING OVER

46.1 The Employer shall take over the Designs after issuing a certificate of completion.

47. FINAL ACCOUNT

47.1 The Consultant shall supply to the Employer a detailed account of the total amount that the Consultant considers payable under the Contract before the end of the Contract Period. The Employer shall certify any final payment that is due to the Consultant within 90 days of receiving the Consultant's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Consultant and make payment within 60 days of receiving the Consultant's revised account.

48. AS BUILT DRAWINGS AND /OR OPERATING AND MAINTENANCE MANUALS

48.1 If "As Built Drawings" (Completion Drawing) and/or operating and maintenance manuals are required, the Consultant shall supply them by the dates stated in the Contract Data.

48.2 If the Consultant does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Consultant.

49. TERMINATION

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

- a) the Consultant stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Engineer;
- b) - "DELETED"-
- c) the Consultant becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- d) - "DELETED"-
- e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Consultant fails to correct it within a reasonable period of time determined by the Engineer;
- f) the Consultant does not maintain a security which is required;
- g) the Consultant has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- h) if the Consultant, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.

49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

49.5 If the Contract is terminated, the Consultant shall stop the work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. PAYMENT UPON TERMINATION

50.1 If the Contract is terminated because of a fundamental breach of Contract by the Consultant, the Engineer shall prepare bill for the value of the work done less advance payments, if any, received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Consultant, the difference shall be a debt payable to the Employer.

50.2 If the Contract is terminated at the Employer's convenience, the Engineer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Consultant's personnel employed solely on the Works, and the Consultant's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the

contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. PROPERTY

51.1 The materials on the Site, Plant, Equipment which belong to the Employer and all Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Consultant's default.

52. RELEASE FROM PERFORMANCE

52.1 If the Contract is frustrated by any event entirely outside the control of either the Employer or the Consultant, the Employer shall certify that the Contract has been frustrated.

F. SPECIAL CONDITIONS OF CONTRACT

53. LABOUR

The Consultant shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Consultant shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Consultant on the Site and such other information as the Engineer may require.

54. COMPLIANCE WITH LABOUR REGULATIONS

During continuance of the Contract, the Consultant and his sub-Consultants shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Consultant shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Consultant, Employer shall have the right to deduct any money due to the Consultant including his amount of security deposit. The Employer shall also have right to recover from the Consultant any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Consultant and the Sub-Consultant in no case shall be treated as the employees of the Employer at any point of time.

55. PROTECTION OF ENVIRONMENT

The Consultant shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the Consultant and his sub-Consultants shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

56. CLAIMS, DISPUTES AND ARBITRATION

56.1 CONSULTANT'S CLAIMS

If the Consultant considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Consultant shall give notice to the Employer with a copy to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Consultant became aware, or should have become aware, of the event or circumstance.

If the Consultant fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Consultant shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Consultant shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Consultant shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Employer. Without admitting the Employer's liability, the Engineer may, after receiving the copy of the notice under this Sub-Clause, monitor the record-keeping and/or instruct the Consultant to keep and provide further contemporary records. The Consultant shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.

Within 45 days after the Consultant became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Consultant and approved by the Engineer, the Consultant shall send to the Employer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- a. this fully detailed claim shall be considered as interim;
- b. the Consultant shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and
- c. the Consultant shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Consultant and approved by the Engineer.

Within 45 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Consultant, the Employer will respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such fixed period of time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Consultant shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Employer shall proceed in accordance with Sub-Clause: [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause: [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Consultant is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Consultant fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

57. AMICABLE SETTLEMENT

In case any dispute between the Engineer and the Consultant for which claim has already been made by the Consultant, remains unresolved, the Consultant shall, then, give notice of dissatisfaction and intention to commence arbitration to the Employer duly specifying the subject of the dispute or difference as also the amount of claim item wise. The Parties shall make attempts to settle the dispute amicably before the commencement of arbitration as per procedure set by K-RIDE. However, unless both Parties agree otherwise, demand for arbitration may be made by the Consultant after ninety days from the day on which a notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.

PROCEDURE FOR AMICABLE SETTLEMENT IN CONTRACTS

1. Amicable Settlement Committee at senior management level shall make an attempt to resolve the issues /disputes within 90 days of request by the Consultant.

2. The Amicable Settlement Committee comprises of the first two officers (mentioned below) of K-RIDE in case the issue involves Civil Engineering discipline and three officers (mentioned below) in case the issues involve other discipline(s) of the engineering (other than Civil engineering):
 - a. GM/K-RIDE directly in-charge of the project;
 - b. GM(Finance)/Concerned finance officer, and
 - c. GM/K-RIDE (in the same order) directly in-charge of the project of other discipline(s) - in case the issues involve other discipline(s) of the engineering.
3. Whenever the Consultant submits a request for amicable settlement, MD/K-RIDE should forward the same to concerned GM/K-RIDE (in the same order) directly in-charge of the project. GM/K-RIDE on receipt of the same shall issue a note to the concerned finance officer and concerned GM/K-RIDE of other discipline (in case the issues involved other discipline(s) of engineering), about the request for amicable settlement to be dealt by him/her/them and fix a date in consultation with him/her/them for a hearing. The date should then be communicated to MD/K-RIDE, GM/K-RIDE of other department (if the issues involved their department) and Consultant for presenting their case before the Amicable Settlement Committee.
4. This being an additional workload like arbitration, the Committee members shall be paid fee by K-RIDE at the rates payable to the Arbitrators of K-RIDE.

58. ARBITRATION

Any dispute, in respect of which amicable settlement has not been reached, arising between the Employer and the Domestic or Foreign Consultant related to any matter arising out of or connected with this contract, then the Consultant shall be entitled to demand in writing that the dispute or difference be referred to arbitration.

Only such dispute(s) or difference(s) in respect of which the demand had been made for amicable settlement under GCC 4.2 but could not be settled, shall be referred to arbitration.

The Arbitration proceedings shall commence from the day, a written and duly quantified demand for arbitration is received by Managing Director, Rail Infrastructure Development Company (Karnataka) Limited, Bengaluru/K-RIDE).

The disputes so referred to arbitration shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996 and any statutory modification or re-enactment thereof.

Any dispute or difference or claim arising out of, or in connection with, or relating to the present contract or the breach, termination or invalidity thereof shall be referred and settled under the Arbitration Centre – Karnataka (Domestic and International) Rules 2012, by one or more arbitrators appointed in accordance with its rules.

58.1 PROCEDURE FOR APPOINTMENT OF ARBITRATORS: THE ARBITRATORS SHALL BE APPOINTED AS PER FOLLOWING PROCEDURE:

Any dispute or difference or claim arising out of, or in connection with, or relating to the present contract or the breach, termination or invalidity thereof shall be referred and settled under the Arbitration Centre – Karnataka (Domestic and International) Rules 2012, by one or more arbitrators appointed in accordance with its rules.

Arbitration proceedings shall be held at Bengaluru, India or at a place where K-RIDE's (dealing the contract) office is located, and the language of the arbitration proceedings and that of all documents and communications between the Parties shall be in English.

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.

The fees and other charges of the conciliator/arbitrators shall be as per the fee structure fixed by the Employer with reference to the Rules of Arbitration Centre – Karnataka (Domestic and International) Rules 2012. The cost of arbitration shall be borne equally by the respective parties.

Performance under the contract shall continue during the arbitration proceedings and payments due the Consultant by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceeding.

58.2 EXCEPTED MATTERS

The following are the list of excepted matters in arbitration.

- a. Assistance by Employer for the Stores to be obtained by the Consultant.

- b. Illegal Gratification.
- c. Meaning and intent of specifications and Drawings.
- d. Rates for Non-tendered items of works.
- e. Signing of "No claim Certificate"
- f. Measurement of works.
- g. Provisions of Payment of Wages Act 1936.
- h. Provisions of Contract Labour (Regulation and Abolition) Act, 1970.
- i. Provisions of Employees Compensation Act 1923.
- j. Provisions of Mines Act 1952.
- k. Right of Employer to determine the Contract
- l. Payment on determination of Contract by Employer.
- m. Bonus clause as per clause 26.14 of PCC

59. JURISDICTION OF COURTS

The Contract Agreement shall be subject to exclusive jurisdiction of Courts as indicated in the Contract Data.
The Jurisdiction of Courts is Bengaluru, Karnataka.

60. SETTLEMENTS THROUGH COURT

It is a term of this contract that the Consultant shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through Dispute resolution as above.

K-RIDE

SECTION – 6

CONTRACT DATA

| CONTRACT DATA | | | |
|---------------|---|----------------------------------|--|
| SL. No | Conditions | CC/SCC/PCC Sub Clause | Data |
| 1. | Employer's name and address | 38 / IFT | General Manager (Land, Project Coordination & Corridor-4) Rail Infrastructure Development Company (Karnataka) Limited, #8, 1 st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall Rajajinagar 1 st Block, Bengaluru-560010 Tel +91-6364890801 E-mail: gm@kride.in |
| 2. | Engineer's name and address | Clause xiii, Definition / PCC | Project Director, General Consultant (EGIS-AECOM-LBI(WSP) JV), #11/23, Suryadev Building, Rajajinagar, 1 st Block, Bengaluru-560010. |
| 3. | Start of Designs | Clause – 9 / Section 8 -TOR | The consultant shall start the activity of Designs immediately after issue of LOA. |
| 4. | Commencement Date | CC Clause 1.1- xxi / CC | The Employer shall give a Notice to the Contractor stating the Commencement Date, not less than 14 days before the Commencement Date. |
| 5. | Time for Completion | IFT Section-1 Table | 30 Months |
| 6. | Electronic transmission systems | 38 / IFT | E-mail: gm@kride.in |
| 7. | Governing Law | 3 / CC | This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law. |
| 8. | Language for communications | 58.1 / SCC | English |
| 9. | Time for the Parties entering into a Contract Agreement | 1.1 / CC Definitions | This Contract shall come into effect on the date the Contract is signed by both Parties. |
| 10. | Performance Security | New Clause- 4.19 / PCC | The Performance Security will be in the form of a Bank guarantee, from a Public Sector Bank in India or from a Foreign bank having branch in India or from such Foreign bank which has tie up with a PSU bank in India for an amount of 3% of the Accepted Contract Amount and in the same currency of the Accepted Contract Amount. |
| 11. | Normal working hours | 1.5 / PCC | As per the clause referenced. |

| CONTRACT DATA | | | |
|---------------|--|-----------------------|--|
| SL. No | Conditions | CC/SCC/PCC Sub Clause | Data |
| 12. | Delay damages for the works/Key Dates (KD) | | The liquidity damages for each Key dates / milestone have been indicated at Clause 10.8 Appendix-A of Section - 8 / TOR & Scope of Works for not achieving the Key Date / Milestone for each Week. |
| 13. | Maximum amount of Delay damages/ Liquidated Damages (LD) | 26.8 / PCC | The liquidity damages for each Key dates / milestone have been indicated at Clause 10.8 Appendix-A of Section 8 TOR & Scope of Works for not achieving the Key Date / Milestone for each Week. The maximum amount of liquidated damages for the whole of the works is 10% (Ten percent) of final contract price. |
| 14. | Percentage of Retention Money/ Security Deposit (SD) | New Clause 4.20 / PCC | 5% |
| 15. | Limit of Retention Money/SD (Security Deposit) | New Clause 4.20 / PCC | As per Section-7/PCC, New Clause 4.20 Security Deposit |
| 16. | Interim Payment Certificates | 37.1 / PCC | Application for Interim Payment Certificate as per clause 37.1, PCC. |
| 17. | Minimum Amount of Interim Payment Certificates | 37.3 / PCC | 1% of the Accepted Contract Amount after six months of commencement of work as per Letter of Award. |
| 18. | Maximum total liability of the Consultant to the Employer | 22.2.2 / PCC | The Accepted Contract Amount. |
| 19. | Periods for submission of insurance: a. Evidence of insurance b. Relevant Policies | 13 / CC | From the date of issue of Letter of Acceptance: a. Before start date of work b. Before start date of work |
| 20. | Maximum amount of deductibles for insurance of the Employer's risks | 13 / CC | 1% of the Contract amount for each occurrence. |
| 21. | Professional Indemnity | 13.6 / PCC | The Consultant shall provide to the Authority, within 30 days of the Commencement Date, evidence of professional liability insurance maintained by its Design Director and/or consultants to cover the risk of professional negligence in the design of Works. The professional liability cover shall be for a sum of not less than [6% (Six per cent)] of the Contract Price and shall be maintained until the end of the Defects Liability Period. |

| CONTRACT DATA | | | |
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| SL. No | Conditions | CC/SCC/PCC Sub Clause | Data |
| 22. | Defect Liability Period | NEW CLAUSE-9 / PCC | 42 Months |
| 23. | Minimum amount of third-party insurance | 13.8 / PCC | INR 10 Lakhs per occurrence without any upper limit for occurrence. |
| 24. | Bonus for early completion | 26.14 / PCC | As per the Section-7, PCC Clause-26.14 Bonus for early completion. |
| 25. | Date by which the Arbitrator shall be appointed | 58 / SCC | The Arbitration proceedings shall commence from the day, a written and duly quantified demand for arbitration is received by Managing Director, Rail Infrastructure Development Company (Karnataka) Limited, Bengaluru / K-RIDE). |
| 26. | Arbitrator Remuneration | 58.1 / SCC | The fees and other charges of the conciliator/arbitrators shall be as per the fee structure fixed by the Engineer / Employer with reference to the Rules of Arbitration Centre – Karnataka (Domestic and International) Rules 2012. The cost of arbitration shall be borne equally by the respective parties. |
| 27. | Language of Arbitration | 58.1 / SCC | English |
| 28. | Place of Arbitration | 59 / SCC | Bengaluru, India |
| 29. | Jurisdiction of Court | 59 / SCC | The Contract Agreement shall be subject to exclusive jurisdiction of Courts as indicated in the Contract Data. The Jurisdiction of Courts is Bengaluru, Karnataka. |
| 30. | The Methodology and Program of Construction | 4 / TOR | Section - 8 |
| 31. | Site Investigation Reports | Appendix – C / TOR | Section - 8 |
| 32. | Time Frame for completion of DDC | Appendix-A / TOR | Section - 8 |
| 33. | As built drawings | 4.6 / TOR | Section - 8 |
| 34. | Termination by Employer | 49 / CC | Section - 5 |

SECTION - 7

PARTICULAR CONDITIONS OF CONTRACT (PCC)

PARTICULAR CONDITIONS OF CONTRACT (PCC)

The following Particular Conditions of Contract (PCC) shall supplement the Conditions of Contract CC/GCC/SCC/Contract Data. Whenever there is a conflict, the provisions herein shall prevail over those in the CC/GCC/SCC/Contract Data. The conditions indicated in PCC will be on priority as compared to the conditions of CC/GCC/SCC/Contract Data.

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| <p>CLAUSE-1/CC DEFINITIONS</p> | <p>i. The following paras are added to the Existing CC Clauses.</p> <p>ii. “DDC” means the consultant firm appointed to carry out the work of detail design and associated activities of this work.</p> <p>iii. “Contract Agreement” The Parties shall enter into a Contract Agreement within 28 days after the Consultant receives the Letter of Acceptance, unless they agree otherwise.</p> <p>iv. “Letter of Acceptance” means the letter of formal acceptance, signed by the Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression “Letter of Acceptance” means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.</p> <p>v. “Letter of Bid” means the document entitled letter of bid, which was completed by the Consultant and includes the signed offer to the Employer for the Works.</p> <p>vi. “Drawings” means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.</p> <p>vii. “Schedules” means the document(s) entitled schedules, completed by the Consultant and submitted with the Letter of Bid, as included in the Contract. Such document may include the Price schedule, data, lists, and schedules of rates and/or prices.</p> <p>viii. “Bid/Tender” means the Letter of Technical Bid and Letter of Price Bid and all other documents which the Consultant submitted with the Letter of Technical Bid and Letter of Price Bid, as included in the Contract.</p> <p>ix. “Terms of Reference” means the document entitled ‘Terms of Reference’ as part of Works Requirements and as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the works.</p> <p>Parties and Persons</p> <p>x. “Party” means the Employer or the Consultant, as the context requires.</p> <p>xi. “Engineer” means the person nominated by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Consultant under New-Clause 3.4 [Replacement of the Engineer]. The person nominated to act as an engineer may be an employee of Rail Infrastructure Development Company (Karnataka) Ltd (K-RIDE) or an employee of a Project Management Consultancy firm engaged by K-RIDE for project management as per the discretion of the Employer.</p> <p>xii. “Consultant’s Representative” means the person named by the Consultant in the Contract or appointed from time to time by the Consultant under New-Clause 4.21 [Consultant’s Representative], who acts on behalf of the Consultant.</p> <p>xiii. “Employer’s Representative” means the person named by the Employer in the Contract or appointed from time to time by the Employer who acts on behalf of the Employer.</p> <p>xiv. “Employer’s Personnel” means the Engineer, the assistants referred to in New-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and</p> |

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| | <p>of the Employer; and any other personnel notified to the Consultant, by the Employer or the Engineer, as Employer's Personnel.</p> <p>xv. "Consultant's Personnel" means the Consultant's Representative and all personnel whom the Consultant utilises, who may include the staff and other employees of the Consultant and of each Sub-Consultant; and any other personnel assisting the Consultant in the design of the Works.</p> <p>xvi. "GOI" means Government of India.</p> <p>xvii. "Base Date" means the date 28 days prior to the deadline for submission of bids.</p> <p>xviii. Deleted</p> <p>xix. "Day" means any (working or non-working) calendar day from 00:00 hrs. to 24:00 hrs.</p> <p>xx. "Time Period": Any reference to time period commencing "from" the specified day or date "till" or "until" a specified day shall include both such days.</p> <p>xxi. Any reference to "Time" shall be according to Indian Standard Time (IST).</p> <p>xxii. Money and Payments</p> <p>xxiii. "Accepted Contract Amount" means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects. In the Letter of Acceptance, the Accepted Contract Amount shall have i.e. (i) the base amount including GST (ii) the rates quoted by the Consultant shall be deemed to be inclusive of the sales, GST and other taxes (Section -5; CONDITIONS OF CONTRACT (CC) AND SPECIAL CONDITIONS OF CONTRACT (SCC), Clause 39</p> <p>xxiv. "Cost" means all expenditure reasonably incurred (or to be incurred) by the Consultant, whether on or off the Site, including overhead and similar charges, but does not include profit.</p> <p>xxv. "Final Statement" means the statement defined in Sub-Clause 37.12 [Application for Final Payment Certificate].</p> <p>xxvi. "Foreign Currency" means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.</p> <p>xxvii. "Local Currency" means the currency in Indian Rupees.</p> <p>xxviii. "Statement" means a statement submitted by the Consultant as part of an application, under Clause 37 and 40 [Contract Price and Payment], for a payment certificate</p> <p>xxix. Works and Goods</p> <p>xxx. Deleted</p> <p>xxxi. "Goods" means Consultant's Equipment, or any of them as appropriate.</p> <p>xxxii. Deleted</p> <p>xxxiii. "Section" means a part of the Works specified in the Contract Data as a Section (if any).</p> <p>xxxiv. Deleted</p> <p>xxxv. Other Definitions</p> <p>xxxvi. "Consultant's Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Consultant under the Contract.</p> <p>xxxvii. "Country" means India, the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.</p> |

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| | <p>xxxviii. Deleted</p> <p>xxxix. “Laws” means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.</p> <p>xl. “Site” means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.</p> <p>xli. “Unforeseeable” means not reasonably foreseeable and against which adequate preventive precautions could not reasonably be taken by an experienced Consultant by the date for submission of the Bid.</p> <p>xlii. “Railway” means a railway, or any portion of a railway for public carriage of passengers and goods as defined in the Railways ACT 1989. Any reference to railway means the Indian Railways and the respective Zonal Railway</p> <p>(a) References to any legislation or any provision thereof shall include amendment or re-enactment or consolidation of such legislation or any provision thereof so far as such amendment or re-enactment or consolidation applies or is capable of applying to any transaction entered into hereunder;</p> <p>(b) References to laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India and as from time to time may be amended, modified, supplemented, extended or re-enacted;</p> <p>(c) References to a “person” and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and shall include successors and assigns;</p> <p>(d) Deleted.</p> <p>(e) The damages payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “Damages”);</p> <p>(f) “Agreement” means this Agreement, its Recitals, the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this Agreement;</p> <p>(g) “Applicable Laws” means all laws, brought into force and effect by Government of India or the State Government(s) including rules, regulations and notifications made thereunder, and judgements, decrees, injunctions, writs and orders of any court of record, applicable to this Agreement and the exercise, performance and discharge of the respective rights and obligations of the Parties hereunder, as may be in force and effect during the subsistence of this Agreement;</p> <p>(h) “Applicable Permits” means all clearances, licenses, permits, authorisations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the consultancy services of the Railway Project during the subsistence of this Agreement;</p> <p>(i) “Defect” means any defect or deficiency in Design of the Works or any part thereof, which does not conform with the Specifications and Standards;</p> <p>xliii. Encumbrances” means, in relation to the Railway Project, any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority</p> |

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| | <p>of any kind having the effect of security or other such obligations, and shall include any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Railway Project, where applicable herein but excluding utilities referred to in Clause 14 of Employer's Requirement Part-1;</p> <p>xliv. "EPC" means Engineering, procurement and construction</p> <p>xlv. "Good Industry Practice" means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced Consultant engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Consultant in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner;</p> <p>xlvi. "Government Instrumentality" means any department, division or sub-division of the Government or the State Government and includes any commission, board, authority, agency or municipal and other local authority or statutory body, including panchayat, under the control of the Government or the State Government, as the case may be, and having jurisdiction over all or any part of the Railway Project or the performance of all or any of the services or obligations of the Consultant under or pursuant to this Agreement;</p> <p>xlvi. Deleted</p> <p>xlvi. "Intellectual Property" means all patents, trademarks, service marks, logos, get-up, trade names, internet domain names, rights in designs, blue prints, programs and manuals, drawings, copyright (including rights in computer software), database rights, semi-conductor, topography rights, utility models, rights in know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect anywhere in the world;</p> <p>xlix. Deleted</p> <p>l. "Material Adverse Effect" means a material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement and which act or event causes a material financial burden or loss to either Party;</p> <p>li. Deleted</p> <p>lii. Deleted</p> <p>liii. Deleted</p> <p>liv. "Project Assets" means all physical and other assets relating to (a) tangible assets such as civil works and equipment including [foundations, embankments, pavements, road surface, interchanges, bridges, culverts, road over-bridges, drainage works, traffic signals, sign boards, kilometer-stones, electrical systems, communication systems, rest areas, relief centers, maintenance depots and administrative offices]; and (b) Project Facilities situated on the Site;</p> <p>lv. Deleted</p> <p>lvi. Deleted</p> <p>lvii. Deleted</p> <p>lviii. "Specifications and Standards" means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Railway Project, as set forth in Schedule-D, and any modifications thereof, or additions thereto, as included in the design and Engineering for the Railway Project submitted by the Consultant to, and expressly approved by, the Employer.</p> |

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| | <p>lix. “Sub-Consultant” means any person or persons to whom a part of the Works has been subcontracted by the Consultant and the permitted legal successors in title to such person, but not an assignee to such person</p> <p>lx. “Works” means all works including survey and investigation, design, Engineering, procurement, construction, Plant, Materials, temporary works, and other things necessary to complete the Railway Project in accordance with this Agreement; and</p> <p>lxi. “WPI” means the wholesale price index for various commodities as published by the Ministry of Commerce and Industry, GOI and shall include any index which substitutes the WPI, and any reference to WPI shall, unless the context otherwise requires, be construed as a reference to the WPI published for the period ending with the preceding month.</p> <p>lxii. “Background Intellectual Property” means, in respect of each Party, the Intellectual Property owned by or otherwise in the possession of that Party at the Commencement Date.</p> <p>lxiii. “Good Faith” means in all dealings under the Agreement the Client and the Consultant shall act in good faith and in a spirit of mutual trust.</p> |
| <p>CLAUSE-1/CC</p> | <p>The Following Paras Are Added to The Existing CC Clauses.</p> <p>Employer’s Name and Address:</p> <p>K-RIDE (Rail Infrastructure Development Company (Karnataka) Limited) (A Joint venture of GoK and MoR) #8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall Rajaji Nagar 1st Block Bengaluru – 560010 Tel.: 080-24482800</p> <p>Employer’s Authorised Representative and Address:</p> <p>General Manager / Land, Project Coordination & Corridor 4 K-RIDE (Rail Infrastructure Development Company (Karnataka) Limited) #8, 1st Floor, Samparka Soudha, Dr. Rajkumar Road, Opposite Orion Mall Rajaji Nagar 1st Block Bengaluru – 560010 Tel.: +91 6364890801; Tel.: 080-24482800 E – Mail: gm@kride.in</p> |
| <p>CLAUSE -2.1/CC INTERPRETATION</p> | <p>The Following Paras Are Added to The Existing CC Clauses:</p> <p>(a) provisions including the word “agree,” “agreed” or “agreement” require the agreement to be recorded in writing</p> <p>(b) “written” or “in writing” means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and</p> <p>(c) the word “tender” is synonymous with “bid”, and “tenderer” with “bidder” and the words “tender documents” with “bid documents”</p> |
| <p>CLAUSE-6.1/CC, COMMUNICATIO NS</p> | <p>The Following Para Is Added to The Existing CC Clause</p> <p>Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be: in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and delivered, sent or transmitted to the address for the recipient’s communications as stated in the Contract Data.</p> |

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| CLAUSE11/CC EMPLOYER'S RISKS | <p>The Clause 11 Of CC Is Modified as Under</p> <p>Risk And Responsibility</p> <p>11.1 Indemnities</p> <p>The Consultant shall indemnify and hold harmless the Employer, the Employer's Personnel, Employers Representative, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:</p> <p>(a) bodily injury, sickness, disease, or death, of any person including railway user whatsoever arising out of or in the course of or by reason of the Consultant's design (if any), the design and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and</p> <p>(b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Consultant's design (if any), completion of the designs and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel,, their respective agents, or anyone directly or indirectly employed by any of them.</p> <p>The Employer shall indemnify and hold harmless the Consultant, the Consultant's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:</p> <p>(1) bodily injury, sickness, disease, or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and</p> <p>(2) the matters for which liability may be excluded from insurance cover, as described in subparagraphs (d)(i), (ii) and (iii) of Sub-Clause 13.8/PCC [Insurance Against Injury to Persons and Damage to Property].</p> <p>11.2 Consultant's Care of The Works</p> <p>Notwithstanding any term or condition to the contrary in the Agreement or any related document or any legal requirement of the Country or any other relevant jurisdiction (including, for the avoidance of doubt, the jurisdiction of the place of establishment of the Consultant), in the performance of the Services the Consultant shall have no other responsibility than to exercise the reasonable skill, care and diligence to be expected from a consultant experienced in the provision of such services for projects of similar size, nature and complexity to the extent achievable using the standard of care without extending the obligation of the consultant beyond that requirement, the consultant shall perform the services with a view to satisfying any function and purpose that may be described in the contract. The consultant shall comply with all regulations, statutes, ordinances and other forms of standards, codes of practices and legislation applicable to the services and the agreement.</p> <p>The Consultant shall take full responsibility for the care of the Design from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 46.1/PCC [Taking Over of the Works and Sections]) for the completed design, when responsibility for the care of the design shall pass to the Employer. If a Taking-Over Certificate is issued (or is so deemed to be issued) for any Section or part of the design, responsibility for the care of the Section or part shall then pass to the Employer.</p> <p>After responsibility has accordingly passed to the Employer, the Consultant shall take responsibility for the care of any design which is outstanding on the date stated in a Taking-Over</p> |

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| | <p>Certificate, until this outstanding design work has been completed.</p> <p>If any loss or damage happens to the design or Consultant's Documents during the period when the Consultant is responsible for their care, from any cause not listed in Sub-Clause 11.3/PCC [Employer's Risks], the Consultant shall rectify the loss or damage at the Consultant's risk and cost, so that the design and Consultant's Documents conform with the Contract.</p> <p>The Consultant shall be liable for any loss or damage caused by any actions performed by the Consultant after a Taking-Over Certificate has been issued. The Consultant shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Consultant was liable.</p> <p>11.3 Employer's Risks</p> <p>The risks referred to herein below, in so far as they directly affect the design of the works in the Country, are:</p> <ul style="list-style-type: none"> (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies, (b) rebellion, terrorism, sabotage by persons other than the Consultant's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country, (c) riot, commotion, or disorder within the Country by persons other than the Consultant's Personnel, (d) Deleted. (e) Deleted. (f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract, and (g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible. <p>11.4 Consequences of Employer's Risks:</p> <p>If and to the extent that any of the risks listed in Sub-Clause 11.3/PCC above results in loss or damage to the design or Consultant's Documents, the Consultant shall promptly give notice to the Employer and shall rectify this loss or damage to the extent required by the Employer</p> <p>If the Consultant suffers delay and/or incurs Cost from rectifying this loss or damage, the Consultant shall give a further notice to the Employer and shall be entitled subject to Sub-Clause 56.1/SCC [Consultant's Claims] to:</p> <ul style="list-style-type: none"> (a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause [Extension of Time for Completion], and (b) In the case of sub-paragraphs (f) and (g) of Sub-Clause 11.3/PCC [Employer's Risks], Cost shall be payable. <p>After receiving this further notice, the Employer shall proceed in accordance with New-Clause 3.5/PCC [Determinations] to agree or determine these matters.</p> <p>11.5.1 Intellectual and Industrial Property Rights</p> <p>In this Sub-Clause, "infringement" means an infringement (or alleged infringement) of any patent, registered design, copyright, trademark, trade name, trade secret or other intellectual or industrial property right relating to the design; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.</p> <p>Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.</p> <p>The Employer shall indemnify and hold the Consultant harmless against and from any claim</p> |

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| | <p>alleging an infringement which is or was:</p> <p>(a) an unavoidable result of the Consultant's compliance with the Contract, or</p> <p>(b) a result of any design being used by the Employer:</p> <p style="padding-left: 40px;">(i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or</p> <p style="padding-left: 40px;">(ii) in conjunction with anything not supplied by the Consultant, unless such use was disclosed to the Consultant prior to the Base Date or is stated in the Contract.</p> <p>The Consultant shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Consultant is responsible.</p> <p>If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.</p> <p>11.5.2 Copyright</p> <p>As between the Parties, the Consultant shall retain the copyright and other Intellectual Property rights in the Consultant's Documents and other design documents made by (or on behalf of) the Consultant. The Consultant shall be deemed (by signing this Agreement) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Consultant's Documents, including making and using modifications of them. This licence shall:</p> <p>(a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,</p> <p>(b) entitle any person in proper possession of the relevant part of the design to copy, use and communicate the Consultant's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing</p> <p>(c) in the case of Consultant's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by this Agreement, including replacements of any computers supplied by the Consultant:</p> <p>As between the Parties, the Employer shall retain the copyright and other Intellectual Property rights in this Agreement and other documents made by (or on behalf of) the Employer. The Consultant may, at its cost, copy, use, and obtain communication of these documents for the purposes of this Agreement. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Consultant, except as necessary for the purposes of the contract.</p> <p>11.6 Limitation of Liability</p> <p>Neither Party shall be liable to the other Party for loss of use of any design works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, provided that this exclusion shall not apply to any obligation of the Consultant to pay Delay Damages to the Employer under Sub-Clause 26.6/PCC [Delay Damages].</p> <p>The total liability of the Consultant to the Employer, under or in connection with the Contract other than under New-Clause 4.37/PCC [Electricity, Water and Gas], Sub-Clause 11.1/PCC [Indemnities]</p> |

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| | <p>and Sub-Clause 11.5/PCC [Intellectual and Industrial Property Rights], shall not exceed the sum as specified in the Contract Data or if nothing is specified in the Contract Data, the accepted Contract Amount.</p> <p>This Sub-Clause shall not limit liability in any case of fraud, deliberate default, or reckless misconduct by the defaulting Party.</p> <p>The maximum total liability of consultant is accepted contract amount.</p> <p>11.7 Use of Employer's Accommodation/ Facilities</p> <p>Deleted</p> |
| <p>CLAUSE 13/CC INSURANCE</p> | <p>The Following Paras Are Added to The Existing Cc Clauses.</p> <p>Insurance</p> <p>13.6 General Requirements for Insurances</p> <p>In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.</p> <p>Wherever the Consultant is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.</p> <p>If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause,</p> <ul style="list-style-type: none"> (i) the Consultant shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy. <p>The Consultant shall provide to the Employer, within 28 days of the Commencement Date, evidence of professional liability insurance maintained by its Design Director and/or consultants to cover the risk of professional negligence in the design of Works. The professional liability cover shall be for a sum of not less than [6% (Six per cent)] of the Contract Price and shall be maintained until the end of the Defects Liability Period.</p> <p>Waiver Of Subrogation</p> <p>All insurance policies in respect of the insurance obtained by the Consultant pursuant to this Insurance clause shall include a waiver of any and all rights of subrogation or recovery of the insurers thereunder against, inter alia, the Employer, and its assigns, successors, undertakings and their subsidiaries, Affiliates, employees, insurers and underwriters, and of any right of the insurers to any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under any such policy or in any way connected with any loss, liability or obligation covered by such policies of insurance.</p> <p>Cross Liabilities</p> <p>Any such insurance maintained or effected in pursuance of this Insurance clause shall include a cross liability clause such that the insurance shall apply to the Consultant and to the Employer as separately insured.</p> |

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| | <p>Accident Or Injury to Workmen</p> <p>Notwithstanding anything contained in this Agreement, it is hereby expressly agreed between the Parties that the Employer 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 Consultant or Sub-Consultant, save and except as for death or injury resulting from any act, omission or default of the Employer, its agents or servants. The Consultant shall indemnify and keep indemnified the Employer from and against all such claims, proceedings, damages, costs, charges, and expenses whatsoever in respect of the above save and except for those acts, omissions, or defaults for which the Employer shall be liable.</p> <p>Insurance Against Accident to Workmen</p> <p>The Consultant shall effect and maintain during the Agreement such insurances as may be required to insure the Consultant's personnel and any other persons employed by it on the Railway Project from and against any liability incurred in pursuance of this Insurance clauses provided that for the purposes of this para, the Consultant's personnel/any person employed by the Consultant shall include the Sub-Consultant and its personnel. Provided further that in respect of any persons employed by any Sub-Consultant, the Consultant's obligations to insure as aforesaid under this para shall be discharged if the Sub-Consultant shall have insured against any liability in respect of such persons in such manner that the Employer is indemnified under the policy. The Consultant shall require such Sub-Consultant to produce before the Employer, when required, such policy of insurance and the receipt for payment of the current premium within 10 (ten) days of such demand being made by the Employer.</p> <p>Application Of Insurance Proceeds</p> <p>The proceeds from all insurance claims, except for life and injury, shall be applied for any necessary repair, reconstruction, reinstatement, replacement, improvement, delivery or installation of the Railway Project and the provisions of this Agreement in respect of consultancy services of Works shall apply mutatis mutandis to the Works undertaken out of the proceeds of insurance.</p> <p>Compliance With Policy Conditions</p> <p>The Consultant expressly acknowledges and undertakes to fully indemnify the Employer from and against all losses and claims arising from the Consultant's failure to comply with conditions imposed by the insurance policies effected in accordance with this Agreement.</p> <p>Periods For Submission of Insurance:</p> <p>a) evidence of insurance: Before start date of work. b) relevant policies: Before start date of work.</p> <p>Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage. Payments received from insurers shall be used for the rectification of the loss or damage.</p> <p>The relevant insuring Party shall, within the respective periods stated in the Contract Data (calculated from the Commencement Date), submit to the other Party:</p> <p>(a) evidence that the insurances described in this Clause have been effected, and (b) copies of the policies for the insurances described in Sub-Clause 13.8/PCC [Insurance against Injury to Persons and Damage to Property]. (c) If the Consultant fails to submit evidence and copies of the policies as mentioned in (a) & (b) above to prove that the policies have been obtained within the period specified in the contract data, and submits the same later on and from the submitted evidence it is found that the</p> |

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| | <p>policies have not been obtained within the period specified, the Employer shall recover double the cost of the premium for the period the policies have been delayed.</p> <p>When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Employer.</p> <p>Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.</p> <p>Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.</p> <p>If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay double the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.</p> <p>Nothing in this Clause limits the obligations, liabilities or responsibilities of the Consultant or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Consultant and/or the Employer in accordance with these obligations, liabilities, or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.</p> <p>Payments by one Party to the other Party shall be subject to New-Clause 2.4/PCC [Employer's Claims] or Sub-Clause 56.1/SCC [Consultant's Claims], as applicable.</p> <p>The Consultant shall be entitled to place all insurance relating to the Contract including, but not limited to the insurance referred to Clause 13 /PCC or 13.4 of CC with insurers from any eligible source country.</p> <p>13.7 Insurance for Works and Consultant's Equipment Deleted.</p> <p>13.8 Insurance Against Injury to Persons and Damage to Property</p> <p>The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property or to any person (except persons insured under Sub-Clause 13.9/PCC [Insurance for Consultant's Personnel]), which may arise out of the Consultant's performance of the Contract and occurring before the issue of the Performance Certificate.</p> <p>This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data, with no limit on the number of occurrences. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.</p> <p>Unless otherwise stated in the Special Conditions of Contract, the insurances specified in this Sub-Clause:</p> <p>(a) shall be effected and maintained by the Consultant as insuring Party,</p> |

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| | <p>(b) shall be in the joint names of the Parties,</p> <p>(c) shall be extended to cover liability for all loss and damage to the Employer's property including Railways Property arising out of the Consultant's performance of the Contract, and</p> <p>(d) may however exclude liability to the extent that it arises from:</p> <ul style="list-style-type: none"> (i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works, (ii) damage which is an unavoidable result of the Consultant's obligations to execute the Works and remedy any defects, and (iii) a cause listed in Sub-Clause 11.3/PCC [Employer's Risks], except to the extent that cover is available at commercially reasonable terms. <p>13.9 Insurance for Consultant's Personnel</p> <p>The Consultant shall abide by the provisions of ESIC Act, 1948 (extended from time to time) to take care of insurance against liability for claims, damages, losses, and expenses (including legal fees and expenses) arising from injury, sickness, or disease. In addition, the Consultant shall also maintain insurance against liability for claim of death of any person employed by the Consultant or any other of the Consultant's Personnel.</p> <p>The Employer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.</p> <p>The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Sub-Consultant's employees, the insurance may be effected by the Sub-Consultant, but the Consultant shall be responsible for compliance with this Clause.</p> <p>Maximum number of deductibles for insurance of Employer's risks: Nil</p> |
| <p>CLAUSE 25 OF CC PROGRAM</p> | <p>The Following Paras Are Added to The Existing CC Clauses.</p> <p>25.3 Program</p> <p>The Consultant shall submit a detailed time programme to the Employer within 28 days after receiving the notice under Sub-Clause 26.3/PCC [Commencement of Works]. The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software Primavera/Sure Track/MS Project or as mutually agreed. The program must identify the milestones, interface requirements and program reporting elements. The Consultant shall supply, free of cost one set of authorized software to the Employer and the Employer and the soft copy of structured program for the project. This shall be updated every month. The Consultant shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Consultant's obligations. Each programme shall include:</p> <ul style="list-style-type: none"> (a) the order in which the Consultant intends to carry out the Works, including the anticipated timing of each stage of design (if any), Consultant's Documents (b) Deleted. (c) the sequence and timing of inspections and tests specified in the Contract, and (d) a supporting report which includes: <ul style="list-style-type: none"> (i) a general description of the methods which the Consultant intends to adopt, and of the major stages, in the design of the Works, and (ii) details showing the Consultant's reasonable estimate of the number of each class of Consultant's Personnel |

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| | <p>Unless the Employer, within 21 days after receiving a programme, gives notice to the Consultant stating the extent to which it does not comply with the Contract, the Consultant shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.</p> <p>The Consultant shall promptly give notice to the Employer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price, or delay the design of the Works. The Employer may require the Consultant to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 34.2/PCC [Procedure for change of scope].</p> <p>If, at any time, the Employer gives notice to the Consultant that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Consultant's stated intentions, the Consultant shall submit a revised programme to the Employer within 15 days in accordance with this Sub-Clause.</p> |
| <p>CLAUSE 26 OF CC EXTENSION OF THE INTENDED COMPLETION DATE</p> | <p>The Following Paras Are Added to The Existing CC Clauses.</p> <p>26.3 Commencement of Works</p> <p>The Employer shall give the Consultant not less than 14 days' notice for Commencement of work. Unless otherwise stated in the Special Conditions of Contract, the Commencement of work shall be within the number of days after the Consultant receives the Letter of Acceptance as specified in Contract Data.</p> <p>The Consultant shall commence the design works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.</p> <p>26.4 Time for Completion</p> <p>The Consultant shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:</p> <p>(a) achieving the design works within Completion period, and</p> <p>(b) completing all work which is stated in the Contract as being required for whole of the Works or Section(s) to be considered to be completed for the purposes of taking-over under Sub-Clause 46.1/PCC [Taking Over of the Works and Sections].</p> <p>26.5 Extension of Time for Completion</p> <p>The Consultant shall be entitled subject to Sub-Clause 56.1/SCC [Consultant's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 46.1/PCC [Taking-Over of the Works and Sections] is or will be delayed by any of the following causes:</p> <p>a) Deleted.</p> <p>b) Change of Scope, unless an adjustment to the Scheduled Completion Date has been agreed under change of scope.</p> <p>c) Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 34.2/PCC [Procedure for change of scope]) or other substantial change in the quantity of an item of work included in the Contract,</p> <p>d) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,</p> <p>e) Occurrence of Force Majeure event.</p> <p>f) any delay, impediment or prevention caused by or attributable to the Employer, the</p> |

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| | <p>Employer's Personnel, or the Employer's other Consultants.</p> <p>If the Consultant considers himself to be entitled to an extension of the Time for Completion, the Consultant shall give notice to the Employer in accordance with Sub-Clause 56.1/SCC [Consultant's Claims]. When determining each extension of time under Sub-Clause 56.1/SCC the Employer shall review previous determinations and may increase, but shall not decrease, the total extension of time.</p> <p>26.6 Deleted.</p> <p>26.7 Rate of Progress</p> <p>If, at any time:</p> <p>(a) actual progress is too slow to complete within the Time for Completion, and/or</p> <p>(b) progress has fallen (or is expected to fall) behind the current programme under Sub-Clause 25.3/PCC [Program],</p> <p>Other than as a result of a cause listed in Sub-Clause 26.5/PCC [Extension of Time for Completion], then the Employer may instruct the Consultant to submit, under Sub-Clause 25.3/PCC [Program], a revised programme and supporting report describing the revised methods which the Consultant proposes to adopt in order to expedite progress and complete within the Time for Completion.</p> <p>Unless the Employer notifies otherwise, the Consultant shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Consultant's Personnel and/or Goods, at the risk and cost of the Consultant. If these revised methods cause the Employer to incur additional costs, the Consultant shall subject to New-Clause 2.4/PCC [Employer's Claims] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 26.8/PCC below</p> <p>26.8 Extension of Time For Completion With Delay Damages</p> <p>If the Consultant fails to comply with Sub-Clause 26.4/PCC [Time for Completion for entire work or for specified section wise completion period], and he is not entitled to an extension of time under sub clause 26.5/PCC then the employer may grant extension of time with delay damage in such case, the Consultant shall subject to New-Clause 2.4/PCC [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.</p> <p>Further, if the Consultant fails to achieve physical/financial targets as per the agreed programme for a consecutive period of 3 months without any valid reasons, other than attributable to the Consultant, a provisional recovery of delay damages shall be made from the next interim payment certificate @ 1/10th of the sum of delay damages stated in the contract data, for the entire period of 3 months. Such recovery shall continue from the further interim payment certificates till the Consultant is able to make good the shortfall and achieve the cumulative targets as per agreed programme. On achieving the cumulative progress targets as per agreed programme, the entire amount recovered till that month, shall be refunded to the Consultant in the next interim payment certificate. In case the consultant is unable to make good the shortfall and achieve the cumulative targets resulting in delay in completion of the project, then the provisional recoveries made shall be adjusted against the delay damages to be finally imposed on the consultant.</p> <p>These delay damages shall be the only damages due from the consultant for such default, other than in the event of termination under Sub-Clause 49.2/PCC [Termination by Employer] prior to</p> |

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| | <p>completion of the Works. These damages shall not relieve the consultant from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.</p> <p>26.9 Suspension of Work</p> <p>The Employer may at any time instruct the Consultant to suspend progress of part or all of the Works by giving 28days notice. During such suspension, the Consultant shall protect, store, and secure such part or the Works against any loss or damage.</p> <p>The Employer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Consultant, the following Sub-Clauses 26.10, 26.11 and 26.12 of PCC shall not apply.</p> <p>26.10 Consequences of Suspension</p> <p>If the Consultant suffers delay and/or incurs Cost from complying with the Employer's instructions under Sub-Clause 26.9/PCC [Suspension of Work] and/or from resuming the work, the Consultant shall give notice to the Employer and shall be entitled subject to Sub-Clause 56.1/SCC [Consultant's Claims] to:</p> <p>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 26.5/PCC [Extension of Time for Completion], and</p> <p>(b) payment of any such Cost, which shall be included in the Contract Price.</p> <p>After receiving this notice, the Employer shall proceed in accordance with New-Clause 3.5/PCC [Determinations] to agree or determine these matters and bring them to the notice of the Employer for further action.</p> <p>The Consultant shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Consultant's faulty design, workmanship or of the Consultant's failure in accordance with Sub-Clause 26.9/PCC [Suspension of Work].</p> <p>If suspension is ordered by the Employer for reasons other than those mentioned in Sub Clause 26.9/PCC then the Consultant's entitlement is in the table below.</p> <p>However, Employer's decision is final and binding in regard to defining suspension and specifying the suspension period. Consultant has no right to claim or appeal against this decision.</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Suspension Period</th> <th>Extension of Time</th> <th>Compensation for the Suspension Period</th> <th>Remarks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Up to 30 days</td> <td>NO</td> <td>NO</td> <td>Employer may give extension of time in exceptional circumstances</td> </tr> <tr> <td>2</td> <td>30-60 days</td> <td>YES</td> <td>NO</td> <td>Extension of time as considered proper by the Employer</td> </tr> <tr> <td>3</td> <td>Above 60 days</td> <td>YES</td> <td>A. As per Daily rate of wages for idle labour/employees B. Deleted 15% above all these items to cover overhead costs</td> <td>Compensation as assessed by the Employer on submission of documentary proof by the Consultant will be recommended by the Employer and may be considered by the Employer</td> </tr> </tbody> </table> | | | | | Sl. No. | Suspension Period | Extension of Time | Compensation for the Suspension Period | Remarks | 1 | Up to 30 days | NO | NO | Employer may give extension of time in exceptional circumstances | 2 | 30-60 days | YES | NO | Extension of time as considered proper by the Employer | 3 | Above 60 days | YES | A. As per Daily rate of wages for idle labour/employees B. Deleted 15% above all these items to cover overhead costs | Compensation as assessed by the Employer on submission of documentary proof by the Consultant will be recommended by the Employer and may be considered by the Employer |
| Sl. No. | Suspension Period | Extension of Time | Compensation for the Suspension Period | Remarks | | | | | | | | | | | | | | | | | | | | | |
| 1 | Up to 30 days | NO | NO | Employer may give extension of time in exceptional circumstances | | | | | | | | | | | | | | | | | | | | | |
| 2 | 30-60 days | YES | NO | Extension of time as considered proper by the Employer | | | | | | | | | | | | | | | | | | | | | |
| 3 | Above 60 days | YES | A. As per Daily rate of wages for idle labour/employees B. Deleted 15% above all these items to cover overhead costs | Compensation as assessed by the Employer on submission of documentary proof by the Consultant will be recommended by the Employer and may be considered by the Employer | | | | | | | | | | | | | | | | | | | | | |

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| | <p>26.11 Payment for Plant and Materials in Event of Suspension</p> <p>(a) Deleted.</p> <p>26.12 Prolonged Suspension</p> <p>If the suspension under Sub-Clause 26.9/PCC [Suspension of Work] has continued for more than 90 days, the Consultant may request the Employer's permission to proceed. If the Employer does not give permission within 28 days after being requested to do so, the Consultant may, by giving notice to the Employer, treat the suspension as an omission under Clause 34/PCC [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Consultant may give notice of termination under relevant sub-clause (Termination by Consultant).</p> <p>26.13 Resumption of Work</p> <p>After the permission or instruction to proceed is given, the Consultant and the Employer shall jointly examine the design works and submit a report, duly countersigned by consultant, to the Employer. The Consultant shall make good any defect in or loss of the design works, which has occurred during the suspension.</p> <p>26.14 Bonus for Early Completion:</p> <p>In the event that, the Completion Date occurs prior to the Scheduled Completion Date, the Consultant shall be entitled to receive a payment of bonus equivalent to 1% (one per cent) of the Contract Price for per month (part of the month to be excluded) by which the Project Completion Date precedes the Scheduled Completion Date, but subject to a maximum of 3% (three per cent) of the Contract Price. Provided, however, that the payment of bonus, if any, shall be made only after the issue of the Completion Certificate. For the avoidance of doubt, the Parties agree that for the purpose of determining the bonus payable hereunder, the Contract Price shall always be deemed to be the amount and shall exclude any revision thereof for any reason.</p> <p>If the Consultant achieves completion of the whole of the Works prior to the intended Completion Date prescribed in Contract data (Extension of time pursuant to Clause 26.5/PCC or any other clause of these conditions will not be considered), the Employer shall pay to the Consultant a sum stated in the Contract data as bonus for early completion, for every calendar month which shall elapse between the date of completion of all items of works as stipulated in the contract, including variations ordered by the Employer and the time prescribed in Clause 26.4.</p> <p>For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole works is fixed and unless otherwise agreed, no adjustment of the time by reasons of granting an extension of time pursuant to clause 26.5/PCC or any other clause of these conditions will be allowed. Any period falling short of completed month shall be ignored for the purpose of computing the period relevant for the payment of bonus.</p> <p>Amount Of Bonus for Early Completion</p> <p>1% of initial Contract Price per month (part of the month to be excluded) for completion of whole works.</p> <p>Maximum Limit of Bonus</p> <p>3% of Contract Price.</p> <p>(For earlier completion of the work as a whole from the stipulated original date of completion as per contract, a bonus payment of as above shall be paid to the Consultant. The Employer's decision is final and binding on the Consultant so far as bonus payment to the Consultant is concerned).</p> |
| | <p>26.15 Suspension of Unsafe Construction Works</p> <p>Deleted.</p> |

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| <p>CLAUSE 34/CC VARIATIONS & CLAUSE 35/CC PAYMENT FOR VARIATIONS.</p> | <p>The Following Paras Are Added to The Existing Cc Clause 34.</p> <p>34.1 Change of Scope.</p> <p>34.1.1 The Employer may, notwithstanding anything to the contrary contained in this Agreement, require the Consultant to make modifications or alterations to the Works (“Change of Scope”) before the issue of the Completion Certificate either by giving an instruction or by requesting the Consultant to submit a proposal for Change of Scope involving additional cost or reduction in cost. Any such Change of Scope shall be made and valued in accordance with the provisions of this contract.</p> <p>34.1.2 Change of Scope shall mean:</p> <ol style="list-style-type: none"> a) change in specifications of any item of Works; b) omission of any work from the Scope of the Project c) any additional work, Plant, Materials or services which are not included in the Scope of the Project, including any associated Tests on completion of construction. <p>34.1.3 If the Consultant determines at any time that a Change of Scope will, if adopted,</p> <ol style="list-style-type: none"> (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Railway Project, (iii) improve the efficiency or value to the Employer of the completed Railway Project, or (iv) otherwise, be of benefit to the Employer, it shall prepare a proposal with relevant details at its own cost. The Consultant shall submit such proposal, supported with the relevant details including the amount of reduction in the Contract Price, if any, to the Employer to consider such Change of Scope. The Employer shall, within 30 (Thirty) days of receipt of such proposal, either accept such Change of Scope with modifications, if any, and initiate proceedings therefore in accordance with this Article or reject the proposal and inform the Consultant of its decision. For the avoidance of doubt, the Parties agree that the Consultant shall not undertake any Change of Scope without a Change of Scope Order being issued by the Employer, save and except any Works necessary for meeting any emergency. <p>34.2 Procedure for Change of Scope</p> <p>34.2.1 In the event of the Employer determining that a Change of Scope is necessary, it may direct the Consultant by issuing a notice specifying in reasonable detail the works and services contemplated thereunder (the “Change of Scope Notice”).</p> <p>34.2.2 Upon receipt of a Change of Scope Notice, the Consultant shall, with due diligence, provide to the Employer and the Employer such information as is necessary, together with preliminary documentation in support of:</p> <ol style="list-style-type: none"> (a) the impact, if any, which the Change of Scope is likely to have on the Design Completion Schedule if the works or services are required to be carried out during the Consultancy Period; and (b) the options for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time thereof, including the following details: <ol style="list-style-type: none"> (i) break down of the quantities, unit rates and cost for different items of design; (ii) proposed design for the Change of Scope; and (iii) proposed modifications, if any, to the Design Completion Schedule. |

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| | <p>For the avoidance of doubt, the Parties expressly agree that, subject to the provisions of Clause 34.4.2 the Contract Price shall be increased or decreased, as the case may be, on account of Change of Scope.</p> <p>34.2.3 The Consultant's quotation of rates/costs for the Change of Scope shall be determined on the following principles:</p> <p>(A) The rate for various items to be executed through change of scope order shall be estimated on the basis of analysis of rates of KPWD/ IR-USSOR / CPWD / BESCOM / BWSSB</p> <p>(B) In case, any items are not available in 34.2.3 (A), then such rates shall be determined by applying the prevailing market rates of such items in accordance with Good Industry Practice by the Employer.</p> <p>(C) No claims for overheads and profit shall be payable except for market rates where overheads including profit shall be 20%. The priority of reference for deriving rate shall be in the same order as stated above 34.2.3(A). Until such time as such rate(s) are agreed or fixed after consultation with the Employer, shall determine the provisional rate(s) to enable IPC to be issued by the Employer.</p> <p>34.2.4 Upon reaching an agreement, the Employer shall issue an order (the "Change of Scope Order") requiring the Consultant to proceed with the performance thereof. In the event that the Parties are unable to agree, the Employer may:</p> <p>(a) issue a Change of Scope Order requiring the Consultant to proceed with the performance thereof at the rates and conditions approved by the Employer till the matter is resolved in accordance with Article Dispute resolution (as per relevant clause of SCC); or</p> <p>(b) proceed in accordance with below Clause 34.5</p> <p>34.2.5 The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply mutatis mutandis to the works undertaken by the Consultant under this clause 34.</p> <p>34.3 Payment for Change of Scope</p> <p>Payment for Change of Scope shall be made in accordance with the payment schedule specified in the Change of Scope Order.</p> <p>34.4 Restrictions on Change of Scope</p> <p>34.4.1 No Change of Scope shall be executed unless the Employer has issued the Change of Scope Order save and except any Works necessary for meeting any Emergency.</p> <p>34.4.2 Unless the Parties mutually agree to the contrary, the total value of all Change of Scope Orders shall not exceed 25% of the Contract Price.</p> <p>34.4.3 Notwithstanding anything to the contrary in this contract, no change arising from any default of the Consultant in the performance of its obligations under this Agreement shall be deemed to be Change of Scope, and shall not result in any adjustment of the Contract Price or the Project Completion Schedule.</p> <p>34.5 Power of The Employer to Undertake Works</p> <p>34.5.1 In the event the Parties are unable to agree to the proposed Change of Scope Orders in accordance with Clause 34.2, the Employer may, after giving notice to the Consultant and considering its reply thereto, award such works or services to any person on the basis of open competitive bidding from amongst bidders who are pre-</p> |

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| | <p>qualified for undertaking the additional work; provided that the Consultant shall have the option of matching the first ranked bid in terms of the selection criteria, subject to payment of 2% (two per cent) of the bid amount to the Employer, and thereupon securing the award of such works or services. For the avoidance of doubt, it is agreed that the Consultant shall be entitled to exercise such option only if it has participated in the bidding process and its bid does not exceed the first ranked bid by more than 10% (ten per cent) thereof. It is also agreed that the Consultant shall provide assistance and cooperation to the person who undertakes the works or services hereunder, but shall not be responsible for rectification of any Defects and/or maintenance of works carried out by other agencies.</p> <p>34.5.2 The works undertaken in accordance with this Clause 34.5 shall conform to the Specifications and Standards and shall be carried out in a manner that it should not cause any disruption to the Project and also minimise adverse effect to main Consultant. The provisions of this Agreement, insofar as they relate to Works and Tests, shall apply mutatis mutandis to the works carried out under this Clause 34.5.</p> <p>Variations And Adjustments.</p> <p>34.6 Right to Vary</p> <p>Variations may be initiated by the Employer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by making a request to the Consultant to submit a proposal.</p> <p>The Consultant shall execute and be bound for variations of all change of scope of orders till the price does not exceed 25% of the Contract Price as specified in LOA/Original agreement</p> <p>34.7 Adjustments for Changes in Legislation</p> <p>Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Consultant in the performance of obligations under the Contract.</p> <p>If the Consultant suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Consultant shall give notice to the Employer and shall be entitled subject to Sub-Clause 56.1/SCC [Consultant's Claims] to:</p> <p>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 26.5/PCC [Extension of Time for Completion], and</p> <p>(b) payment of any such Cost, which shall be included in the Contract Price.</p> <p>After receiving this notice, the Employer shall proceed in accordance with New-Clause 3.5 [Determinations] to agree or determine these matters.</p> <p>In case there is a decrease in cost as a result of changes of Law by Legislation after the Base Date, the Employer shall proceed in accordance with New-Clause 3.5 (determination) to agree or determine these matters.</p> <p>Notwithstanding the foregoing, the Consultant shall not be entitled to such an extension of time if the same shall already have been taken into account in determining an extension and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause PVC/Contract Data.</p> |

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| <p>CLAUSE 37/CC PAYMENTS.</p> | <p>The Clause 37 Of CC Is Replaced with The Following.</p> <p>Payments.</p> <p>37.0 Procedure for Estimating the Payment for The Works</p> <ol style="list-style-type: none"> 1. The Employer shall make interim payments to the Consultant, as certified by the Employer on completion of a stage, for a length, number or area as specified, and valued in accordance with the proportion of the Contract Price assigned to each item and its stage and payment procedure in Lumpsum Price schedule and contract price weightages. 2. The Consultant shall base their claim for interim payment for the stages completed till the end of the month for which the payment is claimed, valued in accordance with para 1 supported with necessary particulars and documents in accordance with this Agreement. 3. Any reduction in the Contract Price arising out of Change of Scope or the Works withdrawn, as the case may be, shall not affect the amounts payable for the items or stage payments thereof which are not affected by such Change of Scope or withdrawal. The Parties further agree that the adjustments arising out of the aforesaid modifications shall be carried out in a manner that the impact of such modifications is restricted to the said Change of Scope or withdrawal, as the case may be, and does not alter the payments due for and in respect of items or stage payments which do not form part of such Change of Scope or withdrawal. 4. Stage Payment Statement for Works The Consultant shall submit a statement (the "Stage Payment Statement"), in 3 copies, by the 7th (seventh) day of a month to the Employer in the prescribed form, showing the amount calculated in accordance with Para 3 above to which the Consultant considers itself entitled for the completed stage(s) of design works. The Stage Payment Statement shall be accompanied with the progress reports and any other supporting documents. The Consultant shall not submit any claim for payment of incomplete stages of work. In the event that there is no claim for a month in accordance with the provisions of this Para 4, the Consultant shall submit a nil claim to the Employer. 5. Stage Payment for Works <ol style="list-style-type: none"> i. Deleted ii. Deleted. iii. In cases where there is a difference of opinion as to the value of any stage, the opinion of the Employer shall prevail and interim payments shall be made to the Consultant on this basis; provided that the foregoing shall be without prejudice to the Consultant's right to raise a Dispute. iv. The Employer may, for reasons to be recorded, withhold from payment: <ol style="list-style-type: none"> (a) the estimated value of work or obligation that the Consultant has failed to perform in accordance with this Agreement and in respect of which the Employer had notified the Consultant; (b) deleted. v. Payment by the Employer shall not be deemed to indicate the Employer's acceptance, approval, consent or satisfaction with the work done. vi. In the event the amounts released by the Employer under para 5 (i) exceed the amount finally determined by the Employer pursuant to para 5 (ii) to para 5 (iv), the difference thereof shall be accounted for in the next IPC. |

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| | <p>Time Of Payment</p> <p>The Employer shall pay to the Consultant any amount due under any payment certificate issued by the Employer in accordance with the provisions of the contract.</p> <p>37.1 Application for Interim Payment Certificates</p> <p>Payments shall be adjusted for deductions for payments other than recoveries in terms of contract and taxes, at source as applicable under law. The Consultant shall be liable to pay liquidated damages for shortfall in progress. Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.</p> <p>The Consultant shall submit a Statement in six copies to the Employer in accordance with the payment procedure specified by the Employer, after the end of each month, in a form approved by the Employer, showing in detail the amounts to which the Consultant considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with New-Clause 4.39/PCC [Progress Reports] and Record Measurement Sheets.</p> <p>The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:</p> <ul style="list-style-type: none"> (a) the estimated contract value of the Works executed and the Consultant's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below); (b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 34.7/PCC [Adjustments for Changes in Legislation] and Sub-Clause PVC/Contract Data [Adjustments for Changes in Cost]; (c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the new clause 4.20: Security Deposit of this section to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Contract Data; (d) Deleted. (e) any amounts to be added and deducted for Materials in accordance with New-Clause 13/PCC [Materials intended for the Works]; (f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 56.1/SCC [Claims, Disputes and Arbitration]; and (g) the deduction of amounts certified in all previous Payment Certificates. (h) for invoicing as per GST Laws, the estimated contract value of the Works executed in terms of (a) above and any amounts added or deducted as per (b) to (g) above is to be broken up in two components i.e., (i) the base amount excluding GST (ii) GST component (calculated at the rate for works contract service as per GST Laws). (i) Statement of interim payments certificates should be submitted by the Consultant to the Employer by the 7th day of each month for the work executed upto the end of the previous month. (j) An amount to be deducted for the payments to be made to different Departments towards payments liable to be made by the Consultant <p>37.2 Schedule of Payments</p> <p>If the Contract includes a schedule of payments specifying the installments in which the</p> |

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| | <p>Contract Price will be paid, then unless otherwise stated in this schedule:</p> <p>(a) the installments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 37.1/PCC [Application for Interim Payment Certificates];</p> <p>(b) New-Clause 13/PCC [Provisional payment against material at site] shall not apply; and</p> <p>(c) if these installments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which this schedule of payments was based, then the Employer may proceed in accordance with New-Clause 3.5/PCC [Determinations] to agree or determine revised installments, which shall take account of the extent to which progress is less than that on which the installments were previously based.</p> <p>If the Contract does not include a schedule of payments, the Consultant shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 28 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.</p> <p>37.3 Issue of Interim Payment Certificates</p> <p>No amount will be certified or paid until the employer has received and approved the performance security. Thereafter, within 10 (ten) days of receipt of the bill from the Consultant, the Employer shall broadly determine the amount due to the Consultant releasing 80% of the amount. After preliminary scrutiny and certifications by the Employer, Payment of 80% of the certified net payment due (after recoveries and deductions), will be made by the Employer within 10 working days of receiving a statement and supporting documents from the Employer.</p> <p>The remaining 20% of the bill shall be recommended by Employer after detail scrutiny and subsequent comments within 30 days of receipt of the bill from the Consultant. After the submission of bill from the Employer to the Employer, remaining 20% amount: of the bill shall be released within 15 working days by Employer. Any discrepancy shall be rectified in the next payment to the Consultant.</p> <p>However, prior to issuing the Taking-Over Certificate for the Works, the Employer shall not be bound to issue the Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Contract Data. In this event, the Employer shall give notice to the Consultant accordingly.</p> <p>An Interim Payment Certificate shall not be withheld for any other reason, although:</p> <p>(a) if anything supplied or work done by the Consultant is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or</p> <p>(b) if the Consultant was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Employer, the value of this work or obligation may be withheld until the work or obligation has been performed.</p> <p>The Employer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Employer's acceptance, approval, consent or satisfaction.</p> <p>37.4 Payment</p> <p>The Employer shall pay to the Consultant:</p> |

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| | <p>(a) Deleted</p> <p>(b) (i) Within 10 (ten) days of receipt of the bill from the Consultant, the Employer shall broadly determine the amount due to the Consultant and recommend releasing 80% of the amount. After preliminary scrutiny and certifications by the Employer, payment of 80% of the certified net payment due (after recoveries and deductions), will be made by the Employer within 10 (ten) working days of receiving a statement and supporting documents from the Employer subject to the condition that last interim payment certificate has been settled after detailed check. In the event of the Consultant submitting bills based on false measurements, the Employer will issue a written warning to Consultant and the Employer to the effect that the facility of 80% payment without detailed check will be withdrawn in future. If the Consultant repeats the misconduct this facility will be withdrawn as decided by the Employer. The decision of the representative of the Employer is final in this regard.</p> <p>(ii) The remaining 20% of the bill shall be recommended by Employer after detail scrutiny and subsequent comments within 30 (thirty) days of receipt of the bill from the Consultant. After the submission of bill from the Employer to the Employer, remaining 20% amount of the bill shall be released within 15 (fifteen) working days by Employer. Any discrepancy shall be rectified in the next payment to the Consultant; and</p> <p>(c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate or, the undisputed amount shown in the Final Statement, within 56 days after the date of notification of the suspension.</p> <p>Payment of the amount due, unless specified in the Contract Data, shall be made in INR into the bank account, nominated by the Consultant.</p> <p>A foreign company shall have to submit proof of having opened their project office in India before any payment is released to such a company. The required proof here shall be a copy of the report containing information as per format prescribed by Reserve Bank of India submitted to the Director General of Police (DGP) of the state concerned in which project office has been established.</p> <p>37.5 Deleted</p> <p>37.6 Delayed Payment</p> <p>If the Consultant does not receive payment in accordance with Sub-Clause 37.4/PCC [Payment], the Consultant shall be entitled to receive interest compounded monthly on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 37.4/PCC [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.</p> <p>Unless otherwise stated in the Special Conditions of Contract, the interest amount be calculated at the annual rate of 7% (seven percent).</p> <p>The Consultant shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy, if the Consultant submits the complied (Fulfilled) documents.</p> <p>37.7 Deleted</p> <p>37.8 Deleted</p> <p>37.9 Deleted</p> <p>37.10 Deleted</p> |

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| | <p>37.11 Statement at Completion</p> <p>Within 84 days after receiving the Taking-Over Certificate for the Works, the Consultant shall submit to the Employer six copies of a Statement at completion with supporting documents</p> <p>(a) the value of all work done in accordance with the Contract up to the date stated in the Taking- Over Certificate for the Works,</p> <p>(b) any further sums which the Consultant considers to be due, and</p> <p>(c) an estimate of any other amounts which the Consultant considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.</p> <p>The Employer shall then certify in accordance with Sub-Clause 37.3/PCC [Issue of Interim Payment Certificates].</p> <p>Within 56 days after receiving the Performance Certificate, the Consultant shall submit, to the Employer, six copies of a draft final statement as per procedure prescribed by the Employer, with supporting documents showing in detail in a form approved by the Employer:</p> <p>37.12 Application for Final Payment Certificate</p> <p>Within 56 days after receiving the Performance Certificate, the Consultant shall submit, to the Employer, six copies of a draft final statement as per procedure prescribed by the Employer, with all supporting documents (including Consultant's certificate as per relevant clause) showing in detail in a form approved by the Employer:</p> <p>(a) the value of all work done in accordance with the Contract, and</p> <p>(b) any further sums which the Consultant considers to be due to him under the Contract or otherwise.</p> <p>If the Employer disagrees with or cannot verify any part of the draft final statement, as per procedure prescribed by the Employer the Consultant shall submit such further information as the Employer may reasonably require and shall make such changes in the draft as may be agreed between them. The Consultant shall then prepare and submit to the Employer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".</p> <p>However, if, following discussions between the Employer and the Consultant and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Employer shall deliver (with a copy to the Consultant) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 56/SCC [Obtaining Dispute Board's Decision] or Sub-Clause 57/SCC [Amicable Settlement], the Consultant shall then prepare and submit to the Employer (with a copy to the Employer) a Final Statement.</p> <p>37.13 Discharge</p> <p>When submitting the Final Statement, the Consultant shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Consultant under or in connection with the Contract. This discharge may state that it becomes effective when the Consultant has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.</p> <p>37.14 Issue of Final Payment Certificate</p> <p>Within 28 days after receiving the Final Statement and discharge in accordance with Sub-Clause 37.12/PCC [Application for Final Payment Certificate] and Sub-Clause 37.13/PCC [Discharge], the Employer shall issue the Final Payment Certificate which shall state:</p> <p>(a) the amount which he fairly determines is finally due, and</p> |

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| | <p>(b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance (if any) due from the Employer to the Consultant or from the Consultant to the Employer, as the case may be.</p> <p>If the Consultant has not applied for a Final Payment Certificate in accordance with Sub-Clause 37.12/PCC [Application for Final Payment Certificate] and Sub-Clause 37.13/PCC [Discharge], the Employer shall request the Consultant to do so. If the Consultant fails to submit an application within a period of 28 days, the Employer shall issue the Final Payment Certificate for such amount as he fairly determines to be due to the consultant.</p> <p>37.15 Cessation of Employer's Liability</p> <p>The Employer shall not be liable to the Consultant for any matter or thing under or in connection with the Contract or design of the works, except to the extent that the Consultant shall have included an amount expressly for it:</p> <p>(a) in the Final Statement and (b) in the Statement at completion described in Sub-Clause 37.11/PCC [Statement at Completion] (except for matters or things arising after the issue of the Taking-Over Certificate for the design works).</p> <p>However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default, or reckless misconduct by the Employer.</p> <p>37.16 Currencies of Payment</p> <p>a) The Contract Price shall be paid in Indian Rupees (INR) only.</p> <p>37.17 Tax Deduction at Source (TDS):</p> <p>Tax deductions will be made at source as per statutory requirement from every payment made to the Consultant at rates notified from time to time.</p> <p>i. Tax deduction at source (TDS): Income Tax / TDS on GST deduction shall be as per law.</p> <p>ii. Labour Cess & Royalties: The labour Cess & Royalties will be deducted as per norms of applicable law from each IPCs and remitted to the respective Authorities</p> <p>37.18 Production of Vouchers</p> <p>a. The Consultant shall, whenever required by the Employer produce or cause to be produced for examination by the Employer, any quotation, invoice, cost or other account books, vouchers, receipts, letters, memoranda or any copy of or extract from any such documents and also furnish information and returns, as may be required, relating to the execution of this Contract or relevant for verifying or ascertaining the cost of execution of this Contract or ascertaining the Materials supplied by the Consultant are in accordance with the Specifications laid down in the Contract. The Employer's decision on the question of relevancy of any documents, information or returns shall be final and binding on the parties.</p> <p>b. Deleted.</p> <p>37.19 Withholding and Lien For Sums Claimed</p> <p>(i) The Employer shall have lien on and over all materials of every description, tools, tackles, plant, equipment, or any amount due and/or that may become due and payable to the Consultant under the Contract, and / or on and over the deposit of Performance Security or other amount or amounts made under the Contract and which may become payable to the Consultant. Employer may exercise a general lien also.</p> <p>(ii) And further, unless the Consultant pays and clears immediately on demand any claim of the</p> |

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| | <p>Employer, the Employer shall at all times be entitled to deduct the amount of the said claim from the amount, securities and / or deposits which may have become or will become payable to the Consultant under the existing contract, or under any other Contract or transaction whatsoever between the Employer and the Consultant even if the matter stands referred to Arbitration. The Consultant shall have no claim for any interest or damage whatsoever in respect of any amounts withheld or treated as withheld under the lien referred to above and duly notified as such to the Consultant.</p> <p>37.20 Signature on Receipts For Payments</p> <p>Every receipt of payment to consultant including refund of the Performance Security shall be signed by the person authorized to do so on his behalf. In the event of death of any of the Consultant's partners in case the Consultant is a partnership firm, during the currency of the Contract, it is hereby expressly agreed that every receipt by any one of surviving Consultant's partners, shall, if so signed as aforesaid, be a good and sufficient discharge as aforesaid, provided that nothing in this Clause shall be deemed to prejudice or affect any claim, which the Employer may hereafter have against the legal representatives of any Consultant's partner so dying, for or in respect of breach of any of the conditions of the Contract. Provided also that nothing contained in this clause shall be deemed to prejudice or affect the respective rights and obligations of the Consultant's partners, or of the legal heirs / representatives of any deceased Consultant / partner interest.</p> <p>37.21 Post Payment Audit</p> <p>It is an agreed term of the Contract, that the Employer reserves to himself 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 Consultant for the refund of any excess amount paid to him, if as a result of such examination, any over-payment to him is discovered to have been made in respect of any work done or alleged to have been done by the Consultant, under the Contract. If any under-payment is discovered, the same shall be paid by the Employer to the Consultant. Such payments or recoveries, however, shall not carry any interest.</p> <p>37.22 Recovery of Money Due To The Employer</p> <p>All damages (including, without limitation, liquidated damages), costs, charges, expenses, debts, or sums for which the Consultant is liable to the Employer under any provision of the Contract may be deducted by the Employer from amount due to the Consultant under the Contract including, without limitation, and the Employer shall have the power to recover any balance not so deducted from amount due to the Consultant under any other contract between the Employer and the Consultant</p> <p>When the Consultant has assigned to a third party the right to receive amount due, or, to become due, under the Contract to the Consultant or charged such amount in favor of a third party, the Employer's right to deduct damages (including without limitation liquidated damages), costs, charges, expenses, debts or sums for which the Consultant is liable to the Employer from amount due to the Consultant under the Contract shall be limited to the right expressed above.</p> |

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| CLAUSE-40/CC PRICE ADJUSTMENT | <p>The Following Paras Are Added to The Existing CC Clauses.</p> <p>40.1 Contract Price</p> <ol style="list-style-type: none"> 1. The Employer shall make payments to the Consultant for the design works on the basis of the lump sum price accepted by the Employer in consideration of the obligations specified in this Agreement, which shall be subject to adjustments in accordance with the provisions of this Agreement. The Parties further agree that save and except as provided in this Agreement, the Contract Price shall be valid and effective until issue of Completion Certificate. 2. The Contract Price includes all duties, taxes, royalty, and fees that may be levied in accordance with the laws and regulations in force as on the Base Date on the Consultant's equipment, Plant, Materials, and supplies acquired for the purpose of this Agreement and on the on the Works undertaken under this Agreement. Nothing in this Agreement shall relieve the Consultant from its responsibility to pay any tax including any tax that may be levied in India on profits made by it in respect of this Agreement. 3. The Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs, unless otherwise provided for in this Agreement. 4. Unless otherwise specified in this Agreement, the Contract Price covers all the Consultant's obligations for the Works under this Agreement and all things necessary for the Consultancy works thereof and for the rectification of any Defects in the Railway Project. 5. All payments under this Agreement shall be made in Indian Rupees. <p>Unless otherwise stated in the Special Conditions of Contract:</p> <ol style="list-style-type: none"> (a) the Contract Price shall be agreed or determined under Clause 34.3/PCC [Payment for Variation] and be subject to adjustments in accordance with the Contract; (b) the Consultant shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 34.7/PCC [Adjustments for Changes in Legislation]; (c) any quantities which may be set out in the Price schedule or other Schedule are estimated quantities and are not to be taken as the actual and final quantities: <ol style="list-style-type: none"> (i) of the Works which the Consultant is required to execute, or (ii) for the purposes of New-Clause 7/PCC [Measurement and Evaluation]; and (d) the Consultant shall submit to the Employer, within 28 days after the Commencement Date, a proposed breakdown of each lump sum price in the Schedules, if applicable. The Employer may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it. (e) It may be noted that in the event of the Consultant not making the due payments stated in sub-clause (b) above, and the concerned party puts up a claim with the, then the Employer may make such payments and deduct the same from the sums due to the Consultant. <p>40.1.1 Change in Law</p> <p>Change in Law means the occurrence or coming into force of the following, at any time after the last Date of submission of tender:</p> <p>Any new Central and State Taxes, duties, cess, levies, which are imposed or any existing Central and State Taxes, duties, cess, levies & royalties which are withdrawn after the due date of submission of tender and which impact the performance of the Consultant with increased cost, or which results in extra financial gains to the Consultant due to decreased cost in performance of contract shall be certified by the Employer after examining records provided by the Consultant and shall be paid by or</p> |

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| | <p>credited to the Employer.</p> <p>Change in the rate of any existing tax (Including GST) will be considered as change in law and additional or the reduced cost shall be paid by or credited to the Employer, as the case may be.</p> |
| <p>CLAUSE 46/CC TAKING OVER</p> | <p>The Clause 46 Of CC Replaced with The Following Paras.</p> <p>Employer Taking Over</p> <p>46.1 Taking Over of The Works and Sections</p> <p>The Employer shall take over the design works within after issuing a certificate of Completion. The Works shall be taken over by the Employer/Railway when the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 26.4/PCC [Time for Completion] and except as allowed in sub-paragraph (a) below, and</p> <p>A Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.</p> <p>The Consultant may apply by notice to the Employer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Consultant's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Consultant may similarly apply for a Taking-Over Certificate for each Section.</p> <p>The Employer shall, within 28 days after receiving the Consultant's application:</p> <p>(a) issue the Taking-Over Certificate to the Consultant, stating the date on which the designs were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the design for their intended purpose (either until or whilst this work is completed, and these defects are remedied); or</p> <p>(b) reject the application, giving reasons and specifying the work required to be done by the Consultant to enable the Taking-Over Certificate to be issued. The Consultant shall then complete this work before issuing a further notice under this Sub-Clause.</p> <p>If the Employer fails either to issue the Taking-Over Certificate or to reject the Consultant's application within the period of 28 days, and if the designs (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.</p> <p>46.2 Taking Over of Parts of The Works</p> <p>Deleted.</p> <p>46.3 Interference with Tests on Completion</p> <p>Deleted.</p> <p>46.4 Surfaces Requiring Reinstatement</p> <p>Deleted.</p> |
| <p>CLAUSE-49/CC TERMINATION</p> | <p>The Following Paras Are Added to The Existing CC Clauses.</p> <p>Termination By Employer</p> <p>49.1 Notice to Correct/Notice Of Termination</p> <p>If the Consultant fails to carry out any obligation under the Contract as mentioned below, but not limited to the obligations mentioned herein below, the Employer may serve the Consultant with a 14 days' notice in writing calling upon the Consultant to make good the failure and to remedy it. If the Consultant;</p> |

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| | <p>(a) fails to comply with New-Clause 4.19/PCC [Performance Security],</p> <p>(b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,</p> <p>(c) without reasonable excuse fails to:</p> <ul style="list-style-type: none"> (i) proceed with the Works in accordance with Clause 26/PCC [Commencement, Delays and Suspension], or (ii) Deleted. (iii) adhere to the agreed programme of work / activity on the critical path, by a margin of 10% of the stipulated period, or (iv) take steps to deploy competent and adequate number of personnel, and equipment to achieve progress as per agreed programme or (v) adhere to the instructions of Employer persistently or (vi) comply any provision of the contract or (vii) provide the Employer or their representative proper facilities for inspecting the works or any part thereof as required. <p>(d) subcontracts the whole or major part of the Works or assigns the Contract without prior written consent of the Employer.,</p> <p>If the Consultant does not, within 14 days of receipt of notice, proceed to make good his default in so far as the same is capable of being made good and carry on the work of complying with such direction as contained in the notice under sub clause 49.1/PCC to the entire satisfaction of the Employer, the Employer shall be entitled to take action under sub-clause 49.1/PCC, 49.2/PCC below,</p> <p>In case of Consultant's repeated failure to adhere to the agreed program, and whereas the Consultant has been served with a Notice to Correct under Clause 49.1 of PCC, if the Consultant approaches K-RIDE with a revised program with specific monthly physical and financial targets along with the proposal to deploy matching inputs in the form of manpower and other resources to the satisfaction of the Employer, then the Employer may consider whether to proceed with termination of the contract under Clause 49.2/PCC or to continue with the contract. However, the request to continue with the contract shall only be considered if the Consultant supports his earnestness to adhere to the revised program by submitting additional Performance Security in the form of Bank Guarantee(s) of specified number and value as decided by the Employer (total value of which will not exceed 10% of the contract price). The encashment of these additional Bank Guarantee(s) shall be linked with the non-achievement of agreed physical/financial targets agreed upon by the Consultant and the Employer.</p> <p>In case the Consultant's failure is limited to only some of the works, and in response to Notice to Correct under Clause 49.1 of PCC, the Consultant approaches the Employer 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 Employer, on being convinced that the anticipated additional cost for such works will not be substantial and can be recovered from the dues of the Consultant and that such offloading will help in improving the overall progress of the project, may agree to such offloading without any repercussion on the performance security and/or additional bank guarantees, if any, submitted by the Consultant. However, the Employer will not be under any compulsion to agree to such a request. The Consultant shall be informed of the LOA issued to other agency(ies) for such works.</p> <p>In case the Consultant does not approach the Employer for offloading but the Employer is convinced that:</p> <ul style="list-style-type: none"> (i) offloading of some works will help in improving the progress of the design; (ii) termination/part termination of the contract at this stage will not be in the interest of the |

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| | <p>Employer;</p> <p>(iii) the anticipated additional cost for such works will not be substantial and can be recovered from the dues of the Consultant;</p> <p>The Employer may issue 7 days' notice to the Consultant stating the resources required to be deployed against each work. If the Consultant fails to deploy the required resources as indicated in the notice, the employer shall offload such works and proceed with getting the works executed through other agency(ies). The Consultant shall be informed of the LOA issued to other agency(ies) for such works.</p> <p>Offloading under the sub clause 49.1/PCC shall be without any repercussion on the performance security and/or additional bank guarantees, if any, submitted by the Consultant. The Consultant would have no future claim on this account and the extra expenditure so incurred, if any, by the Employer in getting the offloaded work done, shall be recovered from subsequent payment certificates or any other dues of the Consultant</p> <p>49.2 Termination By Employer</p> <p>The Employer shall be entitled to terminate the Contract as a whole or any part or parts (as may be specified in the Notice of Termination under any of the above Sub-Clause issue) if the Consultant:</p> <p>(a) fails to comply with the directions contained in the notice under Sub-Clause 49.1/PCC [Notice to Correct/ Notice of Termination],</p> <p>(b) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against it by Court or Statutory Authority him, compounds with his creditors, or carries on business under a receiver, trustee, or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or</p> <p>(c) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:</p> <p>(i) for doing or forbearing to do any action in relation to the Contract, or</p> <p>(ii) for showing or forbearing to show favor or disfavor to any person in relation to the Contract, or if any of the Consultant's Personnel or agents gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph. However, lawful inducements and rewards to Consultant's Personnel shall not entitle termination.</p> <p>(d) a resolution for winding up of the Consultant is passed, or any petition for winding up of the Consultant is admitted by a court of competent jurisdiction and a provisional liquidator or receiver is appointed and such order has not been set aside within 90 (ninety) days of the date thereof or the Consultant is ordered to be wound up by a court except for the purpose of amalgamation or reconstruction; provided that, as part of such amalgamation or reconstruction, the entire property, assets and undertaking of the Consultant are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Consultant under this Agreement; and provided that:</p> <p>(i) the amalgamated or reconstructed entity has the capability and experience necessary for the performance of its obligations under this Agreement; and</p> <p>(ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and has a credit worthiness at least as good as that of the Consultant as at the Commencement Date;</p> |

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| | <p>(e) failure to complete the Punch List items within the periods stipulated.</p> <p>(f) the Consultant fails to rectify any Defect, the non-rectification of which shall have a Material Adverse Effect on the Project, within the time specified in this Agreement or as directed by the Employer;</p> <p>(g) the Consultant creates any Encumbrance in breach of this Agreement;</p> <p>(h) the Consultant has failed to fulfil any obligation, for which failure Termination has been specified in this Agreement</p> <p>(i) the Consultant commits a default in complying with any other provision of this Agreement if such a default causes a Material Adverse Effect on the Project or on the Employer</p> <p>In any of these events or circumstances, the Employer may, by Notice Terminate the contract with immediate effect.</p> <p>The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.</p> <p>After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Consultant's Documents and other design documents made by or on behalf of the Consultant for completing the work.</p> <p>49.3 Valuation at Date of Termination</p> <p>As soon as practicable after a notice of termination under Sub-Clause 49.2/PCC [Termination by Employer] has taken effect, the Employer shall proceed in accordance with Sub-Clause 3.5/PCC [Determinations] to agree or determine the value of the design and Consultant's Documents, and any other sums due to the Consultant for work executed in accordance with the Contract. For this purpose, the Consultant shall be notified the date for witnessing of measurements and handing over of the materials for which Consultant has already been paid. In case the Consultant fails to attend or send a representative even after such notice, the Employer shall export proceed with measurements of the works executed and taking over of plants and materials etc. for which payment has already been made to the Consultant, which shall be treated as final.</p> <p>49.4 Payment After Termination</p> <p>After a notice of termination under Sub-Clause 49.2/PCC [Termination by Employer] has taken effect, the Employer may:</p> <p>(a) proceed in accordance with New-Clause 2.4/PCC [Employer's Claims],</p> <p>(b) encash the Performance Guarantee and forfeit the Performance Security:</p> <p>i. In full including additional Performance Guarantee amount if any taken in terms of ITT and not due for release on the date of issue of termination letter, in case of termination of the contract as a whole; or</p> <p>ii. in part/parts proportionate to the contract price of the bill/schedule to which the terminated part of work belongs i.e.</p> $P = (A \times B) \div C \text{ where,}$ <p>P = Proportionate Bank Guarantee Amount A =Contract Price of the particular bill/schedule to which the terminated part of work belongs B = Performance Guarantee amount in terms of CC New- clause 4.19/PCC C = Total Contract Price</p> <p>Plus, additional Performance Guarantee amount if any taken in terms of ITT and not due for</p> |

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| | <p>release on the date of issue of termination letter against that particular bill/Schedule to which the terminated part of the work belongs in case of termination in part/parts.</p> <p>(c) release any payment due to the Consultant for works executed prior to termination and evaluation under clause 49.3/PCC (valuation at date of termination, however, if by this time the Consultant has failed to make a payment due to the Employer, the same will be deducted from the payment due and any balance remaining shall then be paid to the Consultant.)</p> <p>49.5 Employer's Entitlement to Termination for Convenience</p> <p>The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Consultant. The termination shall take effect 28 days after the later of the dates on which the Consultant receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another Consultant or to avoid a termination of the Contract by the Consultant.</p> <p>After this termination, the Consultant shall proceed in accordance with the relevant clause and shall be paid in accordance with New-Clause 8/PCC [Payment and Release in case of Optional Termination].</p> <p>49.6.1. Requirements After Termination</p> <p>Upon Termination of this Agreement in accordance with the provisions of this clause 49, the Consultant shall comply with and conform to the following:</p> <p>(a) deliver to the Employer all the design work which shall have become the property of the Employer under this clause 49;</p> <p>(b) deliver all relevant records, reports, Intellectual Property and other licenses pertaining to the Works, other design documents and in case of Termination occurring after the Provisional Certificate has been issued, the "as built" Drawings for the Works;</p> <p>(c) transfer and/or deliver all Applicable Permits to the Employer to the extent permissible under Applicable Laws; and</p> <p>(d) deleted.</p> <p>49.6.2 Other Rights and Obligations of The Parties</p> <p>Upon Termination for any reason whatsoever</p> <p>(a) Deleted.</p> <p>(b) Deleted.</p> <p>(c) the Employer shall be entitled to restrain the Consultant and any person claiming through or under the Agreement from entering upon the Employer's office or any part of the Project in accordance with the provisions of this Agreement.</p> <p>49.6.3 Payment on Termination</p> <p>After termination under Sub-Clause-49.2/PCC the Employer shall return the Performance Security, and shall pay the Consultant an amount calculated and certified in accordance with the following conditions:</p> <p>A. The value of Design work, as per approved programme, and</p> <p>B. Value of work completed up to date by the Consultant at rates specified in the Contract, after taking into account any deductions, retentions, and set off.</p> <p>C. In addition, a sum not exceeding 2% (two percent) of the value of the work remaining</p> |

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| | <p>incomplete on the date of Termination notice taking effect.</p> <p>The payment as above are full compensation for termination under this clause and the Consultant has no claim for damages or other entitlements whether under the contract or otherwise.</p> <p>In case of termination/ foreclosure of the Contract under whatsoever circumstances, any leftover design document of the Employer with the Consultant will be returned to the Employer office at the Consultant's cost. In case of the failure of the Consultant to do so, the Employer will be entitled to recover their cost from the Consultant from the amount becoming due to the Consultant or from any other amount due in any other contracts.</p> <p>The decision of the Employer of the amount to be recovered will be final decision and full credit at rates initially charged to the Consultant shall be allowed for such items.</p> <p>49.7 Termination by consultant</p> <p>49.7.1 Default of Employer</p> <p>In the event of the Employer becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or Amalgamation, then, the Consultant may give notice requiring the Employer to remedy the default within 28 days after receipt of the notice. If the Employer fails to remedy the default or fails to propose steps reasonably acceptable to the Consultant to do so and in that case, the Consultant may terminate the Contract after issue of 14 days' notice to the Employer with a copy to the Employer. In this case, the Consultant shall be compensated as per Sub Clause no.49.11.3.</p> <p>The Employer's decision on the amount payable on this account shall be final and binding.</p> <p>49.7.2 Consultant's Entitlement to Suspend the Work</p> <p>If the Consultant suspends work or reduces the rate of progress of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Employer shall, after due consultation with the Employer and the Consultant, determine any extension of time to which the Consultant is entitled under sub-clause-26.5/PCC</p> <p>49.7.3 Cessation of Work by consultant</p> <p>After termination under Sub-49.7.3, the Consultant shall:</p> <ol style="list-style-type: none"> Cease all further work, except for such work as may be necessary and instructed by the Employer for the purpose of making safe or protecting those parts of the Works already executed, Deleted. Hand over those parts of other Works executed by the Consultant up to the date of termination, Deleted. <p>Any such termination shall be without prejudice to any other right of the Consultant under the Contract.</p> <p>49.7.4 Payment on Termination</p> <p>Deleted.</p> |

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| | <p>49.8 Survival</p> <p>Termination of this Contract</p> <p>a. shall not relieve the Consultant or the Employer of any obligations already incurred hereunder which expressly or by implication survives Termination hereof and</p> <p>b. except as otherwise provided in any provision of this Contract expressly limiting the liability of either party, shall not relieve either party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination</p> <p>49.9 Corrupt or Fraudulent Practices</p> <p>If the Employer determines that the Consultant has engaged in corrupt, fraudulent, collusive or coercive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days' notice to the Consultant, terminate the Consultant's employment under the Contract and expel him from the Site, and the provisions of Clause 49/CC/PCC shall apply as if such expulsion had been made under Sub-Clause 49.2/PCC.</p> <p>For the purposes of this Sub-Clause:</p> <p>(a) "corrupt practice" means the offering, giving, receiving of soliciting of anything of "value to influence the action of a public official in the procurement process or in the Contract execution.</p> <p>(b) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of the Contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition</p> <p>(c) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Employer, designed to establish bid prices at artificial, non-competitive levels.</p> <p>(d) "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.</p> |
| <p>CLAUSE 53 /SCC LABOUR</p> | <p>The Following New-Paras Are Added to The Existing SCC Clauses.</p> <p>53.1 Engagement Of Staff and Labour</p> <p>Except as otherwise stated in the Specification, the Consultant shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.</p> <p>The Consultant is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.</p> <p>53.2 Rates of Wages and Conditions of Labour</p> <p>The Consultant shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Consultant shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Consultant.</p> <p>If the Employer is obliged to provide amenities or arrange payment of wages to contract labour employed by the Consultant either directly or through sub-Consultant under the contract on</p> |

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| | <p>account of failures on the part the Consultant to provide the amenities and / or arrange payment of wages to the contract labour as required of him under the provision of the applicable acts / rules made there under, the Employer shall be at liberty without prejudice to the rights of Employer under Section 20(2) and 21(4) of the Contract Labour (Regulation and Abolition) Act 1970 to recover the whole or part of the expenditure so incurred on the wages so paid by the Employer/Railway from the security deposit and/or from any sum or sums due to the Consultant whether under this contract or any other contract.</p> <p>The Consultant shall inform the Consultant's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances, and any benefits as are subject to taxes under the Laws of the Country for the time being in force, and the Consultant shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.</p> <p>The Consultant shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there-under, regulation or notifications including amendment. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/ regulations including amendments, if any, on the part of the Consultant, the Employer shall have the right to deduct any money due to the Consultant including his amount of performance security. The Employer shall also have right to recover from the Consultant any sum required or estimated to be required for making good the loss or damage suffered by the Employer.</p> <p>The employees of the Consultant and the Sub-Consultant in no case shall be treated as the employees of the Employer at any point of time.</p> <p>The Consultant shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all liabilities provide by the said Act and said Rules.</p> <p>The Consultant shall comply with all applicable Labour Laws, and should not employ Child Labour.</p> <p>The Consultants shall not differentiate wages between men and women for work of equal value.</p> <p>53.3 Persons in The Service of Employer</p> <p>The Consultant shall not recruit, or attempt to recruit, staff and labour from amongst persons in the service of the Employer.</p> <p>53.4 Labour Laws</p> <p>The Consultant shall comply with all the relevant Labour Laws applicable to the Consultant's Personnel, including Laws relating to their employment, health, safety, welfare, immigration, and emigration, and shall allow them all their legal rights. The Consultant and his sub-Consultants shall be responsible to ensure at his own cost, compliance 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 on the works which shall include all the acts listed in Section - 8 but not limited to the same.</p> <p>The Consultant shall require his employees to obey all applicable Laws, including those concerning safety at work.</p> <p>During continuance of the Contract, the Consultant and his Sub-Consultants shall abide at all times by all existing labor enactments and rules made thereunder, regulations, notifications and</p> |

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| | <p>bye laws of the State or Central government or local authority and any other labor laws (including rules), regulations, bye laws that may be passed or notification that may be issued under any labor law in future either by the State or the Central Government or the local authority.</p> <p>53.5 Working Hours</p> <p>No work shall be carried out on locally recognized days of rest, or outside the normal working hours stated in the Contract Data, unless:</p> <p>(a) otherwise stated in the Contract,</p> <p>(b) the Employer gives consent, or</p> <p>(c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Consultant shall immediately advise the Employer.</p> <p>(d) The Consultant, generally will have to carry out work during night hours also and in shifts unless specifically provided otherwise in the Contract. No increase in rates or extra payments shall be admissible for night work.</p> <p>(e) Deleted.</p> <p>(f) Deleted.</p> <p>53.6 Facilities for Staff and Labour</p> <p>Except as otherwise stated in the Specification, the Consultant shall provide and maintain all necessary accommodation and welfare facilities for the Consultant's Personnel. The Consultant shall also provide facilities for the Employer's Personnel visiting office.</p> <p>53.7 Health and Safety</p> <p>The Consultant shall at all times take all reasonable precautions to maintain the health and safety of the Consultant's Personnel and offices.</p> <p>Epidemics</p> <p>In the event of any outbreak of illness of an epidemic nature, the Consultant shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.</p> <p>Records of Safety and Health</p> <p>The Consultant shall maintain such records and make such reports concerning safety, health and welfare of persons as the Employer may from time to time prescribe.</p> <p>Submission of Returns</p> <p>The Consultant shall be responsible for timely submission of all returns and statements to the concerned authorities in full compliance of all rules, bye-laws and regulations for the time being in force.</p> <p>53.8 Consultant's Superintendence</p> <p>Deleted</p> <p>53.9 Consultant's Personnel</p> <p>The Consultant's Personnel shall be appropriately qualified, skilled and experienced in their respective trades or occupations. The Employer may require the Consultant to remove (or cause to be removed) any person employed on the Design works, including the Consultant's Representative if applicable, who:</p> <p>(a) persists in any misconduct or lack of care,</p> |

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| | <p>(b) carries out duties incompetently or negligently, (c) fails to conform with any provisions of the Contract, or (d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.</p> <p>If the Employer asks the Consultant to remove a person who is a member of the Consultant's staff or his work force stating the reasons, the Consultant shall ensure that the person leaves the office within (48) hours and has no further connection with the work in the Contract. The replacement person shall be appointed within fourteen (14) days of the notification by the Employer.</p> <p>A reasonable proportion of the Consultant's Superintending Staff shall have a working knowledge of the English language or the Consultant shall have sufficient number of competent interpreters to ensure the proper transmission of instructions and information. In case the person is not effective in the view of Employer and of the same thing is communicated to the Consultant by the Employer, the Consultant shall appoint (or cause to be appointed) a suitable replacement person</p> <p>53.10 Records Of Consultant's Personnel And Equipment</p> <p>The Consultant shall submit to the Employer, details showing the number of each class of Consultant's Personnel. Details shall be submitted each calendar month, in a form approved by the Employer, until the Consultant has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works</p> <p>53.11 Disorderly Conduct</p> <p>The Consultant shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Consultant's Personnel, and to preserve peace and protection of persons and property on and near the Site</p> <p>53.12 Foreign Personnel</p> <p>The Consultant may bring in to the country any foreign personnel who are necessary for the design works to the extent allowed by the applicable Laws. The Consultant shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will, without any financial liability, if requested by the Consultant, use his best endeavours in a timely and expeditious manner to assist the Consultant in obtaining any local, state, national, or government permission required for bringing in the Consultant's personnel.</p> <p>The Consultant shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Consultant shall similarly be responsible for making the appropriate arrangements for their return or burial. Consultant shall also be responsible for any legal liabilities during their stay.</p> <p>53.13 Supply of Foodstuffs</p> <p>The Consultant shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Consultant's Personnel for the purposes of or in connection with the Contract</p> <p>53.14 Supply of Water</p> <p>The Consultant shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Consultant's Personnel</p> |

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| | <p>53.15 Measures Against Insect and Pest Nuisance Deleted.</p> <p>53.16 Alcoholic Liquor or Drugs The Consultant shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal thereto by Consultant's Personnel.</p> <p>53.17 Arms and Ammunition The Consultant shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Consultant's Personnel to do so.</p> <p>53.18 Festivals and Religious Customs The Consultant shall respect the Country's recognized festivals, days of rest and religious or other customs.</p> <p>53.19 Funeral Arrangements The Consultant shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.</p> <p>53.20 Prohibition of Forced or Compulsory Labour The Consultant shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.</p> <p>53.21 Prohibition of Harmful Child Labour The Consultant shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.</p> <p>53.22 Employment Records of Workers The Consultant shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and shall be available for inspection by the Employer during normal working hours. These records shall be included in the details to be submitted by the Consultant under Sub-Clause 53.10/SCC of PCC [Records of Consultant's Personnel and Equipment].</p> |
| <p>NEW CLAUSE- 1.1</p> | <p>Assignment Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:</p> <ul style="list-style-type: none"> i. may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and ii. may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract. |
| <p>NEW CLAUSE - 1.2</p> | <p>Care and Supply of Documents Each of the Consultant's Documents shall be in the custody and care of the Consultant, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Consultant shall supply to the Employer six copies of each of the Consultant's Documents.</p> |

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| | <p>The Consultant shall keep at office, a copy of the Contract, publications named in the Specification, the Consultant's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.</p> <p>If a Party becomes aware of an error or defect in a document which was prepared for use in executing the designs, the Party shall promptly give notice to the other Party of such error or defect.</p> |
| NEWCLAUSE-1.3 | Deleted |
| NEW CLAUSE-1.4 | <p>Employer's Use of Consultant's Documents</p> <p>As between the Parties, the Consultant shall retain the copyright and other intellectual property rights in the Consultant's Documents and other design documents made by (or on behalf of) the Consultant.</p> <p>The Consultant shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Consultant's Documents, including making and using modifications of them. This licence shall:</p> <ul style="list-style-type: none"> (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works, (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Consultant's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and (c) in the case of Consultant's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Consultant. <p>The Consultant's Documents and other design documents made by (or on behalf of) the Consultant shall not, without the Consultant's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.</p> |
| NEW CLAUSE-1.5 | <p>Consultant's Use of Employer's Documents</p> <p>As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Consultant may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Consultant, except as necessary for the purposes of the Contract.</p> |
| NEW CLAUSE-1.6 | <p>Confidential Details</p> <p>The Consultant shall disclose all such confidential and other information as the Employer may reasonably require in order to verify the Consultant's compliance with the Contract.</p> <p>The Consultant shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out the Consultant's obligations under the Contract or to comply with applicable Laws. The Consultant shall not publish or disclose any particulars of the Works without the previous agreement of the Employer. However, the Consultant shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.</p> |
| NEW CLAUSE-1.7 | <p>Compliance with Laws</p> <p>The Consultant shall, in performing the Contract, comply with applicable laws. Unless otherwise stated in the Special Conditions of Contract:</p> <ul style="list-style-type: none"> a) the Employer shall have obtained similar permission and any other permissions described in the |

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| | <p>Specification as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Consultant harmless against and from the consequences of any failure to do so; and</p> <p>b) the Consultant shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the design and completion of the Works and the remedying of any defects; and the Consultant shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.</p> |
| NEW CLAUSE- 1.8 | <p>Joint Venture — Joint and Several Liability Deleted</p> |
| NEW CLAUSE- 1.9 | <p>Inspections by the Employer The Consultant shall permit the Employer and/or persons appointed by the Employer to inspect the Site and/or the Consultant's records relating to the performance of the Contract.</p> |
| NEW CLAUSE- 1.10 | <p>Bidder's Credentials: The bidder shall submit an affidavit on a stamp paper to the effect that all the documents submitted by her along with her bid are true. This shall be mandatory all bids. The bid shall be summarily rejected if the bidder fails to submit this undertaking along with the bid.</p> <p>After opening the financial bid, the tender committee shall verify the credentials of the bidder who is declared as the lowest bidder (L1) for their authenticity. In case the credentials of L1 are not found to be in order, The bid shall be treated as technically unresponsive and thus invalid. The process shall be repeated for the next higher bidder till the valid L1 is established. If any document (or copy thereof) submitted by a bidder is found to be false/forged:</p> <p>a) The bidder/each partner/member of the bidding firm shall be liable to legal actions apart from punitive actions, as decided by competent authority of K-RIDE. In such an eventuality. The bid shall also be summarily rejected.</p> <p>b) If the contract has already awarded, or Letter of Acceptance (LoA) has been issued and in the event of any failure to comply with the above, the contract shall be terminated, irrespective of the stage of progress in execution of the work. In such an eventuality, Security Deposit (SD), performance Guarantee (PG) and partial/full payments otherwise due to the Consultant, in respect of the partial/full work executed by the Consultant, shall be forfeited by the K-RIDE.</p> <p>c) Other punitive actions, like banning the bidder and partners/members of the bidding firm for future dealings with K-RIDE/Government of India/ Government of Karnataka may also be taken.</p> |
| | <p>2. THE EMPLOYER</p> |
| NEW CLAUSE 2.0 | <p>Obligations of the Employer</p> <ol style="list-style-type: none"> 1. The Employer shall, at its own cost and expense, undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder. 2. The Employer shall be responsible for the correctness of the Scope of the Design, Specifications and Standards. 3. Deleted. 4. In the event that the delay has not occurred as a result of breach of this Agreement by the Consultant or due to Force Majeure, the Employer shall extend Time Extension in accordance with the provisions. 5. The Employer agrees to provide support to the Consultant and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and Applicable |

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| | <p>Laws, the following:</p> <ul style="list-style-type: none"> a) upon written request from the Consultant, and subject to the Consultant complying with Applicable Laws, provide reasonable support to the Consultant in procuring Applicable Permits required from any Government Instrumentality for implementation of the Project; b) deleted c) deleted d) not do or omit to do any act, deed or thing which may in any manner be violative of any of the provisions of this Agreement; e) support, cooperate with and facilitate the Consultant in the implementation of the Project in accordance with the provisions of this Agreement. |
| NEW CLAUSE- 2.1 | <p>Permits, Licenses or Approvals</p> <p>The Employer shall (where he is in a position to do so) provide reasonable assistance to the Consultant at the request of the Consultant:</p> <ul style="list-style-type: none"> (a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and (b) for the Consultant's applications for any permits, licences or approvals required by the Laws of the Country: <ul style="list-style-type: none"> (i) which the Consultant is required to obtain under New-Clause 1.7/PCC [Compliance with Laws], (ii) Deleted (iii) Deleted |
| NEW CLAUSE - 2.2 | <p>Employer's Personnel</p> <p>The Employer will be responsible for ensuring that the Employer's Personnel and the Employer's other Consultants on the Site:</p> <ul style="list-style-type: none"> (a) co-operate with the Consultant's efforts under New-Clause 4.24/PCC [Co-operation], and (b) take actions similar to those which the Consultant is required to take under sub-paragraphs (a) & (b) under New-Clause 4.36/PCC [Protection of the Environment]. |
| NEW CLAUSE- 2.3 | <p>Employer's Financial Arrangements</p> <p>The Employer has sourced the funds to finance the project</p> <p>Assignment by the Employer</p> <p>The Employer shall be fully entitled without the consent of the Consultant, to assign the benefit of the Contract or any part thereof and any interest therein or there under to any third party.</p> |
| NEW CLAUSE- 2.4 | <p>Employer's Claims</p> <p>If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer shall give notice and particulars to the Consultant. However, notice is not required for payments due under New-Clause 4.37/PCC [Electricity, Water and Gas], or for other services requested by the Consultant.</p> <p>The notice shall be given as soon as practicable after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.</p> <p>The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of</p> |

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| | <p>the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract. The Employer shall then proceed in accordance with New-Clause 3.5/PCC [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Consultant, and/or (ii) the extension (if any) of the Defects Notification Period as per New Clause 6.9/PCC.</p> <p>This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Consultant, in accordance with this Sub-Clause.</p> |
| | 3.THE ENGINEER |
| NEW CLAUSE- 3.1 | <p>“Engineer” means the person nominated by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Consultant under New-Clause 3.4 [Replacement of the Engineer]. The person nominated to act as an engineer may be an employee of Rail Infrastructure Development Company (Karnataka) Ltd (K-RIDE) or an employee of a Project Management Consultancy firm engaged by K-RIDE for project management as per the discretion of the Employer.</p> <p>Engineer’s Duties and Authority</p> <p>The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer’s staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.</p> <p>The Engineer shall have no authority to amend the Contract.</p> <p>The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract.</p> <p>However, the Engineer shall obtain the specific approval of the Employer before taking action under the-following Sub-Clauses of these Conditions:</p> <p>a) New-Clause 4.30/PCC [Unforeseeable Physical Conditions] Agreeing or determining an extension of time and/or additional cost.</p> <p>b) Sub-Clause 26.5/PCC [Extension of Time for Completion] Agreeing or determining extension of time.</p> <p>c) New-Clause 6.9/PCC [Performance Certificate] Issue of Performance Certificate.</p> <p>d) Sub-Clause 34. Except,</p> <p style="padding-left: 40px;">(i) in an emergency situation as determined by the Engineer and as amplified in sub-paras (h) and (i) below, or</p> <p style="padding-left: 40px;">(ii) Deleted.</p> <p>e) Sub-Clause 34.2 – Procedure for change of scope: Approving a proposal for Variation submitted by the Consultant in accordance with Sub Clause 34.1.</p> <p>f) Sub-Clause 37.16 -Payment in applicable Currencies: Specifying the amount payable in each of the applicable currencies for a Variation.</p> <p>g) Clause 11.1/SCC: Consultant Claims for extension of time and/or additional payment.</p> <p>h) Providing Power block or Traffic block to the consultant.</p> <p>i) Giving any instruction to the consultant, outside the scope of the Engineer.</p> <p>j) Deleted</p> |

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| | <p>Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Consultant of any of his duties and responsibility under the Contract, instruct the Consultant to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Consultant shall forthwith comply, despite the absence of approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 34/PCC and shall notify the Consultant accordingly, with a copy to the Employer.</p> <p>a) In case the emergency mentioned in above Sub-para occurs on account of failure of consultant, by way of not adhering to the approved scheme of work or not taking adequate safety precautions or by any other reason attributable to the consultant, then no additional amounts shall be paid to the Consultant for attending to such emergencies and the Consultant shall be liable for Employer's claims.</p> <p>b) Deleted</p> |
| <p>NEW CLAUSE- 3.2</p> | <p>Delegation by the Engineer</p> <p>The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident Engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties.</p> <p>However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with New-Clause 3.5/PCC [Determinations].</p> <p>Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 58.1/SCC.</p> <p>Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Consultant to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:</p> <p>(a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;</p> <p>(b) if the Consultant questions any determination or instruction of an assistant, the Consultant may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.</p> |
| <p>NEW CLAUSE- 3.3</p> | <p>Instructions of the Engineer</p> <p>The Engineer may issue to the Consultant (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Consultant shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 34/PCC [Variations and Adjustments] shall apply.</p> <p>The Consultant shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant,</p> <p>(a) gives an oral instruction and</p> <p>(b) receives a written confirmation of the instruction, from (or on behalf of) the Consultant, within two</p> |

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| | <p>working days after giving the instruction, and</p> <p>(c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,</p> <p>(d) then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).</p> |
| NEW CLAUSE- 3.4 | <p>Replacement of the Engineer</p> <p>Notwithstanding New-Clause 3.1/PCC, if the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Consultant of the name, address and relevant experience of the replacement Engineer.</p> |
| NEW CLAUSE- 3.5 | <p>Determinations</p> <p>Whenever these Conditions provide that the Engineer shall proceed in accordance with this New-Clause 3.5/PCC to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.</p> <p>The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 56/SCC [Claims, Disputes and Arbitration].</p> |
| NEW CLAUSE- 3.6 | <p>Remuneration of the Engineer</p> <p>The remuneration, cost and expenses of the Engineer shall be borne by the Employer</p> |
| NEW CLAUSE- 3.7 | <p>Interim Arrangement</p> <p>In the event that the Employer has not appointed an Engineer, or the Engineer so appointed has relinquished its functions, the Employer may, in the interim, designate and authorise any person to discharge the functions of the Engineer in accordance with the provisions of this Agreement, save and except that such person shall not exercise any functions relating to review, comment, approval or inspection as specified in this Agreement for and in respect of the Engineer, and such functions shall be discharged as and when an Engineer is appointed in accordance with the provisions of this Agreement. Provided, however, that nothing contained in this Clause shall in any manner restrict the rights of the Employer to enforce compliance of the provisions of this Agreement.</p> |
| | <p>4.THE CONSULTANT</p> |
| NEW CLAUSE- 4.1 | <p>Consultant's General Obligations</p> <p>4.1.1 Subject to and on the terms and conditions of this Agreement, the Consultant shall undertake the survey, investigation, design, Engineering and observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder.</p> <p>4.1.2 The Consultant shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.</p> <p>4.1.3 Save and except as otherwise provided in this Agreement or Applicable Laws, as the case may be, the Consultant shall, in discharge of all its obligations under this Agreement, conform with and adhere to Good Industry Practice at all times.</p> <p>4.1.4 Deleted</p> <p>4.1.5 Deleted</p> <p>4.1.6 The Consultant shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:</p> |

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| | <p>(a) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining Applicable Permits and obtain and keep in force and effect such Applicable Permits in conformity with Applicable Laws;</p> <p>(b) procure, as required, the appropriate proprietary rights, licenses, agreements and methods, processes, know-how and systems used or incorporated into the Railway Project;</p> <p>(c) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of its obligations under this Agreement;</p> <p>(d) Deleted.</p> <p>(e) always act in a manner consistent with the provisions of this Agreement and not cause or fail to do any act, deed or thing, whether intentionally or otherwise, which may in any manner be violative of any of the provisions of this Agreement;</p> <p>(f) support, cooperate with and facilitate the Employer in the implementation and operation of the Project in accordance with the provisions of this Agreement;</p> <p>(g) ensure that the Consultant comply with the safety and welfare measures for labour in accordance with Applicable Laws and Good Industry Practice;</p> <p>(h) keep a copy of Agreement, publications named in Agreement, the Drawings, Documents relating to the Project, Change of Scope Orders and other communications sent under Agreement, and provide access to all these documents at all reasonable times to the Employer and its Mobilized personnel;</p> <p>(i) cooperate with other Consultants employed by the Employer and with personnel of any other public authority; and</p> <p>(j) not interfere unnecessarily or improperly with the convenience of the public, or the access to and use and occupation of all the existing facilities within the Right of Access, irrespective of whether they are public or in the possession of the Employer or of others.</p> <p>(k) to provide reasoned comments on any information relating to the Consultant's activities under or pursuant to the agreement, which the Employer may publish.</p> <p>(l) The Consultant shall undertake all necessary superintendence as and when required.</p> <p>4.1.7 Electricity, water and other services Deleted</p> <p>4.1.8 Unforeseeable difficulties Except as otherwise specified in the Agreement:</p> <p>(a) the Consultant accepts complete responsibility for having foreseen all difficulties and costs of successfully completing the design works;</p> <p>(b) the Contract Price shall not be adjusted to take account of any unforeseen difficulties or costs; and</p> <p>(c) the Scheduled Completion Date shall not be adjusted to take account of any unforeseen difficulties or costs.</p> <p>For the purposes of this Clause, unforeseeable difficulties include physical conditions like man-made or natural physical conditions including sub-surface and hydrological conditions which the Consultant encounters during execution of the Works.</p> |

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| | <p>4.1.9 Safety at work site Deleted</p> |
| NEW CLAUSE- 4.2 | Deleted |
| NEW CLAUSE- 4.3 | Deleted |
| NEW CLAUSE- 4.4 | Deleted |
| NEW CLAUSE- 4.5 | Deleted |
| NEW CLAUSE- 4.6 | Deleted |
| NEW CLAUSE- 4.7 | Deleted |
| NEW CLAUSE- 4.8 | Deleted |
| NEW CLAUSE- 4.9 | Deleted |
| NEW CLAUSE- 4.10 | Deleted |
| NEW CLAUSE- 4.11 | <p>Publicity The Consultant shall not publish or otherwise circulate alone or in conjunction with any other person, any articles, photographs or other materials relating to the Contract, the Design, the Project or any part thereof, nor impart to the press, or any radio or television network any information relating thereto, nor allow any representative of the media access to the Site, Consultant's Works Areas, or off-Site place of manufacture, or storage except with the permission, in writing, of the Employer. The Consultant shall ensure that his representatives of any tier shall be bound by a like obligation and shall, if so, required by the Employer, enforce the same at his own expense. The provisions of this Sub-Clause shall not exempt the Consultant from complying with any statutory provision in regard to the taking and publication of photographs.</p> |
| NEW CLAUSE- 4.12 | <p>Disclosure of Relationship If the Consultant or any partner of the Consultant or Director of the Consultant's company is closely related to any of the Officers of the Employer, or alternatively, if any close relative of an officer of the Employer has financial interest / stake in the Consultant's firm, the same shall be disclosed by the Consultant at the time of filing his tender. Any failure to disclose the interest involved, shall entitle the Employer to rescind the Contract, without payment of any compensation to the Consultant. The Consultant shall note that he is prohibited from developing such interest during the Contract period.</p> |
| NEW CLAUSE- 4.13 | Deleted |

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| NEW CLAUSE- 4.14 | <p>In Pursuance with this Policy, the Employer</p> <p>a. Will reject the Tender for the Work or rescind the Contract, if the Employer determines that the Tenderer/Consultant has engaged in corrupt or fraudulent practices.</p> <p>b. Will declare a Tenderer/Consultant ineligible, either indefinitely or for a minimum period of 2 years from the date of identification of such prohibited conduct, to be awarded a Contract/s if the Employer at any time determines that the Consultant has engaged in corrupt or fraudulent practices in competing for, or in executing the Contract.</p> |
| NEW CLAUSE- 4.15 | <p>Compensation to Consultant on Rescission of Contract under this clause</p> <p>In the event of rescission of Contract, the Consultant shall not be entitled to any compensation whatsoever, except for the work done up to the date of rescission.</p> |
| NEW CLAUSE- 4.16 | <p>Quality Assurance</p> <p>Unless otherwise stated in Special Conditions of Contract and/or Terms of Reference, the Consultant shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. Such system shall be in accordance with the details stated in the Contract. Compliance with the quality assurance system shall not relieve the Consultant of his duties, obligations or responsibilities.</p> <p>Details of all procedure and compliance documents shall be submitted to the Employer for his consent before each execution stage is commenced</p> |
| NEW CLAUSE- 4.17 | <p>Work by Persons Other than Consultant</p> <p>I. If the Consultant shall fail to carry out any work required under the Contract or refuse to comply with any instruction or order given by the Employer in accordance with the Contract within a reasonable time, the Employer may give the Consultant 14 days' notice in writing to carry out such work or comply with such instruction.</p> <p>II. If the Consultant fails to comply with such notice, the Employer shall be entitled to carry out such work or instruction by his own workmen or by other Consultants in whatever manner the Employer decides, be it single Tender or limited Tender or open Tender or on entrustment basis without any right of appeal by the Consultant.</p> <p>III. However, in case of emergencies/urgencies/affecting safety the period of 14 days' notice shall be 24hours notice in writing. The classification of work as emergencies/urgencies/affecting safety is the prerogative of Employer and his decision is final and binding on the Consultant. Without prejudice to any other right or remedy, all additional expenditure properly incurred by the Employer in having such work or instruction carried out shall be recoverable by the Employer from the Consultant.</p> <p>IV. If by reason of any accident or failure or other event occurring to, in, or in connection with the Works any remedial or other work shall, in the opinion of the Employer, be urgently necessary and the Consultant is unable or unwilling at once to do such remedial or other work, the Employer may authorize the carrying out of such remedial or other work by a person other than the Consultant.</p> <p>V. If the remedial or other work so authorized by the Employer is work, which, in the Employer's opinion, the Consultant was liable to do under the Contract; all expenses properly incurred in carrying out the same shall be recoverable by the Employer from the Consultant. Provided that the Employer shall, as soon after the occurrence of any such emergency as may be reasonably practicable, notify the Consultant thereof in writing.</p> |
| NEW CLAUSE- 4.18 | <p>Confidentiality of Information</p> <p>I. The Consultant shall not use or divulge, except for the purpose of the Contract or with the written permission of the Employer, any information relating to the Works or the Project provided in the</p> |

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| | <p>Contract or otherwise provided by the Employer. The Consultant shall ensure that his representatives of any tier shall be bound by a like confidentiality undertaking.</p> <p>II. The Employer and any third party to whom an assignment has been made in accordance with New-clause 2.3/PCC may use any information provided by the Consultant in accordance with the Contract. The Employer shall use reasonable endeavours to ensure that the Employer and any third party referred to in aforesaid New-clause 2.3/PCC shall not; divulge such information except for any purpose connected with the Contract.</p> <p>On completion of the works, the Consultant shall arrange to furnish to the Employer two (2) bound sets of all "As Built" drawings for every component of the Works at his own cost, all such copies being on Polyester film of quality to be approved by the Employer or his Representative. The Taking – over Certificate of the Works, as per the provisions of Clause 46.1/PCC herein, shall not be issued by the Employer in the event of the Consultant's failure to furnish the aforesaid "As Built" drawings for the entire works.</p> <p>If the Contract specifies that the Consultant shall design any part of the design works, then unless otherwise stated in the Special Conditions of Contract:</p> <ul style="list-style-type: none"> (a) the Consultant shall submit to the Employer the Consultant's Documents for this part in accordance with the procedures specified in the Contract (b) and these Consultant's Documents shall be in accordance with the Specification Drawings, shall be written in the language for communications defined in Clauses 58.1/SCC, and shall include additional information required by the Employer to add to the Drawings for co-ordination of each Party's designs (c) the Consultant shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract and (d) prior to the commencement of the Tests on Completion, the Consultant shall submit to the Employer the "as-built" documents and operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 46.1/PCC [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Employer. |
| <p>NEW CLAUSE- 4.19</p> | <p>Performance Security</p> <p>The Consultant shall obtain (at his cost) a Performance Security and an additional Performance Security, if any in terms of ITT 25.6, for proper performance of the contract, for the amount, currencies and validity period for Performance Security stated in the Contract Data. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.</p> <p>The Consultant shall deliver the Performance Security and additional Performance Security, if any, to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Employer. The Performance Security/additional Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer and shall be in the form as given in Section 10 (Formats) or in another form specifically approved by the Employer.</p> <p>The procedure for obtaining Performance Guarantee is outlined below:</p> <p>The successful bidder shall have to submit a Performance Guarantee (PG) within 28 (Twenty-eight) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 28 (Twenty-eight) days and up to 60 days from the date of issue of LOA may be given by the Employer who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 28(Twenty-eight) days, i.e., from 29th 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</p> |

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| | <p>Railway, submission of PG can be accepted on the next working day.</p> <p>In all other cases, if the Consultant 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 Start-up recognized by Department for promotion of industry and internal trade (DPIIT) under Ministry of Commerce and Industry, DPIIT shall be informed to this effect. The failed Consultant shall be debarred from participating in re-tender for that work.</p> <p>The Performance Security/additional Performance Security shall be, at the Consultant's option, in any of the following forms:</p> <ul style="list-style-type: none"> (i) An unconditional Bank Guarantee in the prescribed format (ii) A Pay Order / Demand Draft drawn on a Scheduled / Nationalized Bank in India in favour of "Rail Infrastructure Development Company (Karnataka) Ltd" payable at Bangalore. (iii) FDR in favour of "Rail Infrastructure Development Company (Karnataka) Ltd." (free from any encumbrance). (iv) An online bank transfer to K-RIDE account. <p>The Bank Guarantee shall be from a bank having minimum net-worth of over INR 500 million from the specified banks as under:</p> <ul style="list-style-type: none"> (i) a Schedule Bank in India, or (ii) a Foreign Bank having their operations in India, or (iii) a Foreign Bank which does not have operations in India is required to provide a counter-guarantee by State Bank of India, <p>The Scheduled Bank issuing the Bank Guarantee must be on "Structured Financial Messaging System (SFMS)" platform. A separate advice of the BG shall be invariable be sent by the issuing bank to the Employer's Bank through SFMS and only after this the BG shall become operative and acceptable to the Employer.</p> <p>The Issuing Bank shall send the SFMS to:</p> <p>Beneficiary: Rail Infrastructure Development Company (Karnataka) Ltd. (K-RIDE) Bank Name: Canara Bank Branch: Prime Corporate Branch Account No. 0430201012110 IFSC Code: CNRB0002636</p> <p>The Consultant shall ensure that the Performance Security/additional Performance Security is valid and enforceable until the Consultant has executed and completed the Works and remedied defects, if any. If the Consultant does not complete the work for any reasons whatsoever, the terms of the Performance Security / additional Performance Security specify its expiry date, and the Consultant has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date, the Consultant shall be bound to extend the validity of the Performance Security/additional Performance Security until the Works have been completed and any defects have been remedied.</p> <p>Failure of the successful Tenderer to furnish the required Performance Security shall be a ground for the annulment of the award of Contract and execution of the Tender Securing Declaration.</p> <p>Release of performance security</p> <ul style="list-style-type: none"> (i) The whole or such portion of the Performance Security amount shall be liable to be forfeited by the Employer at the discretion of the Employer, in the event of any breach of Contract on the part of the |

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| | <p>Consultant.</p> <p>(ii) After completion of the entire Work, the Performance Security shall be released to the Consultant, on issue of last Taking Over Certificate if more than one Certificate exist, by the Employer, the release of Performance Security shall not relieve the Consultant from his obligations and liabilities, to make good that may be detected during the Defects Liability Period.</p> <p>The Guarantees shall be unconditional and irrevocable. The Employer shall return the Performance Security to the Consultant within 21 days after receiving a copy of the Performance Certificate or passing of the Final Payment Certificate whichever is later. However, on completion of specified section(s), the Consultant shall be entitled for release of 90% of the proportionate Performance Security calculated as specified in Contract Data subject to the condition that Employer certifies that no recoveries are pending in the contract. In case Employer points out amount to be recovered then the Consultant shall be entitled for release of 90% of the proportionate Performance Security calculated as specified in Contract Data minus the amount to be recovered.</p> <p>The Employer shall return additional Performance Security submitted in terms of ITT 25.6 as per the following;</p> <p>(a) If the Consultant submits an application stating that all the works against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITT 25.6 have been completed in all respect, then the Employer, on being satisfied with the claim of the Consultant, shall return the full additional Performance Security against the particular schedule(s). Decision of the Employer regarding completion of works against a particular schedule/bill shall be final and binding on the Consultant.</p> <p>(b) If the Consultant submits an application stating that majority of the works (physical progress being not less than 90%) against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITT 25.6 have been completed and execution of balance works is held up for reasons not attributable to the Consultant, then the Employer, on being satisfied with the claim of the Consultant, shall return 75% of the amount of additional Performance Security against the particular schedule(s). The balance amount of additional Performance Security shall however be returned only after completion of the works against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITT 25.6, in all respects to the satisfaction of the Employer. Decision of the Employer regarding completion of works against a particular schedule/bill shall be final and binding on the Consultant.</p> <p>Without limitation to the provisions of the rest of this Sub-Clause, whenever the Employer determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation or as a result of a Variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Consultant shall at the Employer's request promptly submit Performance Guarantee @ 3% of the increased amount over the original contract price in a specific currency. On the other hand, if the value of contract price decreases by more than 25% of the original contract price payable in a specific currency, Performance Guarantee @ 3% of the decrease in contract price from the original contract price in a specific currency shall be returned to the Consultant, on his request.</p> <p>Wherever the contract is terminated under Clause 49.2/PCC, the Performance Guarantee shall be encashed by the Employer:</p> <p>i) in full including additional Performance Guarantee amount, if any, taken in terms of clause 25.6 and 29.5 of ITT and not due for release on the date of issue of termination letter in terms of this clause, in case of termination of the contract as a whole; or</p> <p>ii) at the discretion of the Employer it may be encashed in part/parts proportionate to the Contract price of the bill / schedule to which the terminated part of work belongs</p> |

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| | <p>i.e $P=(A \times B) \div C$ where</p> <p>P=Proportionate Bank Guarantee Amount.</p> <p>A=Contract price of the particular bill/schedule to which the terminated part of work belongs.</p> <p>B=Performance Guarantee amount in terms of CC New-clause 4.19/PCC</p> <p>C=Total Contract price.</p> <p>Plus, additional performance Guarantee amount, if any, taken in terms of sub clause 25.6 and 29.5 of ITT and not due for release on the date of issue of termination letter in terms of this clause against this particular bill/schedule to which the terminated part of the work belongs, in case of termination in part/parts.</p> <p>The balance work should be got done separately, and independently by K-RIDE without risk and cost of the original Consultant. The original Consultant shall be debarred from participating in the tender for executing the balance work</p> |
| <p>NEW CLAUSE- 4.20</p> | <p>Security Deposit:</p> <p>Security Deposit equal to 10 percent of the amount due to the Consultant in IPC's/ Running bills from time to time will be retained, so as to maintain a reserve in the hands of the Employer equal to 5 percent of the Contract Price in respective currencies.</p> <p>The Employer shall at six monthly intervals release 50% of retention money upon submission of Bank Guarantee of like amount in respective currencies as per format given in section 10, Contract Forms for security deposit and issued by an Indian Schedule bank (excluding Cooperative Banks) or from a schedule Foreign Bank as defined in Section 2(e) of RBI Act 1934 read with Second Schedule.</p> <p>The remaining 50% of Security Deposit shall remain with the employer.</p> <p>4.2 (a) Release of Security Deposit:</p> <p>50% of the Security Deposit (Bank Guarantees and/or money) shall be released upon request by the Consultant on or after the date of issue of the Completion Certificate for the whole of the works or the date of issue of last completion Certificate, if more than one completion Certificate exist.</p> <p>4.2.b (i) Refund of Balance 50% Security Deposit:</p> <p>50% of Security Deposit mentioned in clause above shall be returned to the Consultant along with or after, the following:</p> <p>(a) Final Payment of the Contract and</p> <p>(b) Execution of Final Supplementary Agreement or Certification by Employer that K-RIDE has No Claim on Consultant and</p> <p>4.2.b (ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 49 of PCC, the Security Deposit already with K-RIDE under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 49 of PCC the Security Deposit shall not be forfeited.</p> <p>4.2.(c) No interest shall be payable upon the Bid Security and Security Deposit or amounts payable to the Consultant under the Contract, but Government Securities deposited in terms of New-Clause 4.19/PCC of this clause will be payable with interest accrued thereon.</p> <p>4.2.(d) When contract amount exceeds the contract price due to variation in quantities of certain tender items on the higher side or due to operation of additional non tendered items as per design requirement, the additional retention money at 5% of the increased amount shall be recovered from Interim Payment bills. The additional Security Deposit recovery shall start when the actual</p> |

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| | <p>cumulative payment exceeds the original Contract Price.</p> <p>4.2.(e) Wherever Bank Guarantee or any other instrument is to be extended or fresh BG to be obtained, the cost towards getting extension of BG or fresh BG will be on Consultant's account.</p> |
| <p>NEW CLAUSE - 4.21</p> | <p>Consultant Representative:</p> <p>The Consultant shall depute his Representative to attend all the review meetings notified by the Employer and representative will foresee coordination with others.</p> <p>The Consultant shall not impede and shall afford all necessary facilities, access and/or services to the Employer, Designated Consultants, Utility undertakings, other relevant authorities and other Consultants (whether employed by the Employer or not) who are carrying out on, or in the vicinity of, the Site, works not included in the Contract but forming part of the Project:</p> <p>A. The Consultant shall take all reasonable steps to ensure that the Works are co-ordinated and integrated with the Design, manufacture, installation execution and testing of such other works and shall in particular (but without limitation):</p> <ul style="list-style-type: none"> i. comply with any direction which the Employer may give for the integration of the Design with the design of any other part of the Project; ii. consult, liaise and co-operate with those responsible for carrying out such other works, including where necessary, in the preparation of the respective designs, the preparation of co-ordinated programmes, method statements, co-ordination drawings and specifications together with arrangements of service priorities and zoning; <p>B. The Consultant shall undertake Design co-ordination with other Consultants who are carrying out works forming part of the Project as described in the Terms of Reference Section - 8. At the end of each such co-ordination period, the Consultant and the other Consultant with whose works the interface period refers shall jointly state in writing that their design co-ordination activities are complete and that their respective designs are integrated and can be finalised without interference with each other's designs or the designs with which their designs have already been integrated.</p> <p>A copy of this joint written statement shall be provided to the Employer within 7 days of the end of the said design co-ordination period. Unless and until copies of all relevant and necessary design co-ordination statements have been submitted to the Employer, the Employer shall be entitled to suspend any review or further review of the Consultant's or the other Consultant's design submissions. Such suspension shall not be grounds for the Consultant to claim nor shall be entitled to receive an extension of time or additional payments.</p> <p>C. Deleted</p> <p>D. Deleted</p> <p>E. The Consultant shall in accordance with the requirements of the Employer co-ordinate his own Works with that of Designated Consultants through Co-ordinated Installation Programme (CIP) stated in the Employer's Requirements, or as the Employer may require, and shall afford the Designated Consultants all reasonable opportunities for carrying out their works.</p> <p>F. Deleted</p> <p>G. Deleted</p> <p>H. Deleted</p> |
| <p>NEW CLAUSE- 4.22</p> | <p>Deleted</p> |

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| NEW CLAUSE-4.23 | Deleted |
| NEW CLAUSE-4.24 | <p>Co-operation</p> <p>The Consultant shall, as specified in the Contract or as instructed by the Employer, allow appropriate opportunities for carrying out work to:</p> <ul style="list-style-type: none"> (a) the Employer's Personnel, (b) any other Consultants employed by the Employer, and (c) the personnel of any legally constituted public authorities, <p>If, under the Contract, the Employer is required to give to the Consultant possession of any foundation, structure, plant or means of access in accordance with Consultant's Documents, the Consultant shall submit such documents to the Employer in the time and manner stated in the Specification.</p> |
| NEW CLAUSE-4.25 | Deleted |
| NEW CLAUSE-4.26 | Deleted |
| NEW CLAUSE-4.27 | <p>Quality Assurance</p> <p>The Consultant shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Employer shall be entitled to audit any aspect of the system.</p> <p>Details of all procedures and compliance documents shall be submitted to the Employer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Employer, evidence of the prior approval by the Consultant himself shall be apparent on the document itself.</p> <p>Compliance with the quality assurance system shall not relieve the Consultant of any of his duties, obligations or responsibilities under the Contract.</p> <p>Quality Control</p> <p>Within 28 days of the issue of the Letter of acceptance, the Consultant shall submit to the Employer, for his consent, his proposed Quality Plan as per the Terms of Reference. The quality manual should address the quality system as required by ISO 9001-1991. Any supplement to the Site Quality Plan shall be submitted at least 14 days before commencement of the relevant work.</p> <p>Upon the Employer notifying his consent to the Quality Plan, or any supplement thereto, the Consultant shall, adhere to the principles and procedures contained in such document, except where the Employer gives his consent to any amended or varied version thereof.</p> <p>The Consultant shall appoint a suitably qualified and experienced person, not otherwise engaged in the performance of the Contract, to act as manager of the quality assurance system and shall provide such other personnel and resources as required to ensure effective operation of the quality assurance system. The said manager shall carry out audits of the application of the quality assurance system, and ensure effective quality control and delivery of quality assurance.</p> <p>The Consultant shall provide all necessary access, assistance and facilities to enable the Employer to carry out surveillance of the designs to verify that the quality assurance system is being properly and fully implemented. No extra payment shall be made in this regard and the cost of the Work under this element shall be deemed to be included in the Contract Price.</p> <p>Quality control records and Documents</p> <p>The Consultant shall hand over to the Employer a copy of all its quality control records and documents before the Completion Certificate is issued.</p> <p>Video recording</p> <p>Deleted.</p> |

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| NEW CLAUSE-4.28 | Site Data Deleted. |
| NEW CLAUSE-4.29 | Sufficiency of the Accepted Contract Amount The Consultant shall be deemed to: a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters. Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Consultant's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper completion of the design works and the remedying of any defective designs. |
| NEW CLAUSE-4.30 | Unforeseeable Physical Conditions Deleted |
| NEW CLAUSE-4.31 | 1. Time for access to the Site Deleted 2. Protection of Site from encroachments Deleted 3. Temporary Right of Access Deleted 4. Access to the Employer and other project partners. Deleted 5. Geological and archaeological finds Deleted |
| NEW CLAUSE-4.32 | Deleted |
| NEW CLAUSE-4.33 | Deleted |
| NEW CLAUSE-4.34 | Deleted |
| NEW CLAUSE-4.35 | Deleted |
| NEW CLAUSE-4.36 | Protection of the Environment The Consultant shall take all reasonable steps to protect the environment as prescribed by applicable Laws. |
| NEW CLAUSE-4.37 | Electricity, Water and Gas The Consultant shall be responsible for the provision of all power, water and other services he may require for the design work at his own cost. |
| NEW CLAUSE-4.38 | Deleted |
| NEW CLAUSE-4.39 | Progress Reports Unless otherwise stated in the Special Conditions of Contract, monthly progress reports shall be prepared by the Consultant and submitted to the Employer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be |

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| | <p>submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.</p> <p>Reporting shall continue until the Consultant has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.</p> <p>Each report shall include:</p> <p>A) Charts and detailed descriptions of progress, including each stage of design (if any), Consultant's Documents.</p> <p>B) The Comparisons of actual and planned progress of all activities, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays.</p> |
| NEW CLAUSE-4.40 | <p>Security of the Site</p> <p>Deleted</p> |
| NEW CLAUSE-4.41 | <p>Consultant's Operations on Site</p> <p>Deleted</p> |
| NEW CLAUSE-4.42 | <p>Design – General Obligations:</p> <p>Drawings for Permanent works:</p> <p>Preliminary Drawings (Tentative) showing general dimensions & details elaborating the scope of work (not based on detailed design) will be supplied along with the Tender documents. The design and Drawings of permanent works are in the scope of consultant.</p> <p>Shop Drawings</p> <p>“Good for Construction “drawings shall be issued by Consultant, based on GFC Drawings the contractor shall prepare shop drawings before execution of work, after taking actual site dimensions and all existing and proposed services / structures etc. The shop / fabrication drawings shall be checked by consultant prior to submission to the Employer for approval.</p> <p>Shop drawings submitted by the Contractor shall be in sufficient detail to indicate the type, size, arrangement, breakdown for packing and shipment, the external connections, fixing arrangements required, the dimensions required for installation and interconnections with other equipment and materials, clearances and spaces required between various portions and any other information specifically called for.</p> <p>Approval of Employer of any such proposal / drawings shall not relieve the Consultant of his responsibility of sufficiency of such works. It shall be the responsibility of the Consultant to promptly bring to the notice of the Employer any error or discrepancy in the Contract documents and obtains his orders thereon. Only stated dimensions are to be taken and not those obtained from scaling drawings. In case any feature of the work is not fully described and set forth in the Drawings and Specifications, the Consultant shall forthwith apply to the Employer for further instructions, Drawings or Specifications.</p> |
| NEW CLAUSE-4.43 | <p>Deleted</p> |
| | <p>5. PLANT, MATERIALS AND WORKMANSHIP.</p> |
| NEW CLAUSE-5.1 | <p>Deleted</p> |
| NEW CLAUSE-5.2 | <p>Deleted</p> |
| NEW CLAUSE-5.3 | <p>Deleted</p> |
| NEW CLAUSE-5.4 | <p>Deleted</p> |

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| NEW CLAUSE-5.5 | Deleted |
| NEW CLAUSE-5.6 | Deleted |
| NEW CLAUSE-5.7 | Deleted |
| | 6. Defect Liability |
| NEW CLAUSE-6.1 | Deleted |
| NEW CLAUSE 6.2 | Deleted |
| NEW CLAUSE 6.3 | Deleted |
| NEW CLAUSE 6.4 | Deleted |
| NEW CLAUSE-6.5 | Deleted |
| NEW CLAUSE-6.6 | Deleted |
| NEW CLAUSE-6.7 | Deleted |
| NEW CLAUSE-6.8 | <p>Consultant to search cause</p> <p>6.8.1 The Employer may instruct the Consultant to examine the cause of any design defect during the depots construction.</p> <p>6.8.2 In the event any Defect identified as per above Clause 6.8.1 is attributable to the Consultant, the Consultant shall rectify such Defect within the period specified by the Employer, and shall bear the cost of the examination and rectification of such Defect.</p> <p>6.8.3 In the event such Defect is not attributable to the Consultant, the Employer shall, after due consultation with the Consultant, determine the costs incurred on such defects and notify same to the Consultant, and the Consultant shall be entitled to payment of such costs.</p> |
| NEW CLAUSE-6.9 | <p>Performance Certificate</p> <p>Performance of the Consultant's obligations shall not be considered to have been completed until the Employer has issued the Performance Certificate to the Consultant, stating the date on which the Consultant completed his obligations under the Contract.</p> <p>The Employer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the design defects notification periods, or as soon thereafter as the Consultant has supplied all the Consultant's Documents and completed and tested all the Works, including remedying any design defects.</p> <p>Only the Performance Certificate shall be deemed to constitute acceptance of the Works.</p> |
| NEW CLAUSE-6.10 | <p>Unfulfilled Obligations</p> <p>After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.</p> <p>Emergency defect rectification</p> <p>If any design defect, is one requiring immediate attention from safety, environmental or operational</p> |

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| | viewpoint, the Employer has the authority to proceed with rectification in any manner suitable and deduct such sums from the Contract Price |
| NEW CLAUSE- 6.11 | Deleted |
| NEW CLAUSE- 6.12 | Deleted |
| | 7.MEASUREMENT AND EVALUATION |
| NEW CLAUSE 7.1 | <p>Works to be Measured</p> <p>The Works shall be measured, and valued for payment, in accordance with this Clause.</p> <p>Whenever the Employer requires any part of the Works to be measured, reasonable notice shall be given to the Consultant's Representative, who shall:</p> <p>(a) promptly either attend or send another qualified representative to assist the Employer in making the measurement, and</p> <p>(b) supply any particulars requested by the Employer.</p> <p>If the Consultant fails to attend or send a representative, the measurement made by (or on behalf of) the Employer shall be accepted as accurate.</p> <p>Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Employer. The Consultant shall, as and when requested, attend to examine and agree the records with the Employer, and shall sign the same when agreed. If the Consultant does not attend, the records shall be accepted as accurate.</p> <p>If the Consultant examines and disagrees the records, and/or does not sign them as agreed, then the Consultant shall give notice to the Employer of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Employer shall review the records and either confirm or vary them. If the Consultant does not so give notice to the Employer within 14 days after being requested to examine the records, they shall be accepted as accurate.</p> |
| NEW CLAUSE 7.2 | <p>Method of Measurement</p> <p>Except as otherwise stated in the Contract and notwithstanding local practice:</p> <p>(a) measurement shall be made of the net actual quantity of each item of the design works, and</p> <p>(b) the method of measurement shall be in accordance with the Price schedule or other applicable Schedules.</p> |
| NEW CLAUSE 7.3 | <p>Omissions</p> <p>Whenever the omission of any work form's part (or all) of a Variation, the value of which has not been agreed, if:</p> <p>a) the Consultant will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;</p> <p>b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and</p> <p>c) this cost is not deemed to be included in the evaluation of any substituted work;</p> <p>then the Consultant shall give notice to the Employer accordingly, with supporting particulars. Upon receiving this notice, the Employer shall proceed in accordance with New-Clause 3.5/PCC [Determinations] to agree or determine this cost, which shall be included in the Contract Price.</p> |
| NEW CLAUSE - 8 | <p>Force Majeure</p> <p>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</p> |

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| | <p>of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics, pandemics, strikes, lockouts or acts of God (hereinafter referred to 'events') provided, notice of the happening of any such event is given by either party to the other within 14 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 of 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 decision of the Employer 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 continuous period exceeding 84 days, either party may at its option terminate the contract by giving notice to the other party.</p> <p>Payment and Release in case of such Optional Termination</p> <p>Upon such termination, the Employer shall determine the value of the work done and issue a Payment Certificate which shall include:</p> <ol style="list-style-type: none"> The amounts payable for any work carried out for which a price is stated in the contract; Deleted Other Costs or liabilities supported by necessary documentary evidence which in the circumstances were reasonably and necessarily incurred by the Consultant in the expectation of completing the Works as per mutually agreed programme. Deleted |
| NEW CLAUSE-9 | Defect Liability Period (DLP): 42 Months |
| NEW CLAUSE-10 | <p>Integrated Testing and System Commissioning</p> <p>Integrated Testing: Tests on Completion shall also include Integrated Testing. The Consultant shall, following satisfactory completion of tests on his design works, equipment, sub-systems or system, perform, at the direction of the Employer, programme of tests to verify and confirm the compatibility and complete performance of his design works, equipment, sub-systems or system with the works, equipment, sub-systems or system provided by others.</p> <p>Compilation of Test Results: The results of the Integrated Testing and Commissioning shall be compiled and evaluated by the Employer and the Consultant</p> <p>Retesting: If the Works, or a part thereof, or a Section, fail to pass the Integrated Testing and Commissioning, the Employer may order such failed tests to be repeated with the same terms and conditions. If such failure and retesting result from a default of the Consultant and cause the Employer to incur costs, the same shall be recoverable from the Consultant by the Employer, and may be deducted by the Employer from any amount due, or to become due, to the Consultant.</p> <p>Failure to Pass Test: If the Works, or a part thereof, or a Section, fail to pass Integrated Testing and Commissioning and the Consultant in consequence proposes to make any adjustment or modification to the Works or a part thereof, or a section, the Employer may, with the approval of the Employer, instruct the Consultant to carry out such adjustment or modification, at his own cost and to satisfy the requirements of Integrated Testing and Commissioning within such time as the Employer may deem to be reasonable.</p> <p>Statutory Requirements: The Consultant shall carry out all statutory tests and trials, under the supervision of the Employer, necessary for obtaining sanction of the competent authority for opening the system for public carriage of passengers as mentioned in the Special Conditions of Contract.</p> |
| NEW CLAUSE-11 | <p>Conflict of Interest: The remuneration of the Tenderer shall constitute the Tenderer's sole remuneration in connection with this Contract or the Services and, the Tenderers shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Tenderers shall use their best efforts to ensure that any Personnel either of them, similarly shall not receive any such additional remuneration Neither the Tenderer nor the Personnel of either of them shall</p> |

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| | <p>engage, either directly or indirectly, in any of the following activities:</p> <p>(a) during the term of this Contract, any business or professional activities in India which would conflict with the activities assigned to them under this Contract</p> <p>The tenderer shall not be one of the following:</p> <p>(i) A firm which has been engaged by the Employer to provide consulting services for the preparation related to procurement for or implementation of this project.</p> <p>(ii) Any association/affiliation (inclusive of parent firms) of a firm or an organization mentioned in para (i) above.</p> <p>(iii) A Tenderer who lends, or temporarily seconds its personnel to firms or organizations which were engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.</p> <p>Jurisdiction of Court in case of dispute or differences arising on account of this tender: Any suit or application, arising out of any dispute or differences on account of this tender shall be filed in a competent court at Bangalore, Karnataka only and no other court or any other district of the country shall have any jurisdiction in the matter.</p> |
| NEW CLAUSE-12 | <p>Special/Acceleration Advance</p> <p>Employer at his sole discretion, may provide Interest bearing Special/Acceleration Advance to expedite works or to bring forward the completion date(s) and on account of immediate additional mobilization to complete balance works as targeted. The maximum cumulative Special/Acceleration Advance shall be 5% of the Accepted contract amount, which shall be released in stages as and when deemed appropriate as decided by the Employer. The advance released at a time shall not exceed 1% of the Accepted contract amount. The Special Acceleration Advance shall be interest bearing and secured by BG equivalent to 110% of the advance amount.</p> <p>Interest on Advance Payment: At the rate of SBI MCLR+2% interest per annum on reducing balances. The Interest rate is applicable from the date of submission of IPC/ advance request by consultant.</p> |
| NEW CLAUSE-13 | Deleted |
| NEW CLAUSE-14 | Deleted |
| NEW CLAUSE-15 | Language for communications- English |
| NEW CLAUSE-16 | <p>Time for access to Site</p> <p>Deleted</p> |
| NEW CLAUSE-17 | <p>Employers' Bank details for Letter of Credit</p> <p>(a) Bangalore Prime Corporate Branch Canara Bank, MG Road, Bengaluru-560001 IFSC Code – CNRB0002636 A/c No - 0430201012110</p> <p>(b) Issuance/ reimbursing branch for LC Shall be indicated later.</p> |
| NEW CLAUSE-18 | <p>18.1 Representations and warranties of the Consultant</p> <p>The Consultant represents and warrants to the Employer that:</p> <p>a) it is duly organised and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the</p> |

transactions contemplated hereby

- b) it has taken all necessary corporate and other actions under Applicable Laws to authorise the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement
- c) this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof
- d) it is subject to the laws of India, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising thereunder including any obligation, liability or responsibility hereunder
- e) the information furnished in the Bid and as updated on or before the date of this Agreement is true and accurate in all respects as on the date of this Agreement
- f) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its memorandum and articles of association or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected
- g) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement
- h) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement
- (i) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement
- (j) no representation or warranty by it contained herein or in any other document furnished by it to the Authority or to any Government Instrumentality in relation to Applicable Permits contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading
- (k) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for securing the contract or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Employer in connection therewith
- (l) all information provided by the bidder in response to the tender or otherwise, is to the best of its knowledge and belief, true and accurate in all material respects; and
- (m) nothing contained in this Agreement shall create any contractual relationship or obligation between the Employer and any Sub-Consultants, designers, consultants or agents of the Employer.

18.2 Representations and warranties of the Employer.

The Employer represents and warrants to the Consultant that:

- a) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated herein and that it has taken all actions necessary to execute this Agreement, exercise its rights and perform its obligations,

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| | <p>under this Agreement</p> <ul style="list-style-type: none"> b) it has taken all necessary actions to authorise the execution, delivery and performance of this Agreement c) it has the financial standing and capacity to perform its obligations under this Agreement d) this Agreement constitutes a legal, valid and binding obligation enforceable against it in accordance with the terms hereof e) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on the Employer's ability to perform its obligations under this Agreement f) it has complied with Applicable Laws in all material respects g) it has good and valid right to the Site. <p>18.3 Disclosure</p> <p>In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any obligation of either Party under this Agreement.</p> |
| <p>NEW CLAUSE-19</p> | <p>Disclaimer</p> <p>19.1 The Consultant acknowledges that prior to the execution of this Agreement, the Consultant has, after a complete and careful examination, made an independent evaluation of the Tender, Scope of the Project, Specifications and Standards, Site, local conditions, physical qualities of ground, subsoil and geology, traffic volumes, suitability and availability of access routes to the Site and all information provided by the Employer or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in New Clause 2.0/PCC and New Clause 18.2/PCC, the Employer makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumptions, statement or information provided by it and the Consultant confirms that it shall have no claim whatsoever against the Employer in this regard.</p> <p>19.2 The Consultant acknowledges and hereby accepts to have satisfied itself as to the correctness and sufficiency of the Contract Price.</p> <p>19.3 The Consultant acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 19.1/PCC above and hereby acknowledges and agrees that the Employer shall not be liable for the same in any manner whatsoever to the Consultant, or any person claiming through or under any of them, and shall not lead to any adjustment of Contract Price or Scheduled Completion Date.</p> <p>19.4 The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 19.1/PCC above shall not vitiate this Agreement, or render it voidable.</p> <p>19.5 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 19.1/PCC above, that Party shall immediately notify the other Party, specifying the mistake or error.</p> <p>19.6 Except as otherwise provided in this Agreement, all risks relating to the Project shall be borne by the Consultant; and the Employer shall not be liable in any manner for such risks or the consequences thereof.</p> |

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| <p>NEW CLAUSE-20</p> | <p>Completion Certificate</p> <p>20.1 Tests on Completion</p> <p>20.1.1 Deleted.</p> <p>20.1.2 Deleted.</p> <p>20.2 Provisional Certificate</p> <p>20.2.1 Upon completion of designs, the Employer shall satisfy itself that the designs have been successful. Upon such determination, the Employer shall issue to the Consultant a certificate substantially in the form set forth in relevant Schedule (the "Provisional Certificate"). The Employer may issue a Provisional Certificate even if certain works forming part of the Depot Construction Project are not yet completed and in such an event, the Provisional Certificate shall have appended thereto a list of outstanding items signed jointly by the Employer and the Consultant (the "Punch List").</p> <p>20.2.2 Upon issuance of the Provisional Certificate, the Consultant shall forward to the Employer copies of defectives rectification.</p> <p>20.2.3 Deleted</p> <p>20.2.4 The Parties hereto expressly agree that the Employer may, upon request of the Consultant to this effect, issue a Provisional Certificate for part of the Railway Project and the provisions of above Clauses shall apply mutatis mutandis to such Provisional Certificate. The issuance of the provisional certificate will not absolve the Consultant of its obligations to complete the remaining part of Railway Project.</p> <p>20.2.5 Deleted.</p> <p>20.3 Completion of Punch List items</p> <p>All items in the Punch List shall be completed by the Consultant within 90 (ninety) days of the date of issuance of the Provisional Certificate and for any delay thereafter, other than for reasons solely attributable to the Employer or due to Force Majeure, the Employer shall be entitled to recover Damages from the Consultant to be calculated and paid for each day of delay until all items are completed, at the lower of (a) 0.1% (zero point one per cent) of the Performance Security, and (b) 0.2% (zero point two per cent) of the cost of completing such items as estimated by the Employer. Subject to payment of such Damages, the Consultant shall be entitled to a further period not exceeding 120 (one hundred and twenty) days for completion of the Punch List items. For the avoidance of doubt, it is agreed that if completion of any item in the Punch List is delayed for reasons attributable to the Employer or due to Force Majeure, the completion date thereof shall be determined by the Employer in accordance with Good Industry Practice, and such completion date shall be deemed to be the date of issue of the Provisional Certificate for the purposes of Damages, if any, payable for such item under this Clause.</p> <p>20.4 Completion Certificate</p> <p>20.4.1 Upon completion of all items in the Punch List, the Employer shall issue a completion certificate substantially in the form (the "Completion Certificate") separately for and in respect of each Provisional Certificate issued.</p> <p>20.4.2 Deleted.</p> <p>20.5 Rescheduling of Tests</p> <p>Deleted.</p> |
| <p>NEW CLAUSE - 21</p> | <p>Deleted</p> |

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| NEW CLAUSE - 22 | <p>Liability And Indemnity</p> <p>22.1 General indemnity</p> <p>The Consultant will indemnify, defend, save and hold harmless the Employer and its officers, servants, agents, Government Instrumentalities and Government owned and/or controlled entities/enterprises, (the “Employer Indemnified Persons”) against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Consultant of any of its obligations under this Agreement or from any negligence under the Agreement, including any errors or deficiencies in the design documents, or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, or breach or default of this Agreement on the part of the Employer Indemnified Persons.</p> <p>22.2 Indemnity by the Consultant</p> <p>22.2.1 Without limiting the generality of Clause 22.1, the Consultant shall fully indemnify, hold harmless and defend the Employer and the Employer Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:</p> <ul style="list-style-type: none"> (a) failure of the Consultant to comply with Applicable Laws and Applicable Permits (b) payment of taxes required to be made by the Consultant in respect of the income or other taxes, suppliers and representatives; or (c) non-payment of amounts due as a result of services furnished to the Consultant. <p>22.2.2 Without limiting the generality of the provisions of this LIABILITY AND INDEMNITY, the Consultant shall fully indemnify, hold harmless and defend the Employer Indemnified Persons from and against any and all suits, proceedings, actions, claims, demands, liabilities and damages which the Employer Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other Intellectual Property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Consultant in performing the Consultant’s obligations or in any way incorporated in or related to the Project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Consultant shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Railway Project, or any part thereof or comprised therein, is held to constitute an infringement and its use is permanently enjoined, the Consultant shall promptly make every reasonable effort to secure for the Employer a license, at no cost to the Employer, authorising continued use of the infringing work. If the Consultant is unable to secure such license within a reasonable time, the Consultant shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part, or process thereof with non-infringing work or part or process, or modify the same so that it becomes non-infringing.</p> <p>22.3 Notice and Contest of Claims</p> <p>In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Agreement (the “Indemnified Party”) it shall notify the other Party (the “Indemnifying Party”) within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.</p> <p>22.4 Defence of Claims</p> |
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| <p>NEW CLAUSE - 23</p> | <p>22.4.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this Agreement, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnified Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.</p> <p>22.4.2 If the Indemnifying Party has exercised its rights under Clause 22.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).</p> <p>22.4.3 If the Indemnifying Party exercises its rights under Clause 22.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:</p> <ol style="list-style-type: none"> a. the employment of counsel by such party has been authorised in writing by the Indemnifying Party; or b. the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action; or c. the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defence of such action and shall have been so notified by the Indemnified Party; or d. the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either: <ol style="list-style-type: none"> (i) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or (ii) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement: <p>Provided that if Sub-clauses (b), (c) or (d) of this Clause 22.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defence of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.</p> <p>22.5 No Consequential Claims</p> <p>Notwithstanding anything to the contrary contained in this new clause 22, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.</p> <p>22.6 Survival on Termination</p> |
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| | <p>The provision of this new clause 22 shall survive the Termination of this agreement.</p> <p>Contents Of Terms of Reference</p> <p>23.1 All the contents, conditions, instructions, appendices etc. mentioned in Terms of Reference shall have an overriding effect over any contradictory / different conditions, if any, in CC or PCC or anywhere else in the bid document and the provisions of Terms of Reference only shall apply in all such cases.</p> <p>23.2 The decision of Employer is final in this regard.</p> |
| NEW CLAUSE - 24 | Irrespective of whether its mentioned Employer in the Bid Document, the instructions of the Employer will have an overriding effect over the instructions of Employer. |

APPENDIX - A

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK

(The laws as current on the date of bid opening will apply)

- a) **Employees Compensation Act 1923:** The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) **Payment of Gratuity Act 1972:** Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years' service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) **Employees Provident Fund and Miscellaneous Provisions Act 1952 (since amended):** The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:
 - (i) Pension or family pension on retirement or death, as the case may be.
 - (ii) Deposit linked insurance on the death in harness of the worker.
 - (iii) Payment of P.F. accumulation on retirement/death etc.
- d) **Maternity Benefit Act 1951:** The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) **Contract Labour (Regulation & Abolition) Act 1970:** The Act provides for certain welfare measures to be provided by the Consultant to contract labour and in case the Consultant fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Consultant is required to take license from the designated Officer. The Act is applicable to the establishments or Consultant of Principal Employer if they employ 20 or more contract labour.
- f) **Minimum Wages Act 1948:** The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- g) **Payment of Wages Act 1936:** It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- h) **Equal Remuneration Act 1979:** The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- i) **Payment of Bonus Act 1965:** The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.7000/-per month or the minimum wage as fixed by the appropriate government whichever is higher. The Act does not apply to certain establishments. The newly set-up establishments are

exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.

- j) **Industrial Disputes Act 1947:** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) **Industrial Employment (Standing Orders) Act 1946:** It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Employer.
- l) **Trade Unions Act 1926:** The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- m) **Child and Adolescent Labour (Prohibition & Regulation) Act 1986:** The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- n) **Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979:** The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home up to the establishment and back, etc.
- o) **The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:** All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- As per Central Government's Notification No.S.O.2899 dated 26.09.1996 under this act, the cess shall be levied @1% of cost of construction works which shall be deducted from each bill of the payment due to the Consultant.
- p) **Factories Act 1948:** The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.
- q) **The Employees State Insurance Act, 1948 (Act No. 34 of 1948) (Provisions as extended from time to time):** An Act to provide for certain benefits to employees in case of sickness, maternity and 'employment injury' and to make provision for certain other matters in relation thereto.

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SECTION - 8

TERMS OF REFERENCE, SCOPE OF WORK AND GENERAL INFORMATION

SECTION – 8 TERMS OF REFERENCE, SCOPE OF WORK AND GENERAL INFORMATION

PROJECT BACKGROUND

- a. Bengaluru is the fifth largest metropolis in India and is one of the fastest growing cities in Asia. It is also the capital of Karnataka. It is globally recognized as IT capital of India and also as a well-developed industrial city. The city which was originally developed as a Garden City over the years, slowly transformed into an industrial and software hub of India. Emergence of IT sector has overshadowed other areas of development and has metamorphosed the city into a global hub. The establishment of the IT hubs on the outskirts has converted the city and its surroundings into Silicon Valley of India. It has also caused an urban sprawl around, to some extent lop sided towards south and east. It has become a commercial, administrative and military centre for the Region because of its salubrious climate and cosmopolitan nature of people. It was also known as pensioners' paradise with well-developed residential areas, roads with well grown trees, good commercial establishments, shopping malls etc.
- b. The urban infrastructure growth however, is unable to cope up with the expansion of the city resulting in traffic congestion and long commuting time for residents. To increase the share of public transport in Bengaluru, Government of Karnataka and Indian Railways or Ministry of Railways had commissioned many studies though RITES Ltd., for introduction of Suburban Railway Services in Bengaluru. The studies analysed the existing Railway network and suggested improvements / augmentation by way of implementation.
- c. However, to run Suburban Railway System in Bengaluru, separate tracks need to be planned, which may involve land acquisition. The land acquisition is generally a costly and time-consuming affair and hence, most of the earlier proposals remained non-starter. Railways have now decided to explore the possibility of introducing / enhancing the Suburban Railway Services in Bengaluru, with minimum land acquisition. Towards this end, Railways entrusted the work of carrying out the Feasibility of running Suburban Railway services along the existing Railway network of Bengaluru.

PROJECT HIGHLIGHTS

- a. BSRP is a flagship project being executed by K-RIDE, a joint venture of Govt of Karnataka and Ministry of Railways.
- b. The 4 corridors of BSRP with about 148 km of Railway line will act like a connecting bridge between Rural and Urban areas. For details, see the system map provided in the bid document.
- c. The K-RIDE infrastructure project is being built at a projected cost of ₹ 15,767 crore. It will provide a delightful travel experience for travellers across different sectors and streams. The trains will be air-conditioned (Metro-like with automated double-leaf sliding doors).
- d. The 57 suburban stations will be enabled with Metro-like facilities and promote smart card-based cashless travel for suburban Railway users.
- e. BSRP planned to setup two (2) nos. of depots at Akkupete (near Devanahalli) in North Bangalore spreading in about 49.42 Acres area and at Soladevanahalli (Near Chikkabanavara) in South-West Bangalore in an area of about 50 Acres. K-RIDE plans to construct about 77 stabling and 16 inspection & work shop lines to cater rolling stock for all the 4 corridors.
- f. System Description of Bangalore Suburban Rail Projects

The Rail Systems are based on:

i. Continuous Automatic Train Control (CATC)

This is based on CBTC which consists - Automatic Train Protection (ATP), Automatic Train Operation (ATO) and Automatic Train Supervision (ATS) sub systems. The train borne Automatic Train Control system will consist of Automatic train Operation (ATO) and Automatic train Protection (ATP). This will work on fixed block principle.

ii. Automatic Train Protection (ATP)

The primary function of the train control system. This sub system will be inherently capable of achieving the following objectives in a fail-safe manner. Line side signals will be planned at diverging routes (i.e., at points & crossings), which shall serve as backup signalling in case of failure of ATP system. However, in such cases, train speed will automatically be restricted to 25 km/h. The cab borne equipment will be of modular sub-assemblies for each function for easy maintenance and replacement. The ATP assemblies will be fitted in the vehicle integrated with other equipment of the rolling stock.

iii. Automatic Train Operation (ATO)

The system will operate the trains automatically from station to station within the safety envelope of ATP and open the train doors on the correct side. In conjunction with ATP/ATS, ATO can control the dwell time at stations and manage the train running in accordance with headway/ time table.

iv. Automatic Train Supervision (ATS)

A train supervision system will be installed to facilitate the monitoring of train operation and also remote control of the station. The train supervision will log each train movement and display it on the workstation with each Traffic Controller at CC and on the workstation placed in the Station Control Room (SCR) with each Station controller. The centralized system will be installed in Control Centre (CC). The CC will have a projection display panel showing a panoramic view of the status of tracks, points, signals and the vehicles operating in the relevant section/ whole system providing the following main functionalities:

1. Automatic Route Setting
2. Automatic Train Regulation
3. Continuous Tracking of Train Position
4. Display Panel & Workstation Interface
5. Link to Passenger Information Display System for online information
6. Computation of train Schedule and Timetable
7. Issue special commands to train such as train hold, skip station etc.

g. Rolling Stock

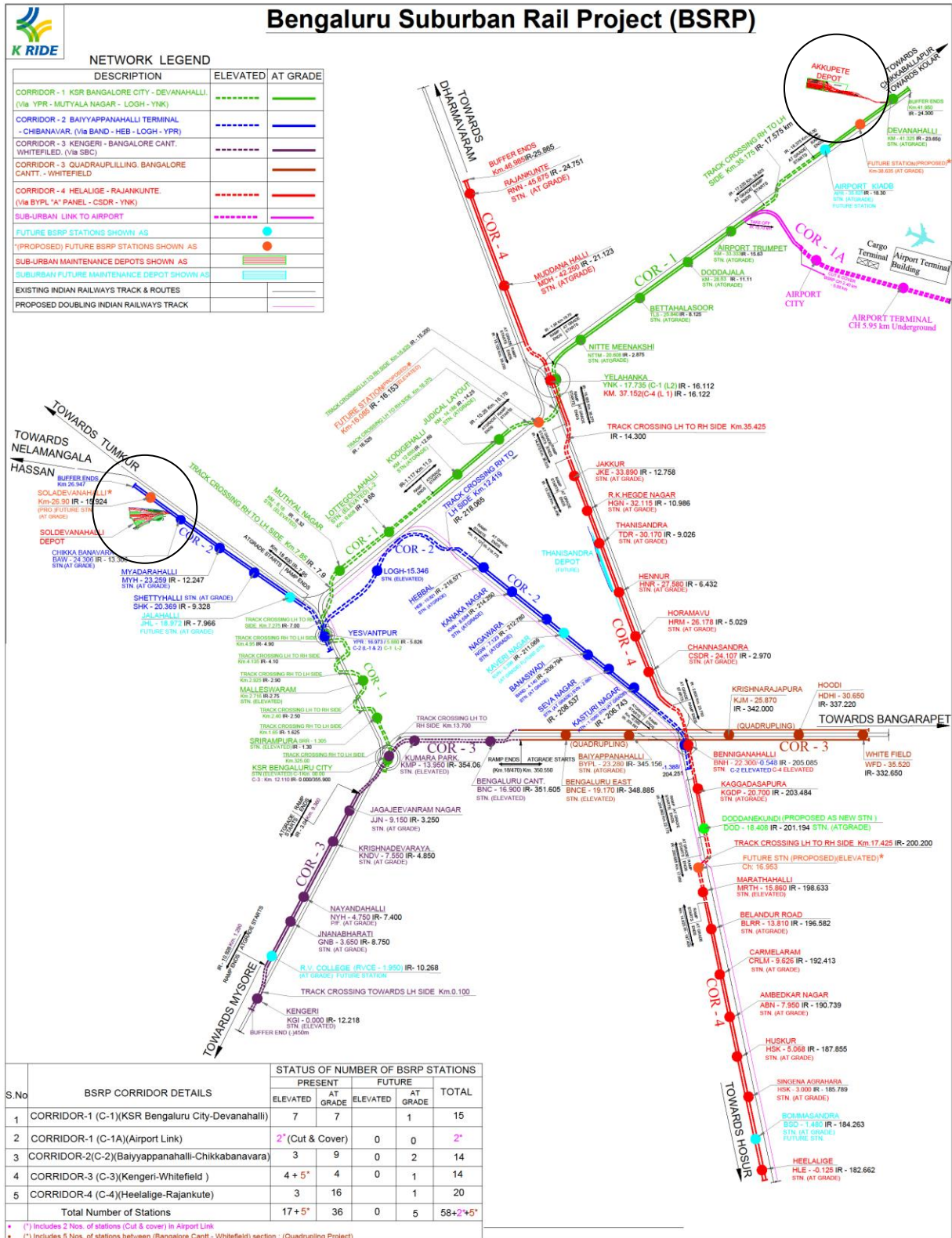
To meet the traffic demand, 3.2 m wide & 21.7 m length AC rolling stock is recommended for running suburban rail services in Bengaluru.

The Design speed is 90 kmph and operational speed shall be 80 kmph (except at stations). The operating speed at stations shall be 50 kmph. The operating speed in depots shall be 25 kmph.

- h. Train power supply shall be fed by 25KV- A.C. OHE System

(Any other relevant parameters of the proposed system can be referred from SOD of BSRP in website kride.in)

- i. BSRP network map showing the location of Depots is attached below for reference:



TERMS OF REFERENCE (TOR)

1. OBJECTIVE

- a) The objective of this work is to provide expert Detailed Design Consultancy services for planning, Designing of alignment, Designing of depots with all allied structures including Architecture, preparation of specifications, estimates and rendering assistance in preparation of bid document etc. until awarding of construction tender, assistance during installation and commissioning, interface management, Design services during construction phase, ensuring full social and environmental safeguards compliance in accordance with Government (National and State) legal framework.
- b) The DDC shall possess ISO: 9001 Certification for their quality management systems. If this certification is not available, the same shall be obtained within a reasonable period from the date of issue of LOA and a copy of the certification submitted to K-RIDE. The certification shall be maintained throughout the tenure of the engagement of DDC.
- c) The DDC shall be a proactive partner of the Employer in successful implementation of the Project (Depots). The DDC is expected to have adequate experience of delivering design for such type of infrastructure, knowledge of trends in industry and working with stakeholders including handling multiple government stakeholders, project affected people and communities, civil society organizations/non-government organizations, and workers, among others. The key objectives of the DDC shall include but not be limited to the following:
 - i) To ensure effective stakeholder engagement/consultation and management to achieve their alignment to overall objectives of the design
 - ii) To align global best practices and technology solutions keeping in view durability, efficiency, issues of obsolescence, economy etc.
 - iii) To plan and assist in implementation of the design while ensuring durability, maintainability and reliability of service
 - iv) To adopt appropriate technology solutions, planning approaches, to help minimize project life cycle cost, cost and time overruns, disputes and issues related to Design
 - v) To assist in the bid process of Construction tender and Plant & Equipment tender, system integration and interface management
 - vi) To support the Employer in implementation of design, design assistance during construction, assisting, installation, testing & commissioning and their services conforming to the design, design evaluation of construction works etc.

2. BRIEF SCOPE OF WORKS:

Ecological Constraints and Complex Terrain at the proposed BSRP Depots demand efficient planning of the layout, optimization of building areas and proper design of vertical alignment etc. The brief scope is as mentioned below:

- 2.1 **Survey:** The basic survey details of the Depots will be shared by the Employer to DDC. The DDC shall evaluate design parameters required for Design of both depots by carrying out any additional surveys (if required) and validate the survey details given by the Employer and the complete geotechnical investigation of both the depots.
- 2.2 **GTI:** GTI (Geo-technical investigation) of the depots has not been carried out. Geo-technical investigation of both the depots forms a part of the scope of this work. The cost of such investigations shall be included in the tender price. The list of investigations to be carried out is mentioned in Appendix-C of this section. The DDC shall prepare a Geotechnical survey report and a Geotechnical interpretation report incorporating the Geo technical data and submit to the Employer for acceptance.
- 2.3 **Design Factors:** The DDC is required to design the vertical alignment of both the depots with due consideration to the rainfall intensity, run-off data and High Flood Level (HFL) data for last 100 years and other factors as considered necessary for the design. The Formation level, Rail level etc. are to be so determined that they, in no way, affect the alignment of Depot exchange lines (the lines that connect Depot with the main corridors) alignment.
- 2.4 **Calculation of the earthwork volume:** Calculation of the earthwork volume for cutting and filling of the Depot land to achieve the desired levels forms a part of the scope. The DDC shall carry out the Utility

identification of all Utilities (above and below ground level) and prepare the diversion schemes (for those Utilities needing diversions) and the relevant drawings showing the diversion plans. The DDC shall coordinate with the concerned local authorities viz., BBMP, BDA, BESCOM, BWSSB, KPTCL, KPWD, SWR, Forest Department (GoK), Revenue Department (GoK) etc. for approvals and obtain approval of the concerned local authorities on the Diversion plans. The Employer will facilitate by way of issuing letters and discussing with the senior officers of the concerned departments as and when required. However, the complete legwork, liaison, coordination and arrangements at field level are the responsibility of the DDC.

- 2.5 Based on field survey reports, Geotechnical interpretation reports, Utility constraints etc., the DDC shall propose the vertical alignment for various tracks and the founding levels for various structures.
- 2.6 The various structures are such as, but not limited to,
- a. Workshop Buildings
 - b. Control Centre
 - c. Ancillary Buildings & Staff Quarters
 - d. Required facilities for Inspection of Rolling Stock and theirs overhauling
 - e. Stabling lines Formations and plan
 - f. Rolling Stock Servicing & Inspection bays etc.
 - g. Auto wash plant, control and equipment room
 - h. Wheel Lathe
 - i. Axle parking facility
 - j. Overhauling rooms
 - k. Central compressor house
 - l. Time office
 - m. Bogie storage
 - n. Depot equipment maintenance cum store
 - o. Guest house for Employer
 - p. Training room
 - q. S&T, AFC Equipment storage cum maintenance room
 - r. Server room

NOTE: All the above facilities need not be/may not be standalone buildings. They can/may be clubbed as per the site feasibility and an economical proposal shall be submitted to the Employer for approval.

- 2.7 As a part of preparation of bid document for construction of depots, the DDC shall provide construction schedule of each component of depot.
- 2.8 The DDC shall prepare final layout of Depot using various Domestic and International standard designs in consultation with the Employer.
- 2.9 The DDC shall perform cost-effective detailed designs of facilities such as, but not limited to:
- a. Civil (other than structural)
 - b. Structural
 - c. Track
 - d. Architectural
 - e. Electrical
 - f. Interior Design
 - g. Gentries
 - h. Workshops
 - i. Repair bays
 - j. Approach roads and Internal roads
 - k. Grade separators (if any)
 - l. Control Centre
 - m. Stores
 - n. Training
 - o. Drainage
 - p. Washing and Cleaning of trains

- 2.10 The DDC shall also include following design details:
- Drainage and sewerage systems for entire Depot buildings and tracks
 - Two independent Depot entries - one for main entry and the other for alternative entry
 - Internal roads connecting all the Depot facilities
 - Fencing and boundary walls, to avoid trespassing
 - Approach tracks to the depot
 - Auxiliary power supply for Depots
 - HVAC and firefighting works
 - Location and Layout of Auto wash plant
 - Control and Equipment room
- 2.11 The DDC shall prepare interface design requirement for the tracks laid inside inspection bays, workshops, washing aprons etc.
- 2.12 The DDC shall assess the requirement of Depot equipment and machinery and prepare the complete list with specifications - including machinery at workshops for efficient maintenance of rolling stock including emergency breakdown equipment.
- 2.13 From the operational requirement, DDC shall design one additional stabling line/ loop line with platform at Soldevanahalli. The DDC shall also study various alternatives for connecting Soldevanahalli Depot from Chikkabanavara Station and Akkupete Depot from Devanahalli Station. The DDC shall submit to the Employer the vertical alignment and other items of work as mentioned above and obtain approval to proceed with the development of Depot design.
- 2.14 The DDC shall prepare cost estimation for calling Depot construction tenders and Plant & Equipment tenders (in consultation with the concerned contractor/agency/advisor) as directed by the Employer. The scope of tender includes the following works:
- Civil Works including track works
 - Structural works
 - Electrical and Mechanical works
 - Specification for Depot equipment
 - Utility works for Depot workshops
 - Specification for Plant and Machinery
- 2.15 The DDC shall assist in clarifying the queries of the bidders for the above work.
- 2.16 Preparation of plan, design and coordination during Design and Construction phase, within the target dates, as directed by the Employer forms a part of the scope of the work.
- 2.17 Design alterations/modification, if any, required during construction stage is in the scope of the work
- 2.18 Preparation of detailed design quality control report for depot forms a part of the scope of the work.
- 2.19 Preparation of Civil Structural Drawings (CSD), Structural Opening Drawings (STROD), Structural, Electrical, Mechanical Drawings (SEM), Mechanical, Electrical and Plumbing Drawings (MEP), Equipment Layouts and Interface Coordination Drawings (ICD) are in the scope of the work.
- 2.20 The DDC shall liaise with system-wide contractors for complete interfacing until finishing of all components and structures of depots
- 2.21 Statutory requirements for designs from various local authorities is under scope of DDC
- 2.22 During the construction stage, DDC has to carry the notes on quality of the design work implemented on site with periodical visits and advise the Employer on necessary actions required
- 2.23 The DDC will carry out review of the construction work at frequencies as directed by the Employer and suggest the Employer on time and cost parameters with respect to design
- 2.24 Due to site conditions or unforeseen conditions, DDC has to change the design drawings or incorporate necessary design requirements suggested by Employer, if required
- 2.25 The DDC shall provide detailed design drawings (Room layout, Cable Routing, Cable Trenching, etc.) of concerned rooms i.e., Control Centre (CC), Backup Control Centre (BCC), Signalling Equipment

Room (SER), Telecom Equipment Room (TER), Central Equipment Room (CER), Signalling Maintenance Room (SMR), Telecom Maintenance Room (TMR), Uninterrupted Power Supply (UPS) Room, AFC simulation Room, S&T Simulation Room etc., and integrate with S&T contractor requirements

- 2.26 The DDC shall collect and integrate detailed interface requirements (space, doors, mechanical load, lighting, false flooring, cable raceways (routing), Embedded conduits, vertical risers, cut-outs, slab openings, air conditioning & ventilation arrangements, etc.) for concerned rooms from DDC/S&T contractor
- 2.27 The DDC shall check and verify the design details of radio masts on buildings, area and arrangement of fixtures, routing requirements for antenna cable, aviation warning lights and Earthing arrangements of the mast. Shall also check the adequacy of maintenance access for the radio mast, antenna etc.
- 2.28 The DDC shall advise the access control and intrusion detection requirement, as well as monitoring requirements, for various locations in the CC, Depot perimeter fence and gate sensors and for access control vehicle barrier. Shall design the doors to be suitable for access control system
- 2.29 The DDC shall incorporate all cable routings in combined services drawings and shall design the cable routing and containments within the yard, buildings and sheds in consultation with the concerned.
- i. The DDC shall validate the locations and fixing arrangements of all heavy S&T equipment like CCTV cameras, TDS clocks, PA speakers, CCTV monitors, signalling equipment's etc. in structural and detailed design
 - ii. The DDC shall validate the location and installing procedure of lighting protection system
 - iii. The DDC shall coordinate with S&T contractor to finalise the route for the power cable from UPS room to CER, CC, SER, TER, SMR, TMR and all Depot area wayside Equipment (Signals, Axle Counters, Point Machine, Radio Access Points, Tetra Tower, GPS Antenna etc.)
 - iv. The DDC shall liaise with S&T contractor for Earthing Requirements of all S&T installations.
 - v. As BSRP signalling system is of CBTC, the signal arrangement for the Depot approach track and Depot can be of lower grade of operation as the train movement is controlled by Operations Control Centre (OCC)
- 2.30 The DDC shall study the rollingstock requirements and their allied buildings detailing as per the table mentioned below:
- i. Calculation of Inspection, repair and stabling lines required for each depot
 - ii. Estimation of manpower in each Depot based on the maintenance plan
- 2.30.1 RS requirements in Depot (Near IBL and WSL)
- i. Location, layout Inspection Bay line (IBL) requirements
 - ii. Location, layout Work shop line (WSL) with embedded track and pits requirements
 - iii. Location, layout Stabling lines ballasted with path on both sides for inspection requirements
 - iv. Location, layout Unloading track for unloading coaches' requirements
 - v. Location, layout Dedicated VAC maintenance in workshop line requirements
 - vi. Intensive washing line without OHE
 - vii. Location, layout Wheel lathe line requirements
 - viii. Platforms at roof level for cleaning VAC and other overhead equipment maintenance in (IBL) requirements
 - ix. Overhead electrical equipment OHE isolators for IBL's requirements
 - x. Compressed air lines at ground level and roof platform level in IBL requirements
 - xi. Pressurised water lines at train roof level for VAC cleaning requirements
 - xii. Location, layout Wheel/axles parking area requirement
 - xiii. Dedicated Air and water line in WSL for VAC and other train repair and cleaning requirements
 - xiv. Dedicated cleaning area for washing and Drying HVAC filters requirements
 - xv. Test bench and overhauling rooms - Compressor, Brake callipers requirements
 - xvi. Test bench and overhauling rooms - Pantograph Door

- xvii. Test bench and overhauling rooms - VCB
- xviii. Test bench and overhauling rooms - Battery
- xix. Test bench and overhauling rooms - CI, APS and control units
- xx. Test bench and overhauling rooms Traction motors
- xxi. Location, layout Tool room requirements
- xxii. Location, layout Time office
- xxiii. Central compressor house requirements
- xxiv. Location, layout Bogie and wheel overhauling area requirements
- xxv. Bogie storage area
- xxvi. Bogie washing and sand blasting area
- xxvii. Overhead cranes in IBL and WSL requirements including size of columns, gantry, cross beam, electrical rails, overhead walkway for crane operator, requirements
- xxviii. Wiper water filling stations at end of line in IBL and SBL requirements
- xxix. Location, layout RRM room near to wheel lathe line requirements
- xxx. Location, layout Charging and parking area for Diesel shunter and battery shunter, Fork lift, Scissor lift requirement
- xxxi. Location, layout Test track requirements
- xxxii. Depot-in-charge office with support staff
- xxxiii. Other officers' rooms with support staff
- xxxiv. Conference room large
- xxxv. Conference room of 10 seats
- xxxvi. Rolling stock Training Hall
- xxxvii. Supervisor office with staff
- xxxviii. Rolling stock tool room and Rolling stock store
- xxxix. Dress change and wash room for women
 - xl. Change room with lockers and Wash room
 - xli. Lunch room/canteen area
 - xlii. Visitor room
 - xliii. Paint room/paint booth
 - xliv. Drawing office/plans/information
 - xlv. Lab room
 - xlvi. Brake and compressor overhauling area
 - xlvii. Security/monitoring room
 - xlviii. Depot equipment maintenance cum store room
 - xlx. Welding and brazing training room cum sheet metal cutting room
 - I. First aid room
 - li. Eye wash area
 - lii. Turn tables in WSL for bogie movement
 - liii. Ratings and make of P&M equipment (at least 3) with scope and specifications and international bidding cost
- xlx. Guest House for KRIDE officials

NOTE: All the above facilities need not be/may not be standalone buildings. They can/may be clubbed as per the site feasibility and an economical proposal shall be submitted to the Employer for approval.

2.30.2 Store bifurcation

- i. Store and store officer
- ii. Location, layout Store requirements both main and subsidiary.
- iii. Storage area bifurcation for all the departments
- iv. Scrapyard
- v. Hazardous waste
- vi. Metal scrap
- vii. Zero value items
- viii. Flammable material
- ix. Chemical storage room
- x. Scrapped glass storage

- xi. Doors and windows storage
- xii. Lorry parking area

2.30.3 Depot approach

- i. For coach unload (considering calculation of radius of curvature)
- ii. Material unloading

2.30.4 Training Room

- i. Classrooms (training rooms) for trainees
- ii. Examination hall (computerised)
- iii. Hostel rooms for trainees and training faculty
- iv. Library and reading rooms
- v. Space for keeping models

2.30.5 General Requirements of Depot

- i. Sewage treatment plant (STP)
- ii. Effluent treatment plant (ETP)
- iii. Portable water circulation diagram
- iv. Hydrant water circulation diagram
- v. Electrical wiring diagram (Both HT and LT)
- vi. Machineries and plant layout location and foundation requirement
- vii. Work permit/Contract staff handling room
- viii. Information Office/cell/telephone/internet/communication cell rooms
- ix. S&T, AFC equipment storage cum maintenance room
- x. PSS and backup CC
- xi. Record room
- xii. Recreation facility for Trainees and employees
- xiii. Indoor (Table tennis, carrom, Badminton)
- xiv. Outdoor (Volley ball, mini cricket and football)
- xv. Landscaping (Gardening)
- xvi. Depot Entry Arch design
- xvii. Location layout for emergency staff quarters
- xviii. Approach road for quarters
- xix. Location layout for Solar panels fixing
- xx. DG rooms (essential and non-essential connected to DG set)
- xxi. Scope for future expansion
- xxii. Watch towers
- xxiii. Control Centre (CC)
- xxiv. Server Room
- xxv. Floor for all admin and other

Any additional design requirements not covered above from the various systems will be intimated during the Design stage and the same shall be carried out by DDC at their own cost.

2.31 Electrical Scope of Works

The detailed studies required to be submitted by DDC are as follows:

2.31.1 Power Supply:

The DDC is required to give the detailed electrical arrangement of Depot. It is responsible for doing the load calculations of auxiliary and traction power supply. The calculation of voltage drop along with the Power Factor improvement analysis needs to be done. Deciding the requirement of auxiliary and traction substation, Space requirement of RSS/ASS & rating of traction & auxiliary transformer along with all equipment for both HV & LV side including protection system is part of the scope. The DDC needs to assess the availability with the nearest Grid Sub Station (GSS) and right of way. The DDC needs to survey the land available for the construction of RSS/ASS. The DDC needs to prepare the earthing arrangement for the Depot, RSS & ASS. The optimum

utilization of renewable energy sources needs to be ensured keeping the available resources in mind.

2.31.2 Building Electrification along with Indoor & Outdoor Lighting:

The DDC needs to conduct the illumination studies and propose the indoor and outdoor lighting arrangements for depots. The design of system shall be compliant with the ECBC guidelines to receive the highest ECBC rating.

2.31.3 Traction Substation (TSS):

The DDC has to specify requirement of traction power for testing & commissioning of Rolling Stock maintained at each depot.

The Basic parameters considered for design are as follows:

Electrical System Redundancy:- 100%

The DDC is required to obtain the following data for the electrical design from the relevant Government agencies in Bangalore. All the details and documents have to be submitted to the Employer for approval.

| Sr. No. | Item | Details |
|---------|----------------------|--|
| 1 | Temperature | Minimum Temperature (ambient) Maximum design temperature (ambient) Mean temperature adopted |
| 2 | Rainfall | Rain occur generally during Monsoon from June to September and occasional showers in December and January are also experienced |
| 3 | Humidity | Maximum relative humidity Minimum relative humidity |
| 4 | Wind pressure | Maximum wind pressure adopted for design |
| 5 | Thunder storm | The region is subjected to thunder during June to September. Isoceraunic level of average 30 thunderstorms per year as per relevant IS standard. |
| 6 | Nature of atmosphere | SPM SO ₂ NO ₂ RSPM The expected pollution levels in future are likely to be higher than current figures. |
| 7 | Earthquake | Design as per relevant zone |

2.31.4 The list of Electrical studies/ Drawings pertaining to Depots to be submitted by DDC are:

- a) Structure Erection Drawing
- b) Feeder Drawing
- c) Power Supply Distribution, Switching Stations and Booster Transformers
- d) Cable Run Layout Plan and the Erection Drawings for High Voltage Cables from Grid Substation to RSS
- e) Total Supply System Layout Plan,
- f) Location Plan for Power Installations and Power Schematic Diagram.
- g) Single Line Diagram of RSS, TSS, AMS & ASS
- h) Overall General Arrangement Drawing of RSS and ASS
- i) Protection Drawings of RSS & ASS & Extension Bays at Grid Sis (if required Metering and Arrangement of RSS & ASS and at Grid SIS
- j) Location Plan and Schematic Diagram Layout Drawings of RSS & ASS

- k) Power and Control Cable Run Layout Diagram
- l) Structural Assemble and Structures Drawings
- m) Foundation Layouts Drawings
- n) Control Room Panel Layout Diagram
- o) Control, Protection Scheme and Metering Arrangement Drawing
- p) Earthing System Layout Drawings for RSS & ASS
- q) Earthing and Bonding Arrangement Drawing Entire System and Lighting Protection Plan of layout
- r) Power Supply Schematic and Wiring Layout Diagram
- s) Control Wiring and Equipment Interface Diagram
- t) Other General Layout Drawings
- u) Fencing Layout Bonding/Earthing Layout
- v) Miscellaneous Drawings
- w) Employment Schedule and Charts
- x) Layout Drawing of OHE & PSI Depot

The DDC's design of the works shall comply with the Indian Green Building Council (IGBC). The DDC shall perform detailed design of Green Energy Generation System in Depot using solar panels and maximize such power output and use the same to meet the energy requirement of Depot and reduce dependence on power supply from grid. The DDC shall consider using LED lighting devices to the maximum extent in order to control energy consumption in the depot.

2.32 Scope of Track Design Services for Depots

- a. The track structure shall be with 60 Kg UIC wear resistant Rails 880 Grade 60kg UIC wear resistant rails. On elevated corridor, the track will be of ballast-less type (BLT) and on At-grade alignment, the track will be provided with 350 mm ballast cushion, on PSC sleepers at 1660 nos./km.
- b. The sleeper spacing shall be 65 cm.
- c. The ballast shall be of 65 mm nominal size with a cushion of not less than 300 mm for test track (900m) and 250 mm in other Depot tracks.
- d. The track in the coach wash plant area shall be laid on ballast less plinth beam including fastenings as used on the viaducts.
- e. Transition slabs shall be proposed wherever there is change from Ballast less track to ballasted track and vice-versa.
- f. The track inside the workshops, coach unloading area etc; shall be designed as embedded track.
- g. The track inside the inspection shed shall be designed to be laid on short columns of suitable height and spacing.
- h. All the turnouts in Depot shall be 1 in 8.5 generally with lead radius of 140 m or 190 m in special case. In case where turnout is to be laid in horizontal curvature, it shall be 1 in 9 with lead radius of 300 m.
- i. The track layout shall depend on the operational and functional requirements of BSRP. So, it shall be designed to suit the layout of the Depot functional areas.
- j. The functional areas shall be designed to have least number of movements of Rolling Stock.
- k. The SRJs of the turnouts shall be located in such a way that the turnouts particularly in a cluster do not overlap. This has to be done by superimposing the layout of the turnout sleepers.
- l. The points shall be serially numbered. The chainages of the SRJs and Fouling Marks shall be marked in the drawing and a separate list furnished.
- m. The stipulations of the SoD shall be strictly followed, particularly for points and curves.
- n. Proper drainage shall be designed for collection and discharge of surface runoff water / storm water during monsoon.

- o. The requirement of minimum straight for abrupt change of curvature and cant deficiency while train negotiating a reverse curve, compound curve or a curve followed by straight or vice-versa shall be checked. Except on test track, the horizontal curves on other Depot tracks shall be designed without transition curve.
- p. No cant needs to be provided in horizontal curves in Depot track except test track.
- q. Depot track layout shall be checked for provision of derailing switch. Proposal specifying the name of track as per requirement shall be submitted.
- r. Depot track layout shall be checked for feasibility of CWR based on past experience from other Metro / IR Projects and the tracks shall be designed as CWR, if technically feasible.
- s. Location of insulated rail joints, as required, shall be marked on the track layout.
- t. All dead ends of Depot tracks shall be planned with friction type buffer stops. Sufficient total occupancy length shall be kept while calculating the total length of the track. Impact speed shall be considered as 25 kmph for test track and 10 kmph for other Depot tracks. Deceleration of 2m/sec^2 shall be considered for calculation of sliding distance of buffer stop.

3 SERVICES TO BE PERFORMED BY THE DESIGN CONSULTANT PRIOR TO THE AWARD OF CONSTRUCTION CONTRACTS

3.1 Information

The DDC shall study all the available information and drawings issued or made available in the Scope of Services, carry out all necessary analysis, and request for any further information or data which is necessary for its design development from the Employer, which will be provided, if available.

3.2 Design Alternatives

- 3.2.1 The DDC shall prepare conceptual design drawings. Based on these drawings, the DDC shall develop alternative layouts and designs for Structural, Architectural, E&M and other facilities of the Depot. The DDC shall provide alternative designs for Depot layout. Steel-structures shall be designed as Pre-Engineered Buildings, as far as possible. Comparative analysis (Technical as well Financial) of both Conventional and Pre-Engineered type of steel structures shall be submitted by the DDC to the Employer, to take a final decision in respect of each structure.
- 3.2.2 The objective shall be to reduce construction cost, increase the efficiency of the operations without adversely affecting required transit system functions such as capacity, functionality, service life, reliability, aesthetic appearance, economy of operation or ease of maintenance and which shall not cause unnecessary extension of design or construction time.
- 3.2.3 Design alternatives shall be presented within the time frame mentioned in the list of key dates.
- 3.2.4 Each design alternative shall be presented in sufficient detail to clearly define the proposed design alternative including:
 - (a) A description of the difference between the conceptual design and the proposed design alternative and the comparative advantages and disadvantages of each
 - (b) Clearly illustrated sketches, drawings, diagrams, calculations, published reports or other means that aid in evaluation
 - (c) A detailed estimate of the amount of savings in construction cost
- 3.2.5 If the design alternative is approved by the Employer, all further work of detailed design, drawings, etc. shall be done as per the approved alternatives without any extra cost to the Employer.
- 3.2.6 The DDC shall provide the Employer with all the information relevant to the Design. The Information shall consist of material in the form of descriptions of the works executed with similar design and the resources and manpower employed, and shall include all relevant drawings and sketches.
- 3.2.7 All costs associated with the Scope of services including all associated requirements shall be included in the Lump Sum price quoted by the DDC.

- 3.2.8 The DDC shall study the cost implications of ballast-less track in the entire depot and submit a report showing the cost comparison ballast less and ballasted track along with advantages and disadvantages of both. A hybrid model shall also be studied duly limiting the scope of ballast-less track to essential locations and report prepared. The reports of all the above shall be submitted along with layout plan of the Depot to the Employer, to take a final decision.

3.3 Detailed Design

- 3.3.1 The DDC shall prepare detailed designs based on the requirements provided in the drawings and documents issued to it. If the DDC disagrees with the design requirements of the specified works, it may propose alternative designs to the Employer for approval. Upon approval, the DDC shall completely design and detail the works, provide Tender and Contract Drawings and other documents for the Construction contract and be fully responsible for such design and detailing.
- 3.3.2 The detailed design of the specified works and the incorporation of all system-wide requirements are the responsibility of the DDC by interfacing with System-wide Contractor's Designer. The detailed design shall be developed from the drawings, specifications and design criteria, if any, issued to the DDC by the Employer. Any critical difficulty identified shall be immediately brought to the attention of Employer, but not withstanding that, the DDC shall remain totally committed to the overall integrity of the design, if necessary, actively seeking advice, information and clarification so as to avoid abortive/repetitive work.
- 3.3.3 The DDC shall incorporate in its design, the relevant seismic criteria and earthquake design, as required by the design criteria, particularly for Bangalore region.
- 3.3.4 The DDC's design shall take into account the installation requirements of the system-wide information listed below, which will involve the provision of openings, conduits, fixings, bases, plinths and loadings. The DDC shall make provision in its design programme for the inclusion of these requirements at a later date (as they cannot be fully determined until the award of the system-wide contracts) and for appropriate interfacing with such designated contractors/works. The DDC shall incorporate the requirements of the system-wide contractors into its design as appropriate and as they become available. Any change/alteration occurring at and during various phases of interaction/interface with such system-wide Contractors shall be done by the DDC at no extra cost.
- 3.3.5 The DDC shall provide all the requirements to prepare concrete reinforcing bar bending schedules by the Construction Contractor after supply of GFC (Good For Construction) Drawings by the DDC.

3.4 Requirements for Earthing, Bonding and Stray Current Corrosion Protection

The DDC shall incorporate the relevant requirements of these criteria in its design.

3.5 System-wide Information

The DDC shall incorporate all the relevant information made available to it regarding the system-wide works in its design and other documents of, but not limited to:

- a) rolling stock
- b) track work
- c) electrification/traction power
- d) signaling and tele communications including public address system and security and surveillance systems
- e) traction power, power supply and emergency power supply equipment
- f) various types of Depot equipment
- g) lifts and escalators and
- h) environmental control equipment.

3.6 System-wide Requirements

- 3.6.1 The general arrangement of the Depot, the major equipment locations and major services routes, and the cable routes shall be shown on the CSD drawings. The major equipment loads, pressure

rating of air plenum, major openings and major embedded items and other similar interface shall also be shown on these drawings.

- 3.6.2 During the detailed design phase and through the construction phase, the DDC shall co-ordinate with the Employer and other system-wide consultants to obtain system-wide requirements such as embedded conduits, floor-trunking, wall and floor openings, concrete plinths for equipment, space for air conditioning equipment, sleeves, hoisting hooks etc. and produce structural / architectural / MEP / Fire Fighting / drawings for Construction Contract.

3.6.3 Layout

The DDC shall plan and design the general layout of Depot including workshops, various facilities for inspection and overhaul of rolling stock indicating the stabling lines, servicing / inspection bays, workshop / overhaul bays etc. and road distribution within the demarcated land boundaries.

At the final submission stage, detailed layouts shall be drawn by the DDC on CSD drawings, SEM drawings & MEP drawings. These drawings serve to co-ordinate major routings of all services (it includes all the system-wide coordination). The same drawings shall be used for Construction tender.

3.6.4 Civil and Structural Design

The DDC shall perform all civil and structural design, including preparation of Bill of Quantities of all items of work and Detailed analysis of rates of all such items including all related references of Market Rates as well as any other Reference rates of Standard Schedule of Rates of any Govt. Department, all calculations, drawings, specifications, cost estimates and other documents, as required, but not limited to:

- (a) General Arrangement Drawings
- (b) Depot structures and Sub-structures (includes Admin Building, Central Store, Workshop, Inspection Shed, Stabling Shed & other ancillary building as detailed in Depot Design & Planning Criteria
- (c) Types of Foundations including Piling, if any
- (d) Details for industrial/ structure steel shed or Ancillary Buildings along with rate comparison
- (e) Depot Drainage Plans
- (f) Sewerage Plans
- (g) Sewage and Other Waste Water Drainage and Pollution Control Facilities
- (h) Roads
- (i) Cable-Trenches and Tunnels
- (j) All earthing mat-arrangement and related activities
- (k) Boundary Wall and Fencing

- 3.6.5 The DDC shall co-ordinate its design with the relevant agencies and interfacing DCs and contractors.

3.7 Architectural Services

- 3.7.1 The Architectural services shall include the detailed design of all Architectural and landscaping works, preparation of drawings, specifications and cost estimates, as required, in order to obtain tenders and to construct the Works, together with such other services as are set out and referred to in this document. The works specifically include obtaining necessary approvals from the concerned Civil Authorities.

- 3.7.2 The DDC shall prepare drawings with sufficient detail to fully describe the architectural design of the Depot buildings, sheds, ancillary facilities, including mechanical and electrical equipment. These drawings shall address such issues as, but not limited to:

- (a) Depot Main and Ancillary Buildings Architectural Design
- (b) Work shop, Inspection & Stabling shed
- (c) Site Design, Landscape Design and Urban Design
- (d) Existing site characteristics which are to remain
- (e) Pedestrian Paths and Vehicular Links

- (f) General concepts of building massing
- 3.7.3 Environment impact study shall be conducted by the DDC.
- 3.7.4 The DDC shall analyze available flood data and propose solutions for flood control.
- 3.7.5 System-wide architectural items shall be included in the tender documents:
- (a) Finishes Schedules: Floor Finishes; Wall and Column Finishes; Ceiling Systems and Finishes
 - (b) Railings, Barriers and Gates
 - (c) Stair and Handrail Details
 - (d) Lift Finishes Details
 - (e) Doors and Frames
 - (f) Toilet Room Details
 - (g) Staff Room Details
 - (h) Landscaping and External Works
 - (i) Plans, Sections, Elevations and Details for all the above
- 3.7.6 The DDC shall prepare Standard Specifications for architectural standard design elements and for the supply and installation of architectural standard finishes and materials. The DDC shall also include specifications for any site-specific non-standard material, which needs to be incorporated in the design.
- Architectural Standard Specifications shall include, but not be limited to, the following:
- (a) Site work: Granite kerbs, Concrete kerbs, Natural Stone Pavers, Brick Pavers, Concrete Block Pavers and Grass-Concrete Pavers.
 - (b) Concrete: Concrete Floor Surface Treatments; Precast Concrete Architectural Panels: Glass Reinforced Cement Panels.
 - (c) Masonry: Mortar, Grout and accessories for Granite or Other Stone; Mortar Grout and Accessories for Paver Tile; Mortar and Grout for Masonry and Exterior Setting Beds; Granite or Other Stone Flooring and Bases; Granite or Other Stone: Cubic and Veneer.
 - (d) Metals: Vitreous Enamelled Steel Panels; Barriers and Railings; Drain Grates and Manhole Covers.
 - (e) Thermal and Moisture Protection: Sealants.
 - (f) Doors and Windows: Entrances and Storefronts: Hollow Metal Doors and Frames; Rolling Grilles; Glass and Glazing.
 - (g) Finishes: Paver Tile; Wall Tile; Metal Ceilings; Field Painting.
 - (h) Specialties: Toilet Partitions and Accessories; Equipment Cabinets; Graphics and Ashtray and Litter Bins; Telephone Enclosures; Booths and Workstations.
 - (i) Mechanical Work: Plumbing Fixtures and Trim.
 - (j) Electrical: Lighting.
 - (k) Landscape: Landscape Soft works and Establishment Works.
- 3.7.7 The DDC shall submit the documents and products of its architecture and urban design work as described above.
- 3.7.8 The DDC shall provide continuous support in the form of design data, CAD files, perspective sketches, 3D computer model renderings and walk throughs for all buildings, as directed by the Employer. Also, the DDC is required to provide the 3D model for any other building services as asked by Employer.
- 3.7.9 Other deliverables may be identified by the Employer, as required to support the goals of architecture, urban design, and landscape development. The DDC shall prepare and submit to the Employer cost estimates for architectural works for each building & Facility at the depots. These estimates shall be based on quantities from the drawings submitted by the DDC. Where no drawings exist, the quantities shall be determined by using similar job information and typical relationship of quantities. Cost estimates are required to be submitted.

- 3.7.10 The DDC shall submit a Design Brief to the Employer describing in words, diagrams and graphics of the Architectural Objectives and illustrating how these will be met. This Design Brief shall take into account the following considerations:
- (a) The Depot shall be as transparent as possible to allow for maximum natural ventilation into the workshops & inspection sheds and ancillary buildings areas.
 - (b) The detailing of every element within the Depot area is important, not only for visual and aesthetic reasons but to ensure that materials proposed in the detailing are durable and easily maintainable.
 - (c) The integration and co-ordination of the architectural finishes with the Structural, Electrical, Mechanical fittings and services runs shall be taken care of.
 - (d) The design of the Depot shall be in such a manner that the Depot is safe in the event of a fire. In this respect, it is essential that the following considerations are incorporated into the design:
 - i. All building materials shall be specified to have a class “1” flame spread rating as defined under BS 476 and shall be incombustible.
 - ii. The fire protection of an opening depends on the construction of the complete assembly. All three elements (door, frame and hardware) shall be of types that have been proven by test to be capable of performing their required function in time of fire. All elements making up a door or roller shutter assembly shall carry a label confirming that the tests, in respect of class and fire rating, have been passed.
 - iii. Partition walls and openings shall conform to the compartmentation requirements and the requirements of relevant local authorities.
 - (e) Durability of all Depot elements is important and as such the following considerations shall be incorporated into the design:
 - i. Corrosion protection is required for all exposed and hidden elements.
 - ii. Precautions must be taken to prevent bimetallic corrosion.
 - (f) The choice of finishes shall take into account durability and ease of maintenance, safety, fire resistance, cost, source of supply and replacement and aesthetic considerations.
 - (g) The following considerations which relate to the detailed location of finishes in Depot shall also be taken into account:
 - i. location
 - ii. services interface
 - iii. acoustic requirements
 - (h) Where structural and service elements are used as part of the finished architectural effect (for example exposed ductwork or light fittings at ceiling level), the layout, configuration and detailing of those services elements shall be considered as part of the architectural finishes and shall require architectural acceptance.

3.8 Scope of Services for Machinery & Plants for Depots

- a. The DDC shall provide complete technical support for preparation of Tender Documents until submission of the Bids for all Machinery & Plant Procurement.
- b. The DDC shall review the Detailed Project Report (DPR) and extract all inputs needed for Machinery & Plant specifications. The DDC shall also review other information such as site investigation reports, drawings and any other information relating to this project made available by the Employer.
- c. The DDC shall carry out site visits so as to become acquainted with the site conditions.
- d. The DDC shall examine at least the project DPR and two recent Metro Rail / IR Machinery & Plant tender documents and use them as inputs for preparation of the specifications.
- e. The DDC shall discuss and document the Machinery & Plant decision process and provide reasoning of the choice of Technology to the Employer. The DDC shall carry out a literature survey for machinery and plant specific to the Depot of BSRP.

- f. The DDC shall submit a recommendation on selection of Machinery and Plant to the Employer for approval.
- g. The DDC shall interface with other consultants and contractors on the project with regard to the design and provision of Machinery and Plant items.
- h. The DDC shall compile all codes, manuals and standard drawings for the Machinery and Plant for the purpose of reference and guidance of the Employer.
- i. The DDC shall prepare bid document for invitation of tender for supply, installation and commissioning of Machinery and Plant covering the following:
 - i. Scope of Work
 - ii. Eligibility and Qualifying requirements.
 - iii. Approximate Cost of the work
 - iv. Employer's Requirements – General Specification
 - v. Employer's Requirements – Technical, functional and performance Specification, Training and maintenance requirements, testing and commissioning requirements, installation, handover and acceptance requirements
 - vi. Tender Drawings
 - vii. Interfacing Schedule
 - viii. Delivery Schedule
 - ix. Pricing Documents, Detailing BOQ items wherever applicable
 - x. The DDC shall ensure that the Bid documents contain a scope of work, NIT, ITT, Eligibility and Qualifying requirements, Special conditions of contract, General and special specifications, Bill of Quantities, Key dates, milestones, approximate cost of work, tender drawings etc.
- j. The DDC shall ensure that the Plant & Machinery contractor (Depot Equipment) complies with the Schedule of Dimensions, and any specific requirements with regard to Rolling Stock.
- k. The DDC shall be responsible for the following:
 - i. Preparation of Pre-qualification document, which shall be a part of the tender for procurement of Machinery & Plant, for the review of the Employer. The DDC shall make all necessary corrections to the draft document based on discussion with the Employer.
 - ii. Preparation of Evaluation Methodology, which shall be a part of procurement Machinery & Plant tender for review and discussion with the Employer. The DDC shall make all necessary corrections to the draft document based on discussion with the Employer.
 - iii. Preparation of Preliminary / Tender drawings for review of the Employer. The DDC shall make all necessary corrections to the draft drawings based on discussion with the Employer.
 - iv. Preparation of Technical Schedules along with latest accepted rates of other metros / Railways and necessary technical documentations, incorporating standards and specifications, which shall be a part of Tender document for review of the Employer. The DDC shall make all necessary corrections to the draft technical schedules based on discussion with the Employer.
 - v. The tenders for Machinery and Plant shall be on "Design, manufacture, supply, installation, testing and commissioning basis". The DDC shall provide all necessary general and technical specifications along with associated drawings / documents for procurement of the Machinery and Plant for the Depot. Details required for the contractor to design the Machinery and Plant works shall have to be incorporated by the DDC along with all relevant terms and conditions.
 - vi. Preparation of General & Special Conditions of Contract based on the Employer's preference of contract format and suggest necessary modifications for the tender document. The DDC shall make all necessary corrections to the draft based on discussions with the Employer.

3.9 Electrical and Mechanical Services for Depot

The Electrical and Mechanical services shall include the design of all E&M services. The scope shall include preparation of drawings, outline specifications, cost estimates and other documents, as required. This shall include the incorporation of architectural co-ordination requirements with the requirements of other disciplines.

3.9.1 Electrical

The Scope includes but not limited to:

- (a) Design of power and control cables from LV Main Switchboard in the ASS to the Sub main and other distribution / Sub distribution boards etc. This will include provision of Bus Trucking / feeder cables as required
- (b) Design of UPS feeding all emergency loads related to Electrical & Plumbing
- (c) Design of DG sets for feeding all emergency, essential and semi essential loads
- (d) Design of interlocks and protection schemes for power distribution, suiting to the desired operation, duly coordinated 'with high voltage side protections and protection of the individual equipment
- (e) Design of normal and emergency lighting arrangement & automatic operation in Depot areas, cable galleries, parking areas, subway connecting entry / exit and other room
- (f) This includes external cabling and provision of lighting fixture with lamps, ballast, control gear etc.
- (g) Design of earthing system comprising of earth mats, earth electrodes and main earth bus in ASS, clean earth system and bus
- (h) Design of ASS including ASS Equipment Layout
- (i) Design of control and small power supplies to various Depot equipment / panel
- (j) Design of lighting system including provision of lightning conductors at all required level and locations. etc.

3.9.2 HVAC System

The Scope includes, but not limited to:

- (a) Establishment of the design criteria in consultation with Employer & DDC architect
- (b) Preparation of area wise Heat load based on Architectural / Interior layout considering applicable HVAC standards
- (c) Finalization of energy efficient Air Conditioning system considering capital & operating cost comparison between possible systems
- (d) Preparation of estimate including bill of quantities and technical specification
- (e) Detailed drawings and Good for Construction (GFC) drawings
- (f) Inspection of any equipment, deemed necessary

3.9.3 Fire Fighting inclusive of Fire-alarm and Fire-Suppression System

The Scope includes, but not limited to:

- (a) Fire detection & alarm Panel
- (b) Repeater Pane
- (c) Various detectors (dual photo, heat, multi sensor, beam Flame, LHD, Gas, Aspirator)
- (d) Modules (monitor, control, relay)
- (e) Call points (Break glass, pull station)
- (f) Hooter, Strobes, Hooter cum Strobes
- (g) Functions in fire detection and alarm panel
- (h) Evacuation interface
- (i) Graphical workstation 10, Interface to IBMS
- (j) Fire Suppression system including designing of underground tank fire pump, Plumbing hose rail and sprinkler system/or water mist system

3.9.4 Integrated Building Management System (IBMS)

The Scope includes, but not limited to:

- i. Air-conditioning and ventilation equipment's monitoring & control
 - a. AHUs Control
 - b. VRV/VR units interface
 - c. Parking ventilation

- d. Staircase pressurization
- e. Lift pressurization
- ii. Electrical energy monitoring
 - a. Main incomers
 - b. Sub distribution panels
 - c. Critical / high power consumption equipment / areas
 - d. DG -UPS
 - e. Inverters
- iii. Utility Equipment Monitoring & Control
 - a. Domestic, potable, waste water handling pumps
- iv. Firefighting equipment monitoring
- v. Lifts Monitoring
- vi. Lighting Control
- vii. Billing of Electricity, Water etc.

3.9.5 Elevator

Tender Drawings for Elevators shall be prepared by DDC.

3.9.6 Depot Equipment

Tender Drawings for all the Depot equipment shall be prepared by DDC.

3.9.6.1 Control Centre (CC)

Detailed design and consultancy for Complete facilities of Control Centre (CC) shall be prepared by the DDC, which will include all related interface with all system-wide and other contractors / Consultants and concerned authorities and stake holders.

3.9.7 Water & Waste Water System

The Scope includes, but not limited to:

- a. Design of Water Tank(s), Water Supply, Distribution, Internal & external Plumbing (External Plumbing is connecting to Existing BWSSB water line or Bore Well) for all the required area.
- b. Design of Waste Water management system for the waste water from toilets, kitchen, canteen and all other areas, from which waste water is expected and connecting to existing Sewer Line and STP.

3.9.8 Track Work

The DDC Depot shall be required to perform the following tasks related to, but not limited to, track layout:

- a. Track Mathematization and alignment design by use of software MX Rail or equivalent software
- b. Detailing and providing calculations for all Turnouts, all Crossovers etc. inside the Depot
- c. Coordination with OHE Designer / Contractor and all related interface personnel

3.10 Drainage Work

The DDC shall design and detail the drainage of the Works and detail the connections of these Works to the existing drainage systems. The drainage systems to be detailed as part of the design shall include, but not be limited to:

- a. drainage systems inside/outside buildings/structures for conveyance of water from the sumps or other collection points to the appropriate sewer or drain of BWSSB
- b. sumps and pumps inside/outside buildings/structures, whether above ground or below ground, for collection of water and sewage
- c. systems for the surface water drainage of roads, landscaped areas, car parks and other paved areas for conveyance of the surface water to the appropriate sewer or drain of BWSSB

- d. drainage system of the Depot needs to be connected to the existing drainage system

3.11 Co-ordination and Utility Services

- 3.11.1 The DDC shall co-ordinate provisions, including design of connections to the existing Utilities services, required for the depots and ancillary buildings. The Utilities include, but not be limited to:
- Sewerage System
 - Water supply System
- 3.11.2 The DDC shall co-ordinate all design works including design connections to the utility services with various system-wide contractors. These include, but not be limited to:
- Rolling Stock
 - Traction Power Supply
 - Signalling
 - Telecommunications
 - Mainline guideway structures
 - Track
 - Other system-wide contracts

3.12 Interfaces with other Consultants/Contractors

- 3.12.1 These interfaces include, but not be limited to:

| | |
|---|--|
| Rolling Stock | The DDC shall liaise in relation to: a Rolling Stock b Maintenance requirements for modern Rolling Stock |
| Traction and Power Designer | The DDC shall liaise with traction power design consultant in relation to: I. The design of power systems for depots including the location of support structures II. The design of auxiliary substation and traction substation for Depots III. Requirement of electric power for the complete Depot and workshop including the service buildings shall be submitted to the Employer for onward transmission to the traction / power designer for design of auxiliary substation for depots (i.e., complete load schedule shall be prepared by the Depot Design Consultant) IV. OHE arrangement including earthing and bonding inside the Depot area V. Stray current mitigation measures in Depot |
| Signaling, Train Control and Telecom | The DDC shall liaise regarding the signaling, train control and telecommunication in relation to: a Making of the location of power-operated switches, line side signals and insulated joints on the layout b Track circuiting within the yard including stabling lines and test tracks c Telephone system for all telecom installations d Interlocking of level crossings inside the Depot where roads cross railway tracks |

| | |
|---|---|
| Trackwork Designer | The Consultant shall liaise with the track work designer in relation to: Coordination on preparation of tender schedules, Technical Specifications and Tender estimate for construction contractor. |
| At-Grade Designer | The consultant shall liaise with At-Grade alignment designer in relation to chainage of takeoff points for connections from main line to Depot. |
| Any other Designated Designer / contractor engaged by Employer for successful implementation of BSRP | The consultant shall liaise with any other Designated Designer / contractor engaged by K-RIDE for successful implementation of Depot Project and provide all necessary co-ordination, data, etc. in order to complete design of the depots for successful operation of the Project. |

3.13 Existing Utilities and detection / charting thereof and derivation of methods and estimates for redress and diversion of the same:

- 3.13.1 All necessary data with regard to the existing Utilities in the depots shall be collected by the DDC from the respective owners of the concerned Utilities. The Data as worked out by DDC after their own inspection, the data obtained from the respective owners of the concerned Utilities, the data provided by the Employer and any other data pertaining to the Utilities shall be taken into cognizance and the best workable solutions, including various alternatives for diverting the Utilities, wherever necessary, shall be outlined by the DDC and submitted to the Employer for a final decision.
- 3.13.2 The DDC shall list all the conflicts among the existing Utilities, if any, discovered by the DDC and inform the Employer in writing. The DDC shall submit its recommendations for diversions of the Utilities involved, for effective resolution of such conflicts.
- 3.13.3 The DDC shall also be responsible for co-ordination with the concerned authorities for the design, diversions and modifications for enhancement of the capabilities of Utilities, wherever necessary. The DDC shall co-ordinate with and gather additional technical information, required if any, from the concerned Utility authorities.
- 3.13.4 For any joint survey or joint inspection or meeting - formal or informal, with the relevant Utility authority, the DDC shall prepare the required information, deliver a presentation (if directed by the Employer), and prepare minutes of joint survey / joint inspection / meeting according to the instructions of the Employer. All the correspondence, minutes of meeting, and information transmittals between the Employer's Representative, the DDC, and the relevant Utility authorities shall be in English.
- 3.13.5 If the information is not sufficient for the detailed design, the DDC shall make recommendations / arrangements for additional surveys with prior intimation / approval of the Employer and the cost of the same shall be deemed to be included in the lump sum price quoted.
- 3.13.6 The DDC's recommendations shall take into account the design programme and other implications such as cost effectiveness. The Employer, after going through the detailed status and charting of Utilities submitted by the DDC, will take a decision in determining which diversions shall be carried out and which Utilities, if any, shall be left undisturbed, what conditions must be observed - such as maintaining flows, protection and support, inspection and other matters essential to the planning, programming, and execution of works for Utilities.
- 3.13.7 The prime responsibility for all Utility co-ordination lies with the DDC. The DDC shall submit the Utility diversion scheme prior to the First Review Submission.
- 3.13.8 The DDC shall review any relocation of Utilities with the intent to minimize costs by designing for the permanent relocation instead of initially a temporary relocation and then a permanent relocation, unless warranted due to specific circumstances.
- 3.13.9 The DDC may be requested by Utility authorities to include additional pre-embedded Utility items within the limits of the Employer. The DDC shall obtain the design details for this work

from the respective Utility authority. The DDC shall incorporate this information in the contract documents as a separate set of drawings with the title block "Pre-embedded Utilities". The DDC shall check the suitability of the physical location of these "Pre- embedded Utilities" with respect to all other facilities.

- 3.13.10 The DDC may be requested by Utility authorities to modify the existing Utility capabilities and capacities i.e., change the conduit, size or quantity, change the duct size or quantity, split the duct into two or more ducts with different sizes or quantities of ducts, etc. If these modifications are to be performed for existing Utilities, which are directly affected by the DDC's design or otherwise, such modifications shall be considered as "Utility enhancements", and shall be performed by the DDC at no additional cost, implying clearly that all such costs have been included in Lump sum Price quoted by the DDC.

3.14 Work Sites and Disposal Sites

- 3.14.1 The DDC shall identify the possible locations required temporarily (for muck disposal etc.), in addition to the sites already identified by the Employer. The details to be collected in this regard include, but not limited to:

- (a) Location
- (b) cadastral maps
- (c) names of landowners
- (d) size
- (e) government assessed land prices
- (f) estimated cost of procurement/lease and effects on spoil disposal

However, the final selection and procurement of work sites would be the responsibility of the Construction Contractor.

- 3.14.2 The DDC shall review the Environmental Impact Assessment (EIA) report and other relevant documents and recommend the potential disposal areas for solid waste.

3.15 Construction Programme

- 3.15.1 Civil, Architectural, Electrical and Mechanical Works

The DDC shall produce suggested construction programmes based upon its proposed methods of construction and work sequences. The programme shall be prepared through the latest version of a Project Management software like Primavera or Microsoft Project. The programme shall include interface activities with system-wide and other contractors. The programmes shall be submitted to the Employer for review of compatibility with other programmes and for any subsequent amendment as required. The DDC shall submit construction implementation schedule demonstrating that the designed structures can be constructed within the limits of SOD and other relevant guidelines of the Contract Documents. The implementation schedule shall indicate the earliest possible completion dates for completion of various activities of the work, as indicated by the critical path in the Project Management software. The implementation schedule shall include significant schedule milestone events based on logic restraints, reasonable resources, achievable production rates, and solid construction practices. During the design review stages of the approved construction programme, the Employer may require the DDC to make adjustments based upon the DDC's professional judgment. Where considered to be neither cost effective, nor practical nor feasible, the Employer shall be informed of the findings. The programme will not be made available to the construction contractor by the DDC.

- 3.15.2 Machinery and Plant

The DDC shall produce suggested delivery, installation and commissioning schedule for the Plant and Machinery. The progress shall include interface with the civil and rolling stock contractor.

3.16 Construction Cost Estimates

3.16.1 Cost Estimate for Civil, Electrical and Mechanical Work

The DDC shall prepare and submit to the Employer, construction cost estimates for Depot. These estimates shall be based on quantity take-off from prepared drawings, but where no drawings exist, the quantities shall be determined by using similar job information and typical relationship of quantities. All modifications of the cost estimate before contract award are in the scope of DDC.

The details of cost include the detailed breakup of various components of Civil, Structural, Architectural, Landscaping, MEP, HVAC, Fire Fighting, Water supply system, Sewerage System, Rainwater harvesting system etc.

3.16.2 Cost Estimate for Machinery and Plant

The Consultant shall prepare cost estimate and quantities for procurement, installation, testing and commissioning of all Machinery and Plant.

3.16.3 Cost Estimate for track work in the Depot

The Consultant shall prepare cost estimate and quantities for Track, Turnout, Scissors, Crossover and other items required to complete the Trackwork in the Depot.

3.16.4 The estimates shall show the unit rates and quantities adopted and shall give details of how the unit rates were developed i.e., detailed Rate Analysis of the Unit Rates and shall mention their compatibility, if any, with the Standard Schedule of Rates of KPWD.

3.16.5 The estimates shall be broken down into separate identifiable sections of works as directed by the Employer. The DDC shall submit softcopies and required number of hard copies, duly signed, of the estimates to the Employer, as directed.

3.16.6 The Employer will review the designs, drawings and the estimate. The DDC shall revise the Bill of Quantities as required by the Employer and modify the Cost Estimate, if required, as directed by the Employer.

3.17 Confidentiality of Estimates and Design Budgets

All estimates shall be treated as strictly confidential and shall not be revealed by the DDC to anyone, except to the Authorized Official of the Employer. Any breach of confidentiality in this regard will be treated seriously.

3.18 Tender Documentation

The DDC shall prepare the Bills of Quantities, Cost Estimates, Special Conditions of Contract and Technical Specifications, including the Scope of Work for calling Tender for construction of Depot. Documents shall be in such a form that these can be readily used as a part of the bid documents for construction.

3.19 Amendments to Tender Documents

The DDC shall provide additional design and other information not included in the Tender Documents, as may be required by the Employer. This includes, but not be limited to:

- a. Amendments as appropriate to the Bills of Quantities
- b. Draft replies to tenderers' queries
- c. Addenda to tender documents and drawings
- d. Technical clarification whenever required

3.20 Contract Drawings

The DDC shall submit to the Employer, prior to the award of each construction contract, a complete set of GFC (Good For Construction) drawings, applicable for that work. The DDC shall also furnish a

complete set of softcopies and signed hardcopies of required number of all these drawings, as directed by the Employer.

The GFC drawings shall conform to the tender drawings, specification & BOQ. Any deviations/variations with construction drawings as compared with the tender drawing shall be clearly brought out in writing with reasons to seek approval of the Employer, before execution.

3.21 Geotechnical Investigations

The DDC shall study all subsurface data (Field Survey and Geotechnical Data) by carrying out Geotechnical investigation works on site and make available to Employer. Further any additional, Survey, investigations, data required for Detail Design work shall be carried out. The cost of all these activities shall be included in the quoted Tender Price.

3.22 Extent of Design Services

The DDC shall be responsible for managing and adjusting its manpower (whose duration is not fixed in the BOQ) to accommodate variations in schedule during the estimated design period, and such variations shall not constitute a claim for extended design services or for enhancement of Lump sum contract price.

3.23 Assistance in Proof Checking

The DDC shall extend full co-operation and assistance in proof checking the layouts, detailed design and other design data developed by him. However, the proof checking will be got done by the Employer.

4 SERVICES TO BE PERFORMED BY THE DDC DURING CONSTRUCTION

The services during construction shall be deemed to commence for each construction package on award of the construction contract.

4.1 Contract Drawings

Additional contract drawings or revisions to the contract drawings previously issued for construction shall be prepared by the DDC and submitted to the Employer. Where changes to the contract drawings are required, the DDC shall be responsible for preparing all data related to the detailed design and the revised drawings. The Employer will then issue the drawings to the contractor for construction of the works.

4.2 System-wide Information

4.2.1 The DDC shall incorporate full and final information relating to system-wide equipment and services into the CSDs. Final system-wide requirements defined by CSDs and those required by Systems shall be incorporated into the SEM and STROD drawings and architectural/structural drawings for construction. The DDC shall prepare and submit all intermediate submissions of the structural requirements as necessary to the Employer to meet the construction schedule.

4.2.2 The DDC shall interface with relevant system-wide contractors regarding system-wide contractors' requirements that affect the DDC Depot Design and shall incorporate into its coordinated installation drawings the requirements of all contractors, to ensure compatibility of Depot structure, utility ducts, etc. with system requirements. It is the responsibility of the DDC to finetune the drawings and obtain the signatures of all concerned Contractors and other officials on these drawings.

4.2.3 The DDC shall periodically inspect and review all such aspects to ensure compatibility and, after review shall revise and submit all the necessary drawings, as and when required, as directed by the Employer. This shall be a continuous updating process in conjunction with design development extending towards the completion of all the works. In case of multiple number of revisions, then the DDC has to bear the cost of Stationery and Printing charges for submission of all such revised drawings and documents.

4.2.4 The DDC shall design the embedded items and include these works in the respective civil contracts, as directed by the Employer. All the areas of interface between the civil contractor's work and the system-wide contractor's work shall be clearly defined.

4.3 Construction Methods and Temporary Work

- 4.3.1 The DDC shall review shop drawings, working drawings, drawings for temporary works, bar bending schedules etc. submitted by the construction contractor and appraise the Employer of the ramifications of these in the designs and drawings submitted by the DDC. In case of any conflict necessitating revision of drawings of the construction contractor, the same shall be advised by the DDC. In case of any conflict necessitating revision of drawings of the DDC, the same shall be carried out by the DDC. The decision of the Employer is final in this regard.
- 4.3.2 The DDC shall also review the test reports of material samples submitted by the construction contractor and suggest their suitability or otherwise in the construction works.
- 4.3.3 Furthermore, the DDC shall assess, and report to the Employer, the construction contractor's proposed construction methods and temporary works design with respect to their effect on the permanent works.

4.4 Ensuring Construction as per the Design and Drawings

- 4.4.1 The personnel of DDC shall ensure the construction of depots as per the approved designs and drawings. In this regard, they shall report any disconformity with the approved designs and drawings to the representative of the Employer promptly. Any consequential modification in designs and drawings due to any such disconformity falls in the scope of the DDC.

4.5 Site Meetings

The DDC shall attend site meetings, whenever directed by the Employer.

4.6 Site Visits

Whenever directed by the Employer, the DDC shall visit the site to provide their inputs on the performance, quality, progress etc., of the Works and to report whether the work is progressing, in general, as conceived / designed. The reports of all such visits and the action to be taken shall be reported to the Authorized Official of the Employer, not later than a week. If urgent action is required, and same shall be communicated immediately.

4.7 As-Built Drawings of the Works

The DDC shall review the contract drawings and as-built information submitted by the contractors to the Employer on a continuous basis till the date of issue of the Certificate of Completion for the construction contract. The DDC shall prepare relevant calculations reconciled with as-built conditions, and information necessary for the maintenance of the works.

4.8 Liaison Work

The DDC shall co-ordinate and liaise with all concerned local authorities, private and Government agencies to obtain approvals, testing and clearances as necessary, as directed by the Employer.

5 ORGANISATION OF THE DDC AND RESPONSIBILITIES

5.1 General

- 5.1.1 The DDC shall establish an efficient organization for carrying out all services according to programme requirements. The organization shall provide effective management of the tasks of the contract including those that must be carried out concurrently by separate disciplines and teams and, the organizational strength of DDC shall not be less than the minimum.
- 5.1.2 The organization shall also ensure that all information that becomes available during the design period is directed to the appropriate design teams and effective checking procedures are continuously maintained to ensure that required standards are met.
- 5.1.3 Upon its appointment, the DDC shall promptly set up its organization to the satisfaction of the Employer, and the personnel mentioned in tables B-2, B-3 & B-4 in Appendix-B shall be head quartered in Bangalore. The DDC shall provide two vehicles of approved make, quality, and roadworthiness (one Etios or similar and one Innova crista or similar), not more than three years old and a total run of less than fifty thousand km, along with drivers for the dedicated use of the Employer for inspections, liaison, facilitating visits of higher officials of Railway Board, GoK etc. during the entire period of contract to run a monthly average of three thousand km and a daily

average of twelve hours. The experts in Table B-1 of Appendix-B can work from out station only after permission from the Employer. The Experts need to be available in Bangalore, for meetings, when required. The experts shall attend discussions and meetings with the General Manager and other officials in K-RIDE office, as and when directed by the Employer. Out of the list of attendees specified by the Employer, a few of the personnel of DDC mentioned in table-B1 may be permitted to attend the meetings online by the Employer for a few times, based on justification. The Resident Engineer cum Interfacing Expert along with all the assisting personnel, as mentioned in Appendix-B, has to be physically present in Bangalore all the time during the entire duration of the work under this contract.

5.2 Practices during the course of the work

The DDC shall during course of the work,

- a. employ best practices & current industry technology.
- b. prepare unambiguous drawings and data in all documents and specifications.
- c. provide clarity in tender specifications and drawings.
- d. provide customised and adaptable documents suitable to the site requirements.
- e. ensure that the tender conditions are in harmony with the prevailing Employer's procedures and norms.
- f. provide Schematic drawings to facilitate tenderers understand the Employer's requirements.
- g. ensure speed and optimal cost of construction, including economy, durability, constructability, environment friendliness, quality of service as well as safety in construction, maintenance and operation.
- h. ensure maintainability, reliability and renewability of the system in the context of the Indian socio-economic and technological environment. The focus shall be on ensuring construction with optimum life cycle cost.
- i. ensure phased construction and commissioning of the Depot to permit early revenue generation for BSRP.
- j. ensure adoption of State-of-the-Art technology during course of work.

5.3 Sustainability

The planning, design & construction of all structures shall comply with the Indian Green Building Council (IGBC) requirements. The DDC shall ensure that all relevant specifications and methodology conform to the IGBC Platinum requirements and shall design the structures accordingly. The DDC shall also draft the conditions of the bid document for the construction tender keeping in view the above requirements of IGBC, so that the depots can obtain a Platinum rating from IGBC, without any hassle.

The DDC shall keep in mind the following to achieve a sustainable design and Platinum rating from IGBC:

- a. Water Conservation and Recycling
- b. Energy Efficiency and Conservation
- c. Use of natural light to the extent possible
- d. Use of Solar Energy
- e. Use of Wind Energy
- f. Material Conservation
- g. Use of material such as fly ash as a part replacement to cement in mix design
- h. Reduction in Carbon Footprint
- i. Indoor Environment and Comfort

5.4 Performance

Notwithstanding any review of its organization structure, staff or manning schedules, the DDC shall remain wholly responsible for providing the services.

If, in the opinion of the Employer, the progress or performance of the DDC's works seem to be inadequate at any time to meet those requirements, the DDC shall take the necessary steps to improve them on being notified.

If within a reasonable period of time the DDC has not improved its progress or performance, the Employer may, by a written notice, advise DDC to take additional measures, including changes in its organization, at no additional cost to Employer. Such notice shall be in no way deemed to constitute a waiver of Employer's rights to terminate the Contract by reason of the DDC's breach of contract.

Failure by the Employer to issue such a notice shall not relieve the DDC of its obligation to achieve the required rate of progress and quality of work.

6 Planning and Design Criteria

Purpose

This part presents design criteria of a general nature applying to the areas of the system intended for the stabling, servicing, repair, and overhaul of Rolling stock and other rail/road mobile vehicles used for operation and maintenance of all Plant and Equipment.

The part also contains functional description of various facilities as detailed herein. For the sake of simplicity in the usage of terminology, these areas are collectively termed 'Depot' regardless of their specific functions. The design criteria, in general, encompasses the broad requirement. It is advised to view these requirements as standards, which express the overall intent of the Employer to achieve an efficient operation and maintenance of the system and to adapt this general intent into the specific design under consideration.

However, because of the unique characteristics of any Depot facilities, the criteria may not address all the design challenges that arise in the course of developing the total system design. Accordingly, any variation from the general criteria must be identified by the DDC well in advance and brought to the attention of Employer and specific approval obtained, wherever necessary before progressing with the design.

General Climatic Conditions

The climatic condition of Bangalore Region is described hereunder;

| Sl. no | Item | Nominal Value for Bangalore |
|--------|---|--|
| 1 | Summer season and temperature | April to June with maximum temperature recorded was 36.7°C as the highest and minimum temperature as 29°C |
| 2 | Winter season and temperature | November to March with minimum temperature touching 36°C During winter season temperature ranges between 30°C to 16°C |
| 3 | Wind velocity | Maximum wind speed occurs during the period April to September. A maximum wind speed of 10.62 Kmph was observed in last June |
| 4 | Seismic zone | Zone II |
| 5 | Altitude | 900 m (3,000 ft) above sea level |
| 6 | Monsoon season | Mid-June till September |
| 7 | Average rainfall | An average of 1700 mm; during July – September. |
| 8 | Humidity | Values of relative humidity are about 63% to 88% in the morning and 45% to 78% in afternoon during the south west monsoon season |
| 9 | SO ₂ / NO _x levels, if required | Within the NAAQ Standards prescribed by CPCB |

The DDC shall verify the above data, considering the past 50 years for Bangalore and propose the values to be adopted for design purposes, for approval by the Employer before progressing with the design.

6.1 Codes & Standards

The design and construction of the Depot shall comply with the Codes of Practice and Standards current at the time of detailed design. Regulations made and requirements issued by the Employer, Indian Government and statutory authorities shall be followed and specified. Latest Versions of Codes & Standards shall be adopted.

Alternative and additional codes, Standards and specifications proposed by the DDC shall be internationally recognized codes and shall be equivalent to or better than Indian Standards issued by the Bureau of Indian Standards subject to being, in the opinion of the Employer, suitable for incorporation into the specifications.

The hierarchy of Design standards is as follows:

- i. Indian Standards (IN)
- ii. Euro Norm (EN)
- iii. British Standards (BS)
- iv. Other International Standards and Codes of Practice

6.1.1 List of Design Codes and Standards

The latest version of the following codes (including all the correction slips) shall be used in various stages of design and construction works (non-exhaustive list):

6.1.1.1 IRS CODES

IRS Substructure & Foundation Code 2004 (Including all correction slip)

IRS Bridge Rules – 2004 (Including all correction slip)

IRS Concrete Bridge Code – 1997 (Including all correction slips)

6.1.1.2 IRC CODES

IRC: 5-1998 Standard Specification & Code of Practice for Road Bridges – General Features of Designs (Sixth Revision).

IRC: 6-2010 Standard Specification & Code of Practice for Road Bridges – Loads and Stresses (Third Revision).

IRC: 78-2000 Standard Specification & Code of Practice for Road Bridges – Section Foundation & Sub-Sub Structure (1st Revision).

IRC: 83-1999 Standard Specifications & Code of Practice for Road Bridges, Part-I Metallic Bearings.

IRC: 83-2002 Standard Specifications & Code of Practice for Road Bridges – Part-II Elastomeric Bearings.

IRC: 112-2002 Code of Practice for Concrete Road Bridges.

IRC: SP-33-1989 Guidelines on Supplemental Measures for Design, Detailing & Durability of Important Bridge Structures.

6.1.1.3 IS CODES

IS:269-1976 Specs for Ordinary and Low Heat Portland cement.

IS:383-1970 Specs for Ordinary fine aggregate from natural sources for concrete.

IS:432-1982 Specs for Mild Steel & medium tensile steel bars (Part I).

IS:455-1976 Specifications for Portland Slag Cement.

IS:456-2000 Code of Practice of Practice for plain and reinforced concrete Code of Practice for Plain and Reinforced Concrete – based essentially on CP- 110.

IS: 800-2007 General Construction in Steel.

- IS: 875-1987 Code of Practice for Design Loads Parts 1, 2, 3, 4 & 5 (other than Earthquake) for Building and Structures.
- IS: 1080-1985 Design and Construction of Shallow foundations in soils (Other than Raft, Ring & Shell).
- IS: 1343-1980 Code of Practice for Prestressed Concrete – based essentially on CP110.
- IS: 1364 – 992 Hexagon Head Bolts, Screws & nuts of product grades A & B Part (Part 1) Hexagon Head Bolts (Size range M1.6 to M64).
- IS: 1489 (Part 1) Specifications for Portland Pozzolana Cement (Fly ash based).
- IS: 1786-1985 Specs. for High Strength Deformed steel bars and wires for concrete Reinforcement.
- IS: 1893-2002 Criteria for Earthquake Resistant Design of Structures.
- IS: 1904-1986 Design and Construction of Foundation in Soils: General Requirement
- IS: 1905-1987 Code of Practice for Structural Use of Un-reinforced Masonry.
- IS: 2062-2006 Specifications for Weld able structural steel.
- IS: 2502-1963 Code of Practice for Bending and Fixing of Bars for Concrete Reinforcements.
- IS: 2911 Code of Practice for Design & Construction of Pile Foundations Part1 (Part 1 / Sec 2) Concrete Piles Section 2. Bored Cast-in-situ Piles.
- IS: 2911 Code of Practice for Design & Construction of Pile Foundation of Pile Foundation Part-4 Load test on Piles
- IS: 2950-1981 Design and Construction of Raft Foundations.
- IS: 4326-1993 Code of Practice for Earthquake Resistant Design and Construction of Buildings.
- IS: 4923-1997 Hollow steel sections for structural use-specifications.
- IS: 2062-1999 Steel for General Structural Purposes specifications.
- IS: 8009-1976 Calculation of Settlement of Shallow foundations.
- IS: 8112-1989 Specification for 43 Grade Ordinary Portland Cement.
- IS: 8500-1991 Structural steel – Micro alloyed (Medium and high strength qualities).

6.1.1.4 National Building Code

National Building Code of India 2016 Part – IV “Fire & Life Safety”

6.1.1.5 EURO CODE

Eurocode 0 Basis of Structural Design.

Eurocode 1 Action on Structures.

Eurocode 2 Design of Concrete Structures.

Eurocode 3 Design of Steel Structures.

Eurocode 4 Design of Composite Steel and Concrete Structures.

Eurocode 7 Geotechnical Design.

Eurocode 8 Design of Structures for Earthquake Resistance.

6.1.1.6 OTHERS

FIP Recommendations for the Acceptance of Post – Tensioning Systems. MOST Specifications for Road and Bridge Works – 1994.

ASTM E119 – Standard Test methods for Fire Tests of Building Construction and Materials

Any other codes & special publications as required with the prior approval of Employer.

6.2 Design Life

The design life of the permanent works shall be:

| | | |
|----|---|--------------------------------------|
| a) | For civil engineering structures housing track (ex. Stabling shed, Inspection shed, workshop for IOH / POH, sheds, etc.,) | 100 years |
| b) | For building structure other than (a) above | 100 years |
| c) | For Plant and Equipment | 30 years with midlife rehabilitation |
| d) | For Roads & pavements | 20 years with periodic maintenance |

6.3 Introduction of BSRP Depot

The depots of BSRP are planned to serve all the four corridors.

The functions of depots / activities performed in the depots are stabling of trains, train washing and cleaning, scheduled & non-scheduled inspections, wheel-re-profiling, Intermediate Overhaul (IOH) and Periodic Overhaul (POH), minor as well as major repairs.

The preliminary layouts and design of Depot cum workshop at BSRP broadly include requirements of sheds and buildings and other facilities in Depot, but not limited to, are as mentioned in the clause 2 of this Section 8 : TOR

6.4 Planning and Design Criteria for Depot

The basic considerations for planning and designing of operations in the depots are given underneath. The DDC shall design the Depots so as to be compatible with the requirements for DTO under GoA3.

6.4.1 Operational Considerations

The Depots are the nerve centres of the operations of BSRP and therefore they shall be planned and designed carefully to meet the following broad requirements:

- a. The Rake induction and withdrawal to / from mainline will be primarily from the stabling shed, preferably without involving any shunting operation.
- b. The direct Rake induction and withdrawal to / from mainline from inspection shed shall also be possible.
- c. Heavy interior cleaning line shall be so located, so that direct placement and withdrawal to / from mainline shall be possible. This section shall be close to inspection / overhaul areas for ease of placement of trains.
- d. Movement from Depot to the main line shall be so planned that the headway of main line is not affected.
- e. Simultaneous Induction and withdrawal of a train from Depots to the mainline shall be feasible without affecting the main line operation.
- f. The Depot stabling lines and other lines having direct placement facility would be so interlocked with the main line to ensure that induction of a train for service would be safe and without loss of time for DTO under GoA3.
- g. Stabling tracks shall be on level grade or on a grade not exceeding 0.1% and sloping down towards dead end where provided.
- h. It shall be possible to dispatch an emergency rescue vehicle to mainline directly without loss of time.
- i. Maintenance vehicles shed shall be so located so as to provide direct access to the main line without loss of time.
- j. Automatic wash plant for online washing of train exterior (sidewalls, roof & front / rear) shall be located such that a train can be washed on the entry to the Depot and thereafter can be moved

- to the stabling shed, inspection shed, heavy cleaning shed, under floor wheel lathe shed etc, without any shunting movement.
- k. The Depot layout shall be planned to accommodate adequate number of lines for berthing of trains in stabling lines and inspection bays etc., to meet the requirement of workload for the train fleet holding in the long run.
 - l. The location of Inspection Bay, workshop repair facilities, pit wheel lathe, heavy cleaning bays shall be such that shunting operations for placement of train are the minimum.
 - m. Machinery and Plant specified shall be user-friendly, highly reliable, efficient, require least maintenance and be capable of giving breakdown and maintenance attention to service the train rake in the minimum possible time.
 - n. Rolling stock maintenance is primarily based on unit exchange spare basis. Adequate facilities for lifting of train, removal of bogies, removal and refitment of heavy equipment from/to the train and their repair, overhaul and testing shall be planned in the workshop.
 - o. Adequate space for free access and movement of men, material and trolleys safely in inspection bays, workshop bays, stabling areas shall be planned.
 - p. A well-defined road network is required to access various locations in the Depot.
 - q. There shall be least number of crossings of road with tracks, where trains run.
 - r. Trains will be run in DTO under GoA3 in stabling and other areas as detailed hereunder.
 - s. DTO area shall be fully fenced to prevent any access by working personnel unless otherwise authorised to do so.
 - t. Water supply and Power supply with back up emergency power for the Depot shall be reliable.
 - u. Depot shall have its own sewerage and effluent treatment plant and have network of drains, so designed to ensure no flooding of Depot under any circumstances.
 - v. Administrative offices shall be located in Depot close to entry / exit gate.
 - w. Control Centre shall be located keeping in mind the safety of the building and restricted entry of the operational staff only and offer a clear view of yard.
 - x. Crew booking and crew rest facility shall be located close to stabling shed.
 - y. A back up control centre shall be planned in training centre or any suitable building with all facilities of main control centre.
 - z. Maximum automation in operation and maintenance shall be planned.

6.5 Information about DTO under GoA3

- 6.5.1 Automatic Train operation is an operational safety enhancement device used to help automate train operation. This is achieved by Grade of Automation (GoA). GoA3 is a Driverless Train Operation (DTO) where starting and stopping are automated but the train operator operates the door and drives the train in the event of an emergency.
- 6.5.2 Modern systems are linked to Automatic train control (ATC) and Automatic train protection (ATP) where normal signal operations such as route setting, train operation are carried out by the system. The ATO and ATC/ATP will work together to maintain a train within defined tolerance level of its schedule mentioned in the time table. This combined system adjusts operating parameters marginally such as ratio of power to coast when moving and station dwell time, in order to bring a train back to its normal schedule as per slot assigned for it in the time table.
- 6.5.3 The BSRP Rail system shall have DTO under GoA3 and this system shall be extended to the Depots. The Depot layout at BSRP shall therefore have all operational safety features in Depot suitable for DTO under GoA3.
- 6.5.4 Trains will be placed in stabling line and at designated places ahead of inspection line, under floor wheel lathe line, heavy Interior cleaning shed and workshop line with DTO under GoA3.
- 6.5.5 Stabling lines and all areas where movements take place in the Depot under DTO are to be totally fenced. Groups of 4 lines in stabling area are also to be fenced. This is required to prevent

- any unauthorized access in DTO area. Any entry in DTO area has to be authorized by using signal protection key which will disable train movement under DTO mode in that particular area.
- 6.5.6 For movement of trains from DTO area to inspection shed / heavy interior cleaning shed / workshop, the Train operator shall take over the train from the designated place (entry controlled by signal protection key) and move the trains further. Movement to and from the stabling line and designated places will be under DTO.
- 6.5.7 A Platform of 1.4 m width shall be planned between two stabling lines. Access to these platforms in between stabling lines is only through a foot over bridge that runs across stabling lines and stair cases. For accessing each of the platforms between stabling lines, there shall be gates which are protected by signal protection key. These gates are interlocked such that the access to the platform between a set of two stabling lines is possible only when DTO system is blocked or disabled on the lines to which the platform serves. Alternately, overbridge can be avoided by having separate entry gates for each platform in between two stabling lines from the perimeter road at the end of stabling shed. These gates shall be protected by signal protection key.
- 6.5.8 Adequate space shall be planned between the front end of the train to the friction buffer face on each line where trains are operated under DTO. This space shall be governed by the requirements of DTO under GoA3.
- 6.5.9 All friction buffers in DTO zone shall be 15 m.
- 6.5.10 In the event of parking two trains on stabling line, a minimum gap of 25 m shall be maintained between the two trains. This gap, however, shall be governed by the safety requirements of DTO under GoA3.
- 6.5.11 In under floor wheel lathe shed, the inbuilt train mover provided with the machine will move the train after it has stopped under DTO at the nominated location and power supply is disconnected.
- 6.5.12 Workshop movements will also be controlled in a similar manner. The train will stop at nominated point under DTO and thereafter moved by the train operator or shunting vehicles once the DTO is disabled in line(s), as required, through interlocks and protection keys and power supply to the train is disconnected.

6.6 Operation & Safety Requirements in Depot

Besides requirement of safety for DTO under GoA3, the following operational safety features shall be incorporated in the design of the Depot.

- a. 2 EOT hoists shall be planned over the inspection lines in the inspection bay and they shall be interlocked with the Traction Power switching arrangement.
- b. Train movement inside the inspection shed shall be with Stingers and such operation shall not interfere with EOT hoist operation.
- c. Red flasher lights shall be planned along the inspection lines at conspicuous locations to indicate that the power supply for traction is 'ON'.
- d. Multilevel wheel and other machinery stacking arrangement shall be an inbuilt feature in the Workshop Lines.
- e. The Inspection Bay & workshop and all other work locations shall have provision for adequate lighting in pits and platforms and power sockets and compressed air supply to enable under examination and attention to rolling stock.
- f. The train roof inspection platform shall have at least two openable doors to facilitate staff to go up to the roof for cleaning of roof and checking of roof equipment. Suitable safety interlock shall be planned to ensure maintenance staff are enabled to climb on the roof inspection platform only after isolation of traction power.
- g. Crew control and booking room including crew rest room shall be suitably located to minimize movement of train operators while signing on / signing off duty. PPIO & store Depot shall be so located that material transportation requirement to Workshop / inspection bays are minimised with minimum crossing of tracks.

- h. Width of the doors of the heavy equipment repairs sections shall be adequate to allow free passage of equipment through them.
- i. Provision of water hydrants shall be made wherever necessary.
- j. Compressed air points shall be available in the interior of sheds for cleaning, in inspection bays and heavy interior cleaning sheds.
- k. Depot shall have automatic warning system at each rail crossing for alerting maintenance staff and any other personnel about approaching train. Audio-visual arrangement shall be planned.
- l. Sufficient outdoor and indoor lights shall be planned in work areas and sufficient street lights shall be planned besides roads to ensure safe working and movement of men and material.
- m. Oils, lubricants and other hazardous material shall be planned to be stored away at isolated location.
- n. Planning shall be made to ensure that all personnel entering Depot shall undergo security and safety check including baggage check
- o. Planning shall be made to ensure that safety of road vehicles, road users etc. is not jeopardized by planning audio/visual alarms, wherever required.
- p. Signages shall be planned besides roads and at all other work places, as required.

6.7 Rolling Stock Maintenance

6.7.1 Rolling Stock Features

6.7.1.1 The main features of the proposed Rolling Stock tentatively are as under:

| Sl. No. | Parameter | |
|---------|--|---|
| 1. | Width of Rolling Stock (AC) | 3.2 m |
| 2. | Train speed – Designed | 90 kmph |
| 3. | Acceleration at peak load on tangent track | 0.82 m/sec ² . |
| 4. | Deceleration with Full-service Brake | 1.00 m/sec ² |
| 5. | Deceleration with Emergency brake | 1.3 m/sec ² |
| 6. | Jerk rate | 0.70 m/sec ³ |
| 7. | Service brake (SB) response time | 2.0 Sec |
| 8. | Emergency Brake response time | 1.5 sec. Max. |
| 9. | SB and EB release time | 2.0 Sec. |
| 10. | Coach construction | AC Coaches (Stainless Steel / Aluminium) Width 3.2 m, length – 21.7 m |
| 11. | Tare Weight | DMC (40T), TC (40T)-nominal weight |
| 12. | Axle load | 17 T / 25 T |
| 13. | Train Composition | *DMC+TC+DMC* (three coach trains) DMC+TC+MC*+*MC+TC+DMC*(6 coach trains) * with automatic couplers |
| 14. | Traction Motors | Self-ventilated 3 phase AC drive with VVVF control |
| 15. | CL & SIV | CI with PWM control technology using IGBT |
| 16. | Brake System | Regenerative braking blended with electro-pneumatic friction brake, fail safe pneumatic friction emergency brake, spring applied parking brake. |

| SI. No. | Parameter | |
|---------|-----------------|---|
| 17. | Bogie system | Fabricated steel bogie with air suspension at secondary stage and rubber chevron or steel coil spring at primary stage. |
| 18. | Traction supply | 25 kV OHE current collection system |

6.7.1.2 The Depots shall be designed considering the above features of Rolling stock with maximum coach length of 21.7 m and 25 kV OHE traction system.

6.7.2 Rolling Stock Maintenance Philosophy

6.7.2.1 The outline of the maintenance philosophy followed is listed below:

- Continuous monitoring of the performance of equipment shall be done by condition monitoring of key parameters using "Train Integrated Management System".
- Unit replacement and essential repairs shall be done by the OEMs.
- Automation, to the extent possible, shall be planned with state-of-the-art machinery to ensure quality with reliability.
- Labour intensive procedures shall be kept to the minimum.
- Maintenance staff shall be given special training to develop high-level skills in their trade to ensure quality and productivity in their performance.

6.7.3 Rolling Stock Maintenance Needs

6.7.3.1 Maintenance Schedule

| Sl. no | Type of Schedule | Interval | Work content | Location |
|--------|-----------------------------|---------------------------------|---|-------------------------|
| 1 | Daily check | Daily | Check on the Train condition and function at every daily service completion, internal cleaning/ Mopping of floor and walls with vacuum cleaner as necessary. | Stabling lines |
| 2 | "A" Service Check | 5,000 Km (approx.15 days) | Detailed inspection and testing of sub systems, under frame, replacement / topping up of oil and Lubricants, cleaning of AC filters. | Inspection bays |
| 3 | "B" Service Check | 15,000 Km (approx.45 days) | Detailed inspection of 'A' type tasks plus items of multiples of 15000 Km ('B' type tasks) | Inspection bays |
| 4 | Intermediate Overhaul (IOH) | 4,20,000 Km (approx. 3.5 years) | Check and testing of all sub-assemblies (Electronic, Electrical & Mechanical), Overhaul of pneumatic valves, compressor. Condition based maintenance of sub-systems to bring them to original condition. Replacement of parts due for replacement as per OEM recommendation. Inspection, testing and service trial running and rectification. | Workshop and test track |

| Sl. no | Type of Schedule | Interval | Work content | Location |
|--------|-------------------------|-------------------------------|--|-------------------------|
| 5 | Periodic Overhaul (POH) | 8,40,000 Km (approx. 7 years) | Dismounting and overhaul of all sub-assemblies e.g., Air compressor, pneumatic valves, Brake pipe, bogies, suspension system, traction motor & drive gear, control equipment, saloon doors / control gears, air conditioning unit etc. Overhauling of Equipment including repair and replacement of components / parts as prescribed by the OEMs to bring them to original condition. Inspection, testing and trial running. | Workshop and test track |
| 6 | Heavy Repairs | | Changing of heavy items such as bogies, axle & wheel, axle boxes, traction motor, drive gear etc. Inspection, testing and trial running. | Workshop and test track |

6.7.3.2 Washing Schedule of Rolling Stock

Following schedules are generally recommended for external washing of rolling stock in the Indian environment:

| Sl. No | Type of Cleaning | Maintenance Cycle | Time | Maintenance Place |
|--------|---|-------------------|----------|--|
| 1. | Outside cleaning: wet washing on automatic washing plant | 3 Days | 10 mins | Single Pass-through Automatic Washing plant in Depot |
| 2. | Heavy cleaning: wet washing of Front Face and Rear face on automatic washing plant and Vestibule/ Buffer area, coach floor, walls inside/outside of coaches and roof, manually. | 30 Days | 2-3 hrs. | Automatic washing plant, cleaning & washing shed in Depot. |

6.7.4. Planning of Maintenance Facility

6.7.4.1 Planned number of Trains as per Train Operation Plan (TOP) at Akkupete (near Devanahalli)

The train headways planned for operation and corresponding requirement of coaches for various years are as under:

Corridor-1: KSR Bengaluru City to Devanahalli:

| Year | Headway | No. of Rakes | No. of Coaches |
|------|-----------|--------------------|----------------|
| 2027 | 5 minutes | 14 (3 coach train) | 42 |
| 2031 | 5 minutes | 14 (6 coach train) | 84 |
| 2041 | 5 minutes | 14 (6 coach train) | 84 |
| 2051 | 5 minutes | 14 (6 coach train) | 84 |

Corridor-4: Heelalige to Rajanukunte

| Year | Headway | No. of Rakes | No. of Coaches |
|------|-----------|--------------------|----------------|
| 2027 | 5 minutes | 14 (3 coach train) | 42 |
| 2031 | 5 minutes | 14 (6 coach train) | 84 |
| 2041 | 5 minutes | 14 (6 coach train) | 84 |
| 2051 | 5 minutes | 14 (6 coach train) | 84 |

6.7.4.2 Planned number of trains as per Train Operation Plan (TOP) of Soladevanahalli (Chikkabanavara)

The train headways planned for operation and corresponding requirement of coaches for various years as under:

Corridor-2: Baiyyappanahalli to Chikkabanavara

| Year | Headway | No. of Rakes | No. of Coaches |
|------|-----------|--------------------|----------------|
| 2027 | 5 minutes | 14 (3 coach train) | 42 |
| 2031 | 5 minutes | 14 (6 coach train) | 84 |
| 2041 | 5 minutes | 14 (6 coach train) | 84 |
| 2051 | 5 minutes | 14 (6 coach train) | 84 |

Corridor-3: Kengeri – Cantonment – Whitefield

| Year | Headway | No. of Rakes | No. of Coaches |
|------|-----------|--------------------|----------------|
| 2027 | 5 minutes | 14 (3 coach train) | 42 |
| 2031 | 5 minutes | 14 (6 coach train) | 84 |
| 2041 | 5 minutes | 14 (6 coach train) | 84 |
| 2051 | 5 minutes | 14 (6 coach train) | 84 |

As per DPR, the traffic demand during peak period for the year 2031, 2041 & 2051 is planned to be met on Corridor-1, Corridor-2, Corridor-3 & Corridor-4 by 6 coach trains at 2.5 minutes headway. For increase in demand beyond the year 2051, it is proposed to increase the line capacity by further regulating the headway and also increasing the length of the train to 9 coach train. Signalling system on main line permits headway up to 1.5 minutes. Thus, numbers of coaches/cars in trains to be used in Corridor-1, Corridor-2, Corridor-3 and Corridor-4 line beyond 2051 may be increased and accordingly Depot facilities and layout (stabling lines, inspection lines, workshop line etc.) are to be designed for DTO under GOA3 keeping line parameters in view.

6.7.5 Signalling system permits headway up to 1.5 minutes. Depot facility shall be planned to run 9 coach/car trains at appropriate headways to meet the future demand beyond year 2051. The Depot layout design shall be compatible for DTO under GOA3.

6.7.6 Requirement of Number of Lines for BSRP Depot

- 6.7.6.1 The requirement of number of lines in different stabling, inspection, heavy cleaning, overhaul and maintenance sheds for Akkupete (Near Devanahalli) and Soladevanahalli (near Chikkabanavara) depots of BSRP is related to train holding and the corresponding requirement of facilities for carrying out different schedules of maintenance of rolling stock. While sufficient lines to deal with the no. of trains to be held in BSRP for the year 2051 have to be planned in the depots, provision needs to be made for future expansion of facilities post 2051, to the extent of availability of land.
- 6.7.6.2 The fleet requirement as stated earlier to be served by both Akkupete (Near Devanahalli) and Soladevanahalli (near Chikkabanavara) depots forms the basis for providing various facilities and lines in these depots.
- 6.7.6.3 The DDC has to work out the optimum requirements of lines in the Depots based on the actual train holding and workload. The DDC shall, based on the experience in Railway / Metro Depots in India, work out the optimum no. of lines of suitable length for train holding in the year 2051 in different sheds, duly keeping scope for future expansion in the Depots to hold more trains beyond 2051, to the extent of availability of land.
- 6.7.6.4 The DDC shall plan the Depot for efficient operation and provide alternate routes and redundancy, wherever possible, so as to ensure smooth operation of Depot even in case any route is blocked.
- 6.7.6.5 The DDC shall present to the Employer multiple viable options of Depot layout to meet the operation and maintenance requirement of rolling stock and Depot operation. The

most viable option, after examination, modification (if required) and approval by the Employer can form the basis for proceeding ahead with further detailed design.

6.7.7 Design of Depot cum Workshop Facilities

As per the dimensions of the Rolling Stock, the length of 3, 6 and 9 coaches/cars train would be 67.8 m, 135.6 m and 205 m respectively (approx.). For computing length of lines in the Stabling shed, heavy cleaning shed, under floor wheel lathe shed, Inspection shed and overhaul shed and workshop and shunting / transfer tracks, the above-mentioned lengths of train shall be taken in to consideration. The facilities generally required are also given in subsequent paras.

6.7.8 Stabling Sheds

Trains are parked here during off peak and non-operational hours. Trains will be placed in stabling sheds by DTO under GoA3. The track centre between two tracks in stabling shed shall be 4.6 m.

A platform of 1.1m height shall be planned between two stabling lines for accessing the trains with suitable access-controlled door protected by signal protection key and interlocked with DTO system. The stabling shed shall have OHE System for each line for direct placement of trains inside shed with DTO under GoA3.

Provision shall be made for stop signal, friction buffer stops and safe distance between friction buffer stops and cross path ways.

Each stabling line shall have friction buffer at the end and all tracks shall have 25KV OHE System for train operation.

The shed shall be fully fenced and planned with industrial lighting and inspection lights and all other facilities where necessary.

6.7.9 Inspection Sheds

Inspection of the following sub-systems/equipment of rolling stock is generally carried out in inspection shed:

- a. Electronics: PA / PIS
- b. Mechanical components, couplers etc.
- c. Batteries
- d. Air conditioner
- e. Brake modules: including Brakes and brake gear
- f. Bogie
- g. Traction Motor
- h. Vehicle doors, windows and internal fittings
- i. Power System including converter, circuit-breaker etc.
- j. Wheel measurement
- k. Undergear examination

6.7.9.1 Inspections are grouped into "A" and "B" Checks. Inspections are carried out during the day off peak period and also during night. Since "B" checks take longer time, these cannot be completed in the off-peak times. Inspection lines are to be planned with following facilities to enable attention to coaches:

- a. The track inside inspection bay is depressed with rails on up-stands. The track outside this shed is embedded.
- b. The inspection lines will have sunken floor. The floor will be sunken by 1100 mm and shall be suitable for an adult worker to attend to bogie and undergear components from the side of the train. There shall be pit in between track rails to facilitate attention to undergear.
- c. The track spacing inside inspection shed shall be at least 6.5 m to facilitate movement of men and material in between lines.
- d. Ramps of 1:10 slope, 3 metre-wide are generally planned with sunken floor system for movement of material for the coaches/cars.

- e. Space is planned at each end of line for movement of material by fork lifter/Hand trolley
- f. Roof Inspection platforms supported on the columns shall be planned.
- g. The inspection bay shall be planned with O/H hoist of 2T capacity to facilitate lifting of roof mounted equipment.
- h. Roof and walls shall be designed for optimum natural air ventilation and sufficient natural light.
- i. The movement of train inside inspection shed is by stingers planned for each line.
- j. Lighting below the rail level and in the pit shall be planned to facilitate the under-frame inspection.
- k. 415V 3-phase 50 Hz, 230V 1-phase 50 Hz AC supply and Pneumatic supply shall be planned on each inspection shed columns.
- l. Inspection shed shall have attached sections for attention to various assemblies and subassemblies and associated stores and offices.
- m. Space for cleaning of HVAC filter under high pressure water jet shall be planned.
- n. There shall be space for attending to other subassemblies during inspection.
- o. The shed shall have industrial lighting of sufficient lux to facilitate day and night working.
- p. "Live" status of traction power shall be indicated through audio visual indication and conditions for safety protection arrangement for undertaking work on the train shall be incorporated in the bid document.

6.7.10 Combined Workshop and overhaul shed

- a. The overhaul shed and workshop shall be an integrated shed with workshop in rear and adjacent to overhaul lines. The track spacing in overhaul shed shall be at least 8m for facilitating movement of men and material. The area of workshop shall be sufficient for accommodating all sections for maintenance and repair of assemblies and subassemblies of rolling stock and have maintenance facility for ancillary equipment and other equipment of items of work in the system.
- b. The length of overhaul lines shall be such as to accommodate 3 coaches in lifting berths in each track and the track shall be cross connected with bogie turning facility. Space for workshop maintenance sections shall be planned around and in rear of overhaul lines.
- c. Each coach berth shall have pits at suitable locations for attending to bogie and uncoupling of bogie from body.
- d. At least 9 berths shall be planned in 3 lines for placement of coaches for intermediate and periodical overhaul and also for any heavy repairs.
- e. The track inside overhaul shed shall be embedded and heavy-duty floor suitable for using portable lifting jacks of at least 15 T capacity for lifting of coaches shall be planned.
- f. The workshop will have sufficient berths to meet the IOH / POH demand of all coaches to be held by BSRP system.
- g. At least one line shall be fitted with under floor lifting jack system capable to lift a 3 / 6 / 9 coach/car train for quick change of bogies or any other under frame mounted equipment to save down time of rolling stock. The arrangement of jack system shall be such that lifting of any coach in train formation for replacement of bogie and under frame heavy equipment such as compressors, convertor - inverter, static inverter etc. is also possible individually.
- h. The overhaul and workshop bay shall be equipped with two 15 / 3T overhead cranes, in each bay spanning the entire length of the workshop bay.
- i. Space shall be planned for repairs of HVAC, Doors and Traction motor, repairs etc. Distinct spaces shall be earmarked for dismantling / repairs / assembling and testing of each of this equipment. Related machinery for Overhauling / Repairs & testing activities of every equipment shall also housed in the space earmarked.

- j. There shall be space for bogies, wheels and axles, axle boxes, roller bearings, gear boxes, gears, necessary infrastructure for disassembly, assembly, repair and testing of all assemblies and subassemblies, components of bogies/wheels and axles. The repair shop shall be easily approachable from within the workshop for transportation of components.
- k. There shall be washing and cleaning equipment for bogies. Bogie test stand shall be planned in the workshop. Component cleaning facility shall be planned in workshop.
- l. Workshop lines shall be inter-linked through turn-tables or triangles, as decided by the Employer, each suitable for a train in loaded condition (in case of turn-table).
- m. Suitable arrangement for accessing roofs of coaches shall be planned for attending to roof mounted equipment and repairs. There shall be walkways on columns for roof inspections, along the workshop lines.
- n. Bogie frame paints and battery maintenance cells shall be located in the workshop with arrangement to extract fumes by suitable exhaust systems.
- o. The workshops may have service buildings with array of rooms along its length. These shall cater to overhauling sections, offices, costly store items, locker rooms, toilets etc.
- p. The workshops shall be planned with proper ventilation arrangement. The design shall provide natural air circulation and cross ventilation besides the egress & ingress for coaches.
- q. Air-circulators, lights, Powers supply points and compressed air supply line shall be planned on each workshop column.

6.7.11 Workshop Sections

In general, the workshop shall have separate sections for repair and overhaul facilities for the following:

- a. Bogies and bogie components
- b. Wheels and axles
- c. Traction Motors, Traction motor blowers and auxiliary machines
- d. Axle Boxes and axle Bearings
- e. Roller bearings
- f. Gear boxes and gears
- g. Current Collector mechanisms
- h. Converters / Inverters, Circuit breakers
- i. Batteries and Charging Equipment
- j. Air Compressors, pneumatics, air springs
- k. Air-conditioners
- l. Brakes Equipment
- m. Door actuators
- n. Body furnishing
- o. Control and measuring equipment
- p. Pneumatic equipment
- q. Dampers and Springs
- r. Couplers and Gangways
- s. Electronics in cab desk
- t. ATP / ATO / ATS equipment

This workshop shall have a rail line at floor level with provision of pits for repairs of Shunters, Rail Road Vehicles and other ancillary vehicles. Heavy lifting works can be carried out in main workshop.

The DDC shall study the workshop facilities at various Railway / Metro systems in India for 3200mm wide Rail coaches working in Broad gauge and propose optimum workshop and overhaul shed design by providing specifications for all equipment and machinery required for overhaul of assemblies and subassemblies of Rolling stock planned for operation in BSRP Rail system. Such

design shall be presented to the Employer for review, revision and approval before proceeding with detailed design.

6.7.12 Heavy Cleaning Sheds

- a. In each Depot, an exclusive shed for heavy cleaning of interior walls, floor, seats, window glasses, front and rear face, gangway and buffer area, roof and outside walls etc. shall be located close to the Inspection Shed.
- b. It should be possible to place trains in this shed directly from main line and also by shunting operation from inspection / overhaul shed. The train shall be brought to stop short of this shed with DTO under GoA3. Thereafter, the trains shall be placed inside shed by the train operator after operating signal protection key. Train operation in this shed shall be access controlled.
- c. There shall be no system of catenary and contact wire inside the shed. Instead, Stinger shall be planned for moving the train inside the shed.
- d. The track shall be on up-stands.
- e. Facility for blow down of under-frame and gangway portion of train shall be planned in this shed.
- f. Roof access platform shall be planned for cleaning the roofs of coaches.
- g. There shall be proper drainage of waste water from the pit under the train connected to the waste water system.
- h. Water points, electrical plug points, inspection lights in pits shall be planned as required to facilitate the work. Sufficient storage for equipment and other cleaning material shall be planned.
- i. The Shed shall have suitable industrial lighting and it shall be enclosed from two sides with opening at both ends.

6.7.13 Under floor Wheel Lathe Shed / Wheel Re-profiling Shed

- a. The under-floor wheel lathe shed shall be so located that it is possible to directly take train to the shed. It shall be possible to move a train from inspection shed to this shed.
- b. The shed shall have good road approach.
- c. Wheel profiling machine shall be housed in pit inside the shed and coach is positioned over the machine for re-profiling of wheel set.
- d. No OHE System is planned inside this shed.
- e. The train stops short of this shed in DTO under GoA3. The train movement vehicle provided with machine moves the train inside the Wheel Re-profiling Shed. The train is positioned on the machine by the said vehicle so that one-wheel set of a particular bogie can be machined.
- f. Following completion of wheel turning activity, the train is pushed out of Wheel Re-profiling Shed by train movement vehicle in DTO territory. The train then moves out on its own power.
- g. Wheel Re-profiling Machine has in built metallic scrap disposal system.
- h. One 5T EOT crane shall be planned in the shed.
- i. Service plug points and inspection lights are planned for facilitating work.
- j. Track in wheel re-profiling area is embedded inside shed and also paved apron is planned outside the shed.

6.7.14 Automatic Coach Washing Plant (AWP)

- a. Rolling stock exterior surface (side walls, front & rear cab face, roof) shall be washed using a fully automated train washing system.
- b. It should be possible to wash at least 6 trains per hour with each train being washed in a single pass.
- c. The automatic Coach wash plant shall be placed on the incoming route so that incoming trains into the Depot can be washed before being placed in stabling line, inspection shed etc.
- d. Planning shall be made in such a way that no shunting is involved for washing of trains.
- e. Water recycling arrangement and plant room with underground tank, as required, shall be planned closely near the washing apron / shed.
- f. Washing apron shall have, suitable arrangements for water conservation and collection of dripping water and its proper disposal.

6.7.15 Test Track

The purpose of Test track is testing and commissioning of new trains, testing and trials of the trains after IOH & POH. Test track shall be planned with OHE System and equipped with facilities for DTO under GoA3. The OHE System shall be isolated from rest of the Depot track.

6.7.16 Broad features of test track:

- a. Length of Test Track: 1000 m desirable (however, as per availability of space) - maximum possible length shall be planned
- b. Tangent track or track with a curve of minimum radius of 1000 m
- c. Grade not to exceed 1%
- d. No road crossings
- e. Completely fenced with clearly definable access points to ensure safety
- f. Paved platform on both sides of the track at ends

6.7.17 Facilities for Emergency Response

- 6.7.17.1 Re-railing facilities shall be planned in the Depot for attending to any emergency relief and rescue operations on the main line and also in the Depot.
- 6.7.17.2 Movement for these facilities shall be so planned that operation is possible by road or by rail.
- 6.7.17.3 One nominated line in the Depot with direct access to mainline shall be planned where relief and rescue vehicle can be parked. Such vehicle shall be able to move by road as well. Service plug and other utilities as required shall be planned for day-to-day attention to the vehicle in relief and rescue vehicle shed.
- 6.7.17.4 Response time for these services shall meet the current national and international standards. Time for mobilization of staff & taking out of the rescue vehicle by road or rail from the Depot shall be the minimum possible and shall not exceed 30 minutes.
- 6.7.17.5 A medical centre shall be planned in the Depot and manned round the clock for attending to any emergency during day and night.
- 6.7.17.6 Firefighting arrangement shall be planned in the Depot for attending to any emergency.
- 6.7.17.7 The Depot shall be served by the fire-fighting arrangement of the Bangalore city and proper communication for such emergency arrangements shall be made available in least possible time.
- 6.7.17.8 For firefighting arrangement on connecting line and Depot, city fire fighting services shall be used and emergency water supply arrangement shall be planned in the Depot, as necessary.
- 6.7.17.9 The track and OHE System inspection vehicles shall be separately parked in a shed. This shed shall have direct access to the main line so as to move quickly, in case of emergency. The shed shall have facility for storage, offices, work benches and maintenance of such vehicles.

6.7.18 Infrastructure facilities

6.7.18.1 Coach Unloading Line

As the coaches are of Broad gauge, these shall reach the Depot by road on trailers. To unload the coaches and place them to the track, suitable coach unloading facility shall be planned. It shall have the insulated track embedded in the floor facilitating the movement of road trailer, which will transport the coaches on it. The length of the track embedded area shall not be less than 40 m. There shall be enough space available for movement of heavy cranes for lifting of coaches. The unloading area shall be easily accessible for heavy duty hydraulic trailer. Floor in the coach unloading area shall be heavy duty to withstand load of road mobile cranes of suitable capacity to be used for unloading coaches.

6.7.18.2 Crew Booking Office

Suitable office facility near Depot Control Centre and PPIO shall be planned, so that train operators reporting to duty or going off the duty can obtain updates regarding 'Special Notice', 'Safety Circulars' and other technical updates & information in vogue. This office shall have parking space for two / four wheelers for convenience of the train operating staff. The crew booking office shall have crew rest facility as well for late night and early morning crew to avail rest.

6.7.18.3 Power Supply

Auxiliary substations shall be planned for catering to the power supply requirement of the whole Depot and workshop. Details of connected load for each feeder shall be worked out considering a diversity factor of 0.5. The maximum demand shall be appropriately computed.

Two Auxiliary substations are proposed, as the demand for machines in Workshop area would be large. The standby power supply is proposed through DG set with AMF panel. The capacity of DG set shall be adequate to supply all essential loads without over loading.

There shall be a traction substation in Depot for meeting the traction energy requirement. This shall be suitably located keeping in mind the routing of 25 kV outgoing cables and 33 kV incoming cables.

6.7.18.4 Compressed Air Supply

Silent type compressor units shall be suitably installed inside the workshops at convenient locations for supply of compressed air to workshop and Inspection shed.

The pneumatic pipeline shall run within the workshop and inspection shed for compressed air supply at convenient points. The compressed air supply points shall be such that maximum length of flexible pipeline for supply of compressed air does not exceed 15 m.

6.7.19 Water Supply

6.7.19.1 Pump house, underground water storage

- a. In-house facilities shall be planned for meeting the water requirement of Depot including all buildings, workshops and other areas. For this purpose, water requirement of Depot for all purposes shall be properly assessed and necessary arrangement shall be planned.
- b. Possibility of using water from BWSSB sources shall be examined and planned to the extent possible to conserve ground water. The balance water requirement (other than that met through BWSSB sources) of depots is planned to be met by using ground water. Bore wells / deep tube wells, as per requirement, shall be planned to be installed to meet the balance water requirement of depots.
- c. The Pump house shall accommodate all Plant and Equipment and shall have underground water tanks for storing filtered and unfiltered water. The filtering, storage and distribution network is designed to feed water for service requirements for maintenance of rolling stock, and also requirements in different buildings and sheds. This system also feeds water to fire system when required.
- d. Adequate storage of water to meet a minimum of 36 hours requirement shall be planned.

6.7.19.2 Effluent and waste water system

- a. Waste water released from automatic coach wash plant shall be fed into water recycling plant and residual water shall be treated in effluent treatment plant.
- b. Waste water from bogie cleaning plant and other sources like bearings, filters and other component cleaning areas shall be treated in effluent treatment plant.

- c. A separate effluent treatment plant shall be planned for treating the effluent arising at different locations, as mentioned above. The effluent shall be collected in reservoirs close to the source and transferred to the Effluent treatment plant. The capacity of the plant shall be guided mainly by the quantity of effluent arising out of coach washing and heavy cleaning which are regular activities in the depots duly considering the portion of it, which gets recycled. The specifications and design-built requirements of Effluent treatment plant shall be proposed by the DDC and Employer's approval obtained.

6.7.19.3 Drainage and Sewerage

- a. Sewerage, storm water drainage shall be given due care while designing Depot.
- b. Drainage in the depots is important to ensure that under no circumstances the depots are flooded.
- c. Meteorological records for last 100 years rainfall data and other relevant data shall be used to design the drainage system.
- d. Rain water harvesting shall be given due importance and provisions made in Depot to charge underground reserves.
- e. Waste water including sewage, post treatment in Sewage treatment plant, shall be reused to the extent possible for inferior use like landscaping and residual water shall be discharged to municipal drain duly complying with pollution control norms of the State of Karnataka.
- f. The capacity of municipal drain to efficiently deal with Depot discharge shall be carefully assessed and any augmentation necessary, shall be planned in the depots as also outside the depots.
- g. The sewage from the underground drains is conveyed through the external sewerage network of the Depot and finally disposed into the Sewage Treatment Plant. A common waste water treatment plant shall be planned for the entire depot. The object of sewage treatment is to stabilize decomposable organic matter present in sewage, so as to produce an effluent and sludge, which can be disposed of in the environment without causing health hazards or nuisance.
- h. The degree of treatment shall be decided with a view to produce an effluent and sludge meeting the requirement of local regulatory agencies. The treated water from the sewage treatment plant is distributed to select buildings for toilet flushing and also for landscaping needs.

6.7.20 Training centre

Centralised training centres shall be planned to set up in Depots at Akkupete (near Devanahalli) and Soladevanahalli (near Chikkabanavara) separately for training of personnel in operation and maintenance of rolling stock and other assets and items of work installed and commissioned in the Depots. This facility shall have class rooms, conference hall, model rooms, simulator room, equipment rooms, offices and other related facilities.

Training facility shall be planned to include all necessary audio-visual aids, simulators, models, diagrams, charts as necessary, training material, hardware and software required for training of personnel to be engaged in maintenance of rolling stock and other assets. Computer aided training shall be planned.

The training centre will also house the library, where all reference materials, drawings and documents will be stored and maintained.

Back up control centre shall also be planned to be located in this building.

6.7.21 Control Centre

Control Centre (CC) is situated in the administrative building. However, CC shall be in safe and secure place with access control and have separate entry with no connection with administrative building entrance. It shall have an arrangement for staff rest facility and all necessary facilities for efficient working round the clock throughout the year.

The CC shall have provision for additional space for controlling future lines as and when constructed and commissioned. CC is one-point control for train operation on the line. There shall be separate Control Centres for Bangalore Suburban system in Akkupete (near Devanahalli) Depot and Soladevanahalli (near Chikkabanavara) Depot. CC shall be the nerve centre for DTO under GoA3.

Briefly, the CC discharges the following functions:

- a. Operation management such as planning, dispatching and control from one location
- b. Instruction and support of disaster prevention or accident information system to operating personnel
- c. Communication with other control centres, maintainer, train operator and stations, as necessary
- d. Prepare and monitor train operation plan
- e. It also houses
 - i. Visual display for train control and signalling
 - ii. SCADA for Traction and BMS for Auxiliary Systems
 - iii. ATS, Radio, SCADA, PIDS workstations for Traffic and other controllers

All equipment and accessories required for functioning of CC are installed in the CC and its adjoining rooms. All communication facilities control facilities are located in CC.

6.7.22 Administrative Building

- a. An administrative building shall be planned at a location, close to the Depot main entrance. A time and security office shall be planned close to the main entrance. It shall be equipped with suitable Access control system for all the staff working in the complex.
- b. The administrative building shall normally cover office accommodation for the following officers and staff of O&M division.

GM (Operation & Maintenance), DGM (Operation), DGM (RS), DGM (Traction Power), DGM (E&M), DGM (Signalling), DGM (Telecom & AFC, PSD), DGM (P-WAY), DGM (Civil Structure), DGM (HR), DGM (Finance & Accounts), DGM (Security), DGM (Public Relation), Support officers and staff including meeting rooms, conference room, toilets, minor pantry room etc.

6.7.23 Parking Facilities

Sufficient parking space shall be planned for two wheelers and four wheelers at suitable points, preferably, near the working areas. Administrative building, Central stores crew booking offices shall have separate parking facility. Some of the parking facility shall be covered.

6.7.24 Depot Entry & Roads

There shall be at least two gates for each depot. One of the gates shall be closer to coach unloading area, so that heavy duty trailers bringing the coaches do not have to travel long distance inside depot. The main entrance gate of the Depot shall be so located that any vehicle entering the area of Depot passes through least number of surface crossings with running tracks to reach Depot managers' offices, administrative building and central stores area. The roads inside the depots shall be designed to be fit for movement of heavy vehicles. The Depot Road system shall allow fire tender to move freely to all areas in emergency.

The Depot Road shall have proper drainage and shall be planned with all necessary road signage, audio-visual alarms and road furniture, as necessary for safety of road users.

6.7.25 Depot signages

Signages shall be as per Standard and shall be planned in all sheds and buildings both indoor and outdoor, as per the safety and other requirements of the area.

6.7.26 Sheds and Buildings

The sheds and buildings planned in a typical Railway / Metro Depot in India with brief functions in particular for BSRP Depot are indicated below. Wherever necessary, these buildings may be grouped and located suitably with economy of space and designed with good aesthetic and architectural finishes.

Sheds shall preferably be PEB structures with adequate ventilation arrangement and covered on three sides to meet functional requirement of operation and maintenance of rolling stock. The roofs of the sheds shall be so designed to cater for solar panels for generation of clean energy and shall meet the green building norms.

The decision in this regard may be taken at the detailed design stage with approval of the Employer.

The DDC shall design solar panels on the top of all sheds, buildings etc., wherever it is feasible to provide solar panels for generation of electricity. The DDC shall also design all the associated components for generation of electricity and for using the same in the depots.

| Sl. No. | Name of shed/Building Sheds | Functionality |
|---------|------------------------------|---|
| 1. | Stabling Shed | For stabling of adequate no trains of suitable composition as per fleet size, operational plan of line(s) under long term with DTO under GoA3 Track centre shall be 4725 mm and there shall be a platform in between two trains to access train interior through a system of over bridge and access control gates interlocked with DTO system through signal protection key. |
| 2. | Inspection shed | Periodical time/km based checks of trains e.g. "A" & "B" Checks Unscheduled Inspection of coaches and pre and post commissioning works of trains Each line shall accommodate one train of 3/6/9 coaches, as the case may be, in the long run. Placement is with DTO under GoA3. |
| 3. | Heavy Cleaning shed | Intensive cleaning of train inside, outside and roof once in a month. Line capacity to suit train of 3/6/9 coaches, as the case may be, in the long run. Placement is with DTO under GoA3. |
| 4. | Overhaul Shed | Lifting of coaches of rolling stock for major repairs, intermediate and periodical overhaul of assemblies and subassemblies, bogie changing, under slung equipment changing etc. Adequate berths to deal with workload for train holding on long run Major repair to shunting vehicles, and other rail/road mobile equipment. |
| 5. | Workshop Shed | Repair and attention to assemblies and subassemblies of rolling stock and other rail mounted vehicles, general machine shop, fabrication and welding section etc. It shall have provision for all Plant & Equipment as per plan. |
| 6. | Emergency vehicle shed | For stabling and attention to P/way trolleys, wagons, tie tamping, rail grinding machines, OHE System inspection vehicles and shunting vehicles. |
| 7. | Under floor wheel lathe shed | For In-situ wheel profiling of wheels of coaches |

| Sl. No. | Name of shed/Building Sheds | Functionality |
|------------------|---|--|
| | | Adequate track length shall be planned both in front and rear of train to deal with train of suitable composition as per fleet size and operational plan. |
| 8. | Relief & rescue Shed | For keeping rail cum road relief and rescue vehicle It shall be directly connected to road exit from Depot. |
| 9. | Automatic train wash plant | In-motion state of the art automatic washing of side walls, roof, front and rear end of coaches It shall have a shed to house Plant and Equipment. Provision of washing Apron shall be planned for collection of dripping water and its proper drainage. The capacity shall match washing requirement of a train of adequate length as per fleet size. |
| Buildings | | |
| 10. | Administrative building & CC | Lay out and detailing of administrative building shall be finalized by the DDC (Architect) providing appropriate accommodation for the following: GM (Operation & Maintenance), DGM (Operation), DGM (RS), DGM (Traction Power), DGM (E&M), DGM (Signalling), DGM (Telecom & AFC), DGM (P-WAY), DGM (Civil Structure), DGM (HR), DGM (Finance & Accounts), DGM (Security), DGM (Public Relation) Support officers & staff including meeting rooms, conference room, toilets, minor pantry room etc. |
| 11. | Training Centre & BCC | For training of KRIDE personnel including provision of space for simulator and back up control centre |
| 12. | Depot& line managers Office/PSD/S&T equipment maintenance offices | The building houses the line managers and operational staff. It also shall have office for repair and attention to equipment of PSD, AFC, S&T and E&M system of the BSRP Rail system |
| 13. | Crew Booking & Yard and stabling shed offices | Crew control and booking office with rest room facilities Yard and stabling shed maintenance staff are also housed here. |
| 14. | Workshop, Rolling stock and Depot maintenance office building | The Rolling stock maintenance office building shall provide office facilities, accommodation for rolling stock managers and supervisory personnel. Planning and scheduling of maintenance of rolling stock and its associated Plant & Equipment, and other supervisory personnel and day to day functions. All equipment and furniture shall be planned for rolling stock for meeting all functional requirements. |
| 15. | Inspection shed offices & sections | For offices and rooms for inspection and attention to train assemblies and subassemblies close to inspection shed |
| 16. | Emergency Vehicle Shed and store | For office store and workbenches of emergency vehicles |
| 17. | Depot Vehicle maintenance | For parking and repair / attention to Depot Road vehicles, mobile cranes, material handling equipment with offices and stores |
| 18. | Central Stores for Depot | A central store facility is integrated with Depot to support the maintenance programs of RS, line assets and other assets in depot. The store inside Depot shall be the central store for storage of all types of spares including Capital Spares and consumables etc. required for maintenance and overhaul of rolling stock and also for maintenance of assets of the line and depot. |

| Sl. No. | Name of shed/Building Sheds | Functionality |
|---------|--------------------------------------|--|
| | | <p>Minimum requirements of central store are: Inbuilt fire-fighting system; Adequate lighting arrangement; Standard Industrial racks for palletized goods, accessible by fork lift trucks, several layers high; Offices staff amenities; Communication facility; Handling machines and equipment One overhead crane shall be planned to deal with heavy items</p> |
| 19. | Security offices | <p>There shall be entry and exit Gates of Depot from the main road outside depot. There shall be intermediate access gates inside Depot segregating the maintenance area & administrative area. The access through these gates is on the basis of need to access and on authorisation by the nominated managers. All gates of Depot are under CCTV surveillance. The entry and exit of all personnel working inside the Depot are controlled at main gates. A system of recording and monitoring attendance through suitable system shall be adopted. Provisions shall be planned at these gates for scanning of baggage, body search by security personnel. All security personnel are stationed in these offices.</p> |
| 20. | P/WAY store & office | This building accommodates the personnel of permanent way and buildings, their offices, stores, tools, toilets etc. |
| 21. | Canteen | Depot canteen caters to food and refreshment requirement of Depot personnel and shall provide service at different work centre/buildings where staff work. |
| 22. | Depot medical centre and Prayer Room | Depot medical centre caters to emergency medical attention to Depot personnel in case of any accident or medical emergency and first aid. It shall also have an attached prayer room for staff. |
| 23. | Crèche | A crèche shall be planned for Depot personnel. |
| 24. | Oil & Lubricant store | This building caters for storage arrangement for storing oils, paints, lubricants etc. in the Depot. Such storage is away from the main store. Fire prevention/ suppression arrangement and ventilation arrangements, as required, shall be planned in such storage area. |
| 25. | Hazardous material store | This building shall be planned for storage arrangement for gases and other hazardous material in the depot. Such storage shall be planned away from the main store. Fire prevention/ suppression arrangement and ventilation arrangements, as required, shall be planned in such storage area. |
| 26. | Scrap yard | Nominated area for storage of industrial scrap duly segregated for disposal The area shall be partially covered. |
| 27. | Used oil and lubricant drums | Used oil and lubricant drums are stored here for disposal. |
| 28. | Overhead Tank | For storage of water for supply to various sheds and buildings of Depot |

| Sl. No. | Name of shed/Building Sheds | Functionality |
|---------|---|--|
| | | This shall be of sufficient capacity to meet at least 36 hrs requirement and located near water pump house. |
| 29. | Pump house & filter plant & water reservoir | Pumps of water supply, storage of water and filtering arrangements are accommodated here for meeting the requirements of the depot. |
| 30. | Signalling room | This accommodates all the equipment for signalling system of Depot and is centrally located to cater to all areas. |
| 31. | RSS | This area is for locating 'Receiving substation' of the depot. Incoming power from electricity supply system of City is received here at 220kV/132kV and is utilised for BSRP Rail System through a network of traction and auxiliary substations. Generally, the output power is at 33 kV. |
| 32. | TSS | This area houses the traction substation (TSS) for feeding 25 kV supply to OHE System of Depot for traction purposes to meet traction loads. |
| 33. | ASS | Auxiliary substation (ASS) and LT panels are accommodated here. At the ASS, the 33 kV supply is further stepped down to 415 V for use of Auxiliary loads. These buildings accommodate 33 kV/415 V transformers for auxiliary substation (ASS), LT panels, switch gears, to facilitate distribution of auxiliary power supply to Depot buildings, sheds, workshop, street lighting etc. These buildings shall house diesel generating sets of appropriate capacity for emergency power supply to the Depot. |
| 34. | DG Set & LT panel | |
| 35. | Parking area | Adequate area for parking of two and four-wheeler vehicles shall be planned at suitable locations for use by KRIDE personnel and also by visitors. |
| 36. | Test Track | This track is for testing a new train at commissioning stage and also testing of existing trains after intermediate or periodical overhaul or major modifications. |

DDC shall study the sizes of the buildings provided in other Railway Depots in India, optimize the size & location and group them together with economy of space at detailed design stage and propose them for the approval of the Employer. The DDC shall take into account the possible deployment of personnel in Depot in different areas of work and buildings and sheds as also on the connecting line and make adequate provision for such personnel, duly considering the scope of expansion in length of existing lines in future increase. The DDC shall place their proposal for sheds and buildings for review and revision and approval of the Employer. The Depot layout shall result in optimal movement of men and material.

6.7.27 Depot Plant and Machinery Subsystem

6.7.27.1 A list of major Plants and Machinery generally provided in a typical Railway / Metro Depot in India, to meet requirements of operation and maintenance, is given below.

| Group No. | Serial No. | Equipment | Quantity |
|-----------|------------|---|----------|
| A | 1. | Under floor Pit wheel lathe, Chip crusher and conveyor for lathe on pit | 1 No. |
| | 2. | Battery operated/Electric vehicles for movement of coaches over under floor wheel lathe, and pulling coaches and bogies inside workshop, Rail cum road vehicles (RRV) | 2 Nos. |
| | 3. | Vertical Boring Machine for wheel discs | 1 No. |

| Group No. | Serial No. | Equipment | Quantity |
|-----------|------------|--|---|
| | 4. | Press for removal and pressing of the wheel on axle | 1 No. |
| | 5. | Axle journal turning and burnishing lathe | 1 No. |
| | 6. | Portable Ultrasonic Machine for detecting cracks in Axles | 2 Nos. |
| | 7. | Bogie Testing Machine (BTS) | 1 No. |
| B | 1. | Run through type Automatic Washing plant for Suburban Rail coaches. | 1 No. |
| | 2. | High-pressure washing pump for front and rear end cleaning and interior cleaning of coaches with accessories | 4 Nos. |
| C | 1. | Travelling O/H crane for Workshop shed 15T/ 3T | 8-10 Nos. |
| | 2. | Travelling O/H crane over the Pit Wheel Lathe 5T | 1 No. |
| | 3. | Travelling O/H crane for ETU Shed 5T | 1 No. |
| | 4. | Travelling O/H crane for store 5T | 1 No. |
| | 5. | Hoist for Inspection Line 3T | 3-4 Nos. |
| | 6. | Web sling/ polyester sling with shackle | 50 Nos. |
| D | 1. | Mobile synchronous Jacks 15T for Lifting 3 coaches (set of 12 jacks) | 3 sets + 1 Spare |
| | 2. | Synchronous Pit jacks 15T for lifting full train coaches (set of 2 jacks per coach) | 2 sets |
| | 3. | Mobile lifting table | 2 Nos. |
| | 4. | Coach body stands (set of 4 stands) | 4 Sets |
| | 5. | Bogie turn tables | as required for layout in workshop. |
| | 6. | Mobile safety steps | 8 Nos. |
| | 7. | Lifting rack for HVAC unit | 4 Nos. |
| | 8. | Mobile work lift platform | 4 Nos. |
| E | 1. | Under-frame Blow down plant | 1 No. |
| | 2. | Rail fed Bogie wash plant | 1 No. |
| | 3. | AC filter cleaning machine | 2 Nos. |
| | 4. | Small parts cleaning plant for rolling stock | 1 No. |
| | 5. | High-Capacity vacuum cleaner | 6 Nos. |
| F | 1. | Rail cum road Rescue Vehicle with Re-railing & Allied Equipment (RRV) | 1 No. |
| | 2. | Battery Operated Rail cum Road Shunter (for movement of trains and individual coaches) OR Rail mounted Diesel Shunter for movement of trains | 1 No. |
| | 3. | Ballasted track tamping machine | 1 No. |
| | 4. | Rail grinding machine | 1 No. |
| G | 1. | Road vehicles: - i. Pickup Van ii. Road Truck 5T iii. Road Truck 10T iv. Sedan Car v. 5T Crane mounted Truck | 1 No. 1 No. 1 No. 1 No. 1 No. |

| Group No. | Serial No. | Equipment | Quantity |
|-----------|-------------------------------------|---|-----------------|
| H | 2. | <u>Welding equipment: -</u> | |
| | | i. Mobile/Portable Type welding Machine | 2 Nos. |
| | | ii. Mobile/Portable oxyacetylene Flame cutting Machine | 2 Nos. 1 No. |
| | | iii. Fixed type arc welding Machine, Double head iv. MIG / TIG Welding Machine | 1 No. |
| H | 3. | <u>General Purpose Machine</u> | |
| | | e. General purpose Grinding machine | 1 No. |
| | | f. Tool Grinding machine | 1 No. |
| | | h. Pipe bending machine | 1 No. |
| H | 4. | i. Hand grinding machine | 2 Nos. |
| | | j. Hand drilling machine | 4 Nos. |
| I | 1. | Bearing puller | 1 No. |
| | 1. | Fork lift tractor (battery operated) 3T Capacity | 2 Nos. |
| | 2. | Pallet trucks (Hand Hydraulic) | 2 Nos. |
| J | 3. | Stackers for Depot stores | 2 No. |
| | 1. | Industrial furniture (Work Test Benches) | As required |
| | 2. | Storage Racks (Workshop & Depot stores) | As required |
| K | 3. | Storage bins & Pallets | As required |
| | 1. | HIPOTS (High Voltage Tester) | 2 Nos. |
| | 2. | EMU battery charger | 2 Nos. |
| | 3. | Measuring and testing equipment | 1 set |
| | 4. | Tool Kits including Electric and Electronic Tools | 1 set |
| | 5. | Megger | 2 Nos. |
| | 6. | Impulse Tester for Traction Motor | 1 No. |
| | 7. | Portable wheel profile meter | 2 Nos. |
| | 8. | Video Diagnostic equipment for Traction Motor | 1 No. |
| | 9. | Induction heater for Traction Motors | 1 No. |
| | 10. | Oven for the Motors | 1 No. |
| 11. | Induction heater for Roller Bearing | 1 No. | |
| L | 1. | Small Painting Booth for Bogie frame and small parts. | 1 No. |
| M | 1. | Compressor for Inspection shed & shop air supply | 1 No. |

1.7.27.2 The quantities mentioned in the table above are for one Depot. All the items given above are indicative and not exhaustive. The DDC shall study the Machinery and plant, tools and tackles provided in other rail depots operating in India and submit a report. Based on the prevalent practice in other Railway Depots, the DDC shall optimize the requirement of Plant & Machinery, tools and tackles for BSRP Depots and obtain approval of the Employer before proceeding further with detailed design and developing specifications.

1.7.27.3 Wherever possible, the Depot equipment shall be sourced in India. In exceptional cases, certain Plant and Equipment may be planned to be imported, if it is not indigenously available or manufacture of such equipment is not established in India.

7 STANDARD OF SERVICES

7.1 General

7.1.1 The DDC shall be responsible for the correctness and technical merit of its designs, calculations, drawings and all other documentation prepared by it in carrying out the services.

7.1.2 The DDC shall ensure that qualified and experienced staffs are employed in sufficient number to ensure that accurate, consistent, clear and easily readable drawings and documents are produced in time.

- 7.1.3 The DDC shall provide CV of the all experts as per requirements specified, for the approval of Employer prior to their deployment for this assignment.

The personnel specifically mentioned so in the bid document, shall be available in the local office at Bangalore. This is essential for proper coordination, control and for managing interfaces of the work.

Note: The composition of personnel for the DDC, suggested mainly in respect of “as and when required” is the suggestion of the Employer. However, the main objective is to complete various Key activities before the Key dates. In order to achieve this objective, the consultant is advised to go through the Key dates, ascertain the required rate of progress to complete the activities before the respective Key dates and engage the required number of personnel for the required duration. If the proposed/engaged personnel are found inadequate during the performance of the work, additional staff shall be provided by the DDC consultant at their own cost, to make up the progress.

- 7.1.4 The DDC shall comply with the provisions and procedures covering standards and codes, drawings and calculations outlined below. The DDC shall also comply with the checking procedures given in the bid document.

7.2 Standards and Codes

The standards and codes referred to in the design criteria, drawings, outline specifications and documents issued by K-RIDE to the DDC shall be used in its design and, where appropriate, shall be quoted on drawings and other documents by it. Normally the DDC shall use the Standards given in this document for design requirements in preference to other national standards except when higher standard or better quality is required. Standards quoted in the technical Design & planning Criteria will take preference over those indicated elsewhere. If the DDC proposes to adopt other standards or codes for its designs, it shall submit to the Employer copies thereof, together with a statement as to the cost implication of adoption and substantiation that such a substitution is necessary. In addition, the DDC shall also demonstrate that other standards being proposed are equivalent or superior to those they intend to replace and shall obtain written approval of the Employer prior to their adoption.

7.3 Extent of Information

- 7.3.1 All designs and documentation produced by the DDC shall provide sufficient information and detail for Tenderers to determine accurately the extent of the Works, submit firm prices and during construction, execute and maintain the Works.
- 7.3.2 The Tender and Contract Drawings, Specifications and other information produced by the DDC for construction, or revisions of such documents, shall be submitted to the Employer, well in advance for review. The DDC shall ensure that these documents are produced in a timely manner such that the construction contractor is able to plan and execute its works in accordance with the contract, including the construction programme.
- 7.3.3 The Drawings for construction shall be in such detail as not to require further detailing to be carried out by the construction contractor except as provided under the relevant clause hereof. The DDC's drawings shall show or include details of any unusual features of construction and shall include reinforcement drawings.

7.4 Design Calculations:

- 7.4.1 Calculations shall be prepared according to the best professional standards and compiled into sets that relate to particular aspects of design.
- 7.4.2 Each set of calculations for a structure shall include, but not be limited to, a method statement including:
- A brief description of the structure and its assumed mode of action
 - The loads that will act upon the structure
 - The allowable stresses on the structure
 - Maximum stresses on the structure,

- (e) A brief statement description of the method of analysis used
- (f) A brief statement/description of the method of design
- (g) Details of the computer program used
- (h) A key to symbols used and
- (i) A design summary

- 7.4.3 Each set of calculations shall be bound and shall include a cover sheet and index
- 7.4.4 The calculations shall be checked by conventional way as well as through relevant design software.
- 7.4.5 A statement certified by the DDC's Authorized and Approved Project Manager that the accepted checking procedures, as defined, have been carried out in full shall be attached to each set of calculations submitted to the Employer.
- 7.4.6 The original calculations shall be submitted to the Employer for checking. Each sheet shall be signed in accordance with the requirements given underneath. The original calculations shall be retained by the DDC and shall be produced at such times as may be required by the Employer. The original calculations shall then be handed to the Employer on completion of the services.

7.5 Drawings Prepared by DDC

- 7.5.1 Preliminary drawings, Tender drawings and Detailed drawings / Good for Construction drawings shall be prepared and issued by the DDC in accordance with the requirements issued to it by the Employer (refer to the relevant clause for submission of documents).
- 7.5.2 All drawings shall be prepared in A-1 size and shall be produced by CAD graphic system compatible with the K-RIDE system and as approved by the Employer.

Drawings are defined as:

- a. Preliminary drawings are drawings prepared by the DDC at various stages of evaluation and firming up, prior to their acceptance by the Employer as Tender drawings or Contract drawings.
- b. Tender drawings are drawings prepared by the DDC and approved by the Employer which, with other relevant documentation, contain all the information necessary for tendering purposes and which, together with other relevant documentation, form the bid document.
- c. Contract Drawings are drawings prepared by the DDC from Tender Drawings with all further modifications as directed and approved by Employer and which, together with other relevant documentation, form the Construction Contract. The Contract Drawings shall be stamped "Good For Construction".
- d. Drawings excluded from the DDC's scope of drawings include
 - I. Shop drawings and working drawings
 - II. Fabrication drawings
 - III. As-Built drawings
 - IV. Details of elements of proprietary systems
- 7.5.3 The DDC shall submit to the Employer as a part of a progress report, a list showing drawing numbers, titles, scales and the progress status of all drawings planned for inclusion in the bid document. The format of the progress report shall be as directed by the Employer. The DDC shall update the report as and when required. All drawings shall be checked for compliance with design specifications and for accuracy by the DDC's design staff and the drawings shall also be subjected to the checking procedures as detailed in relevant clause hereof.

7.6 Drawings to be Prepared by Construction Contractors

The Drawings to be prepared by the Construction Contractors are

- a. Shop Drawings, which contain information related to the permanent works

The DDC shall check these drawings and all necessary compliances and the report shall be furnished to the Employer.

- b. Working Drawings, which contain information related to temporary works and details for the construction of permanent works

The DDC shall check these drawings and all necessary compliances and the report shall be furnished to the Employer.

- c. As-Built Drawings, which depict the completed works that have been certified complete

These drawings shall be reviewed by the DDC along with all necessary compliances and the report shall be furnished to the Employer.

7.7 Documents

The documents shall be prepared by the DDC in accordance with the requirements issued by the Employer. The Documents produced by the DDC shall be listed as part of the Progress Report.

7.8 Computer Programs

The DDC shall submit details of all computer programs it intends to use, to the Employer for acceptance prior to use in making calculations. These shall include the computer program manuals, input and output printout of a typical example and previous records of its use by the DDC. The DDC may also be required to perform test calculations using the program so that the results may be compared with those obtained by other means.

8. CHECKING PROCEDURES

8.1 General

8.1.1 The DDC shall establish a Design Quality Assurance Plan (DQAP) and a system of internal checking and approval of all designs, including calculations, drawings and other documents prepared by it, and submit the same to the Employer for acceptance. The work of designs shall be taken up on approval of DQAP by the Employer.

8.1.2 The purpose of the checking shall be to ensure accuracy and consistency, as well as compliance with current requirements, standards, codes and the requirements mentioned in this document. Certification of such a check, that has been carried out shall be submitted to the Employer with each batch of documentation for acceptance at the preliminary, interim and final submission and for subsequent submissions, as required.

8.1.3 Internal checks shall be carried out by personnel who possess experience and competence equal to or superior to the originator, but who have not been involved in producing the original design.

8.2 Design Calculations

Each page of design calculations, including any amendments thereto, shall be endorsed as checked and approved prior to submitting to the Employer by signing along with date by both the originator and the checker. The checker shall append a statement explaining the method of checking used.

The consultant needs to submit the design calculation in both software output as well as calculation format for easy understanding.

8.3 Drawings and Documents

Each document and drawing, including any revisions thereto, shall be endorsed as checked and approved prior to submission to the Employer by signing along with date by both originator and checker. In addition to compliance with the requirements of the documentation, each drawing, where appropriate, shall be checked to ensure compliance with the DDC's certified design calculations.

8.4 Certification

The certificate signed by the Project Manager of the DDC or his accredited representative (approved as a representative of the Project Manager by the Employer) stating that all drawings and documents have been checked and approved in accordance with the DDC's approved DQAP shall accompany all documents and drawings issued by the DDC to the Employer for acceptance.

8.5 Design Quality Assurance Plan

- 8.5.1 The Design Quality Assurance Plan (DQAP) shall get approved by the DDC from the Employer prior to the submission of any work.
- 8.5.2 The DQAP shall identify the personnel, procedures, instructions, records and forms necessary to implement the plan with the following minimum requirements:
- a. Certification process of drawings and documents for submission
 - b. Organizational structure
 - c. Design control - including study and design input/analysis
 - d. Checking of documents
 - e. Document control
 - f. Subcontractor control
 - g. Internal quality audit
 - h. Corrective action
- 8.5.3 The DDC shall also identify the requirement of Quality Level and incorporate a Quality Level List in the QAP for each construction contract.

8.6 Design Quality Audits/Monitoring

The Quality Audits and monitoring of the DDC's DQAP will be conducted by the Employer at intervals commensurate with the DDC's activities.

8.7 Responsibility

Notwithstanding acceptance by the Employer, the DDC shall remain responsible for the quality of the documents.

9 DESIGN SUBMISSION AND REVIEWS

9.1 Design Alternatives and Architectural Review

The Design Alternatives and a preliminary Architectural Review of the DDC's design proposals will be held 8 weeks after the Date of Commencement of the Contract. The DDC shall prepare and present drawings describing the structural and architectural design (of both the Depots) which shall, at a minimum, include, but not limited to:

- I. Site plan
- II. Plans of all buildings & facilities
- III. Reflected ceiling plans at each Building & Workshop
- IV. Sections and elevations
- V. Perspective sketches
- VI. Plans, sections, elevation and sketch design studies of all typical features
- VII. Landscape conceptual design
- VIII. Track Layout

9.2 Progress Meetings

Progress meetings will be conducted by the General Manager (L, PC & C-4) or higher officials generally once in a month or more frequently, if required. The frequency of the meetings may vary during the currency of the contract. The frequency of the meetings during a particular period will be decided by the Employer, based on the need. The DDC shall attend the progress meetings, as and when directed by the Employer. The personnel of DDC, who are required to attend the meeting, will be specified by the Employer depending on the agenda of the meeting. They shall attend the meeting without fail, with all necessary information and documents, preferably physically. No to and fro charges and no charges for stay will be paid by the Employer in respect of the attendees of the meeting, head quartered outside Bengaluru. Out of the list of attendees specified by the Employer, a few of the personnel of DDC mentioned in table-B1 may be permitted to attend the meetings online by the Employer for a few times, based on justification. However, this is as per the discretion of the Competent Authority of the Employer and his/her decision is final and binding on the DDC.

During the meetings, the DDC will be required to produce

- 9.2.1 an updated copy of the computerized project schedule and a design chart showing scheduled and actual start and finish dates and estimated percentage completion for each major design activity
- 9.2.2 an updated copy of the Progress Report showing the status of all drawings and documents

9.3 First Review Submission

- 9.3.1 When the design, including preliminary drawings and drafts of the Bill of Quantities and specifications is substantially developed to define the Works, including locations, shapes and sizes, it shall be submitted to the Employer for the First Review. These documents shall be advanced adequately for the Employer to use them for tendering purposes.
- 9.3.2 Indicative costs shall be prepared for all design alternatives proposed by the DDC. Detailed cost estimates will be required for those design alternatives approved / adopted by Employer.
- 9.3.3 The First Review Submission shall include, but not be limited to:
 - a. Design calculations to reflect the definition of the Works
 - b. Drawings detailed to define the Works, excluding reinforcing details
 - c. Bill of Quantities for all the works in sufficient accuracy to be able to prepare the bid document
 - d. Technical specifications in sufficient detail of materials and workmanship to permit tenderers to tender for the work
 - e. A draft Design Report which shall include studies undertaken by the DDC in considering overland flooding, utility diversions and protection and measures to protect adjacent structures
 - f. Identification of conflicts within the right-of-way, and resolutions to problems identified
 - g. An outline Construction Programme with consideration of alternative construction methods, if appropriate
 - h. A draft description of assumed construction methods, and alternative methods, if considered appropriate
 - i. Initial construction cost estimates and estimate reconciliation with the estimate and, if appropriate, construction cost estimates for alternatives
 - j. Comments, if any, on the documents supplied by the Employer
 - k. Any other documents that may have been requested by the Employer

9.4 First Review Procedure

The Employer will undertake the First Review of all details submitted. Within 3 days of receiving the comments from the Employer, the DDC shall initiate further action to attend the comments and submit the revised documents as per the timeline specified by the Employer, while issuing the comments. After issue of comments, the Employer reserves the right to issue further comments, in case necessary. It is not binding on the Employer to issue all the comments in one go.

9.5 Delivery of Tender Drawings, BOQs, Cost Estimates and Specifications

These documents shall comprise material for inclusion in the tender documents to be issued to Construction Contractors for tendering purposes by the Employer. The documents shall be complete and shall incorporate the First Review comments. It shall not be normally permissible to make adjustments to the BOQs at a later date to accommodate changes in quantities or bill items.

All tender documentation needs to be prepared and submitted in proper approved format to the Employer. The tender documentation shall be prepared in internationally accepted format, including all the required details.

9.6 Final Review

When the design, including preliminary drawings and other details for the Contract Documents for construction, is substantially complete, the DDC shall submit the documents for a Final Review. The quality of this submission shall be such that the Contract Documents can be completed just by incorporation of Employer's final review comments.

9.7 Final Review Submission

9.7.1 The Final Review submission shall include, but not be limited to

- a. Design calculations which are indexed and checked
- b. Drawings sufficiently
- c. Combined Service Drawings (CSDs)
- d. Drawings for track layout
- e. Structural-Electrical-Mechanical Drawings (SEMs)
- f. Electrical- Mechanical Drawings (EMs)
- g. Design report and Geotechnical design summary report including specific actions which are necessary to complete the design
- h. A factual report on additional Geotechnical investigations
- i. A detailed construction programme
- j. A detailed description of the assumed construction methods
- k. Construction cost estimates, estimate reconciliations with prior estimates and back-up data

9.7.2 The Final Review Submission shall include the following documents and products of its Depot design work:

- a. The proposal shall include typical floor plans, sections, elevations, perspective sketches, landscaping, environmental mitigation, public transportation, and interfaces with Depot and ancillary facilities
- b. The site plans for Depot building, workshop, ancillary facility including surrounding land uses, roads, landscaping, existing or proposed buildings and infrastructure, as well as any proposed additions, modifications, or required demolition
- c. Building & ancillary facilities plans for all levels, including restricted area if any; access and parking; load bearing and partition walls; fire separation walls; CC, Auxiliary substation, Traction substation: E & M and Depot equipment layout, ancillary facilities and equipment rooms: any other required furniture, fixtures and equipment
- d. Depot buildings & Workshops Sections and Elevations, keyed to the plans, including all major structural elements; Structural Steel work, track-bed and drainage; mechanical and electrical equipment; provisions for secondary and tertiary building systems and elements: walls and ceilings; doors, windows and other significant openings; and general materials and finishes
- e. Depot buildings and workshops Ceiling Plans, indicating layouts and integration of ceiling mounted services, structural and architectural elements, electrical and mechanical equipment, environmental control systems, system-wide components, signs and graphics and the like
- f. Plans and sections of sufficient size and scale to indicate proposed construction interfaces, methods of construction, and relationships between structures, finishes, MEP and services
- g. Calculations and Miscellaneous Schedules and Tables comprising of
 - i. Schedules of Accommodations, indicating room and space dimensions, functions, and requirements for Depot buildings and ancillary facilities
 - ii. Schedules of Finishes for buildings, workshop and ancillary facilities, indicating materials and finishes, type and extent for each Depot room or space
 - iii. Tables of Depot Equipment, lift numbers, types
- h. Integrated Services Drawings, indicating both existing and proposed services, utilities, structural and architectural elements, electrical and mechanical equipment, environmental control systems, system-wide components and other infrastructure, as required, supporting the Depot Building, workshop and ancillary facilities

Sizes of holes and other penetrations through structural and non-structural elements together with any cast in items required for the installation of services and utilities during the construction of the Depot shall be derived from these drawings.

- i. Outline specification for all architectural, Civil, Structure, Electrical & Mechanical elements

9.8 Final Review Procedure

9.8.1 The Employer will undertake the Final Review of all details submitted. Within 3 days of receiving the comments from the Employer, the DDC shall initiate further action to attend the comments and submit the revised documents as per the timeline specified by the Employer, while issuing the comments. After issue of comments, the Employer reserves the right to issue further comments, in case necessary. It is not binding on the Employer to issue all the comments in one go.

9.8.2 The responsibility of obtaining approval from Local Authorities is the responsibility of DDC. K-RIDE may assist in the approval process by issuing letters, provided a request is made well in advance, so as not to affect the overall submission schedule. The overall responsibility for check and balance exercise of obtaining approvals remains with the DDC.

9.9 Design Report

The Design Report shall include, but not be limited to:

- (a) consideration of the possibility of overland floods and recommendations of measures necessary to provide protection during construction.
- (b) plans for diversion and support (or protection) of existing utility services after their detection and charting, with an indication of the work to be performed including maintenance of utilities, serving adjacent properties.
- (c) A programme for all utilities involved in the Works, listing the following:
 - I. proposed method of treatment
 - II. allocation of responsibility for the work to the Contractor or others
 - III. critical dates for completion of temporary and permanent diversions if any
 - IV. test pit requirements

9.10 Geotechnical Design Summary Report

A Geotechnical Design Summary Report shall be prepared to include, but not limited to:

- a. Project description - subsurface conditions and design elements
- b. Factual subsurface exploration and test data
- c. Site geology and its influence upon design concepts including seismic effects
- d. Description of geologic features of engineering and construction significance
- e. Man-made features of engineering and construction significance
- f. Selection and geo-technical design of ground support
- g. Selection and design of foundations and soil improvement
- h. Protection of adjacent buildings and utilities
- i. Anticipated ground behavior, construction methods and difficulties
- j. Instrumentation and monitoring programme, interpretations and actions

9.11 Submission of Originals

When all the comments of the Final Review submission are incorporated, the submission of originals shall be made to the Employer. This will consist of all documents prepared by the DDC including the Design Estimate. The procedure for review shall be the same as the Final Review Procedure.

9.12 Delivery of Documents

After the Employer has accepted the submission of the Originals, the DDC shall deliver in soft copies all the documents, designs and drawings prepared by it to the Employer. The original documents, typed but not bound, shall have been proof read, reviewed, approved and certified, and be ready for reproduction. Original full size Tender Drawings shall be kept ready for submission.

The DDC shall furnish a complete set of CAD soft copies to the Employer, prepared in accordance with requirements. A CAD File Control Log, which describes the contents of the CAD soft copies, shall also be furnished.

9.13 Delivery of Contract Documents

The DDC shall issue the documents, as specified in the relevant clause, to the Employer for issuance to the contractor for construction.

9.14 Final Design Summary Report

9.14.1 The Final Design Summary Report shall include, but not be limited to:

- a. Scope of Work
- b. Work Description
- c. Drawing Index
- d. Key Design Drawings from all disciplines
- e. Site Plan
- f. Structural, MEP Configuration; System Operation
- g. Construction Description
- h. Design Criteria and
- i. Technical Descriptions

9.14.2 The purpose of this report is to provide a convenient reference to the design and operation of the system. The report shall be in two volumes:

- a. Before construction and
- b. After construction

10 SUBMISSION OF DOCUMENTS

In addition to the soft copies, the DDC shall deliver hard copies of the drawings and documents, as listed, on a good approved quality paper, to the Employer, and packaged as directed by the Employer.

The soft copies shall be submitted both in proprietary software format and pdf. For example, AutoCAD drawings shall be submitted both in AutoCAD format (.dwg extension) and pdf.

10.1 Submission of Hard Copies of Quality Assurance Plan

4 copies of the Quality Assurance Plan

10.2 Submission of Hard Copies for First Review Submission

- a. 3 full size (A-1) sets of drawings
- b. 3 full size (A-1) sets of drawings (including 5 additional sets of full size (A-1) utility drawings)
- c. 3 half size (A-3) sets of drawings (for all disciplines)
- d. 3 sets of Draft BOQs
- e. 3 sets of draft Specifications
- f. 3 sets of design calculations
- g. 3 sets of Construction Cost Estimates
- h. 3 copies of the Design Report
- i. 3 copies of the Construction Programme

10.3 Submission of Hard Copies of Tender Drawings, BOQs, Cost Estimates and Specifications

- a. One full size (A-1) set (of each layer separately)
- b. 3 sets of full size (A1) drawings
- c. 3 half size (A-3) sets of drawings
- d. 3 sets of Bills of Quantities
- e. 3 sets of special specifications
- f. 3 sets of Cost Estimates

10.4 Submission of Hard Copies for Final Review Submission

- a. One full size (A-1) set (of each layer separately)

- b. 5 full size (A-1) sets of drawings (including 5 additional sets of full size (A-J) utility drawings)
- c. 5 half size (A-3) sets of drawings
- d. 5 sets of design calculations;
- e. 5 copies of the Design Report
- f. 5 copies of the Construction Programme
- g. 5 copies of the Construction Cost Estimates

10.5 Submission of Hard Copies of Originals

- a. 1 half size (A-3) sets of prints of drawings
- b. 1 Copy of Construction Cost Estimates
- c. 2 copies of Final Design Summary Report (Vol. 1)
- d. 2 sets of CAD soft copies for drawings
- e. 3 sets of Quantity Take off Sheets and
- f. 3 sets of soft copies for construction cost estimates

10.6 Submission of Hard Copies of Construction Drawings

Four sets of all conformed drawings marked "For Construction" shall be submitted.

10.7 Submission of Hard Copies of "As-Built" Drawings

Three sets of "As-Built" drawings endorsed by the DDC, and 5 sets of Final Design Summary Report (Vol. 2) shall be submitted.

11 KEY DATES, CVs OF THE PERSONNEL, GTI, DELIVERABLES & DRAWINGS

11.1 Time Schedule:

The services shall be delivered as per the Key dates mentioned in Appendix-A.

11.2 CVs of the personnel proposed to be engaged:

The list of Minimum Key Technical personnel and Support staff required for the work along with their qualifications and experience is mentioned in Appendix-B.

11.3 Geotechnical Investigations:

The list of investigations and tests required for the work is mentioned in Appendix-C.

11.4 Deliverables:

The lists of deliverables for each key delivery are mentioned in Appendix-D.

11.5 Drawings:

Land drawings of both depots are attached in Appendix-E

APPENDIX-A

NOTE: "D" - Date of issue of LOA

| Key Date No. | Item | Time Frame | Delay Damages / Penalty for non-achieving progress within the time frame |
|--------------|---|-------------|---|
| KD1 | Engagement of Key Experts (mentioned in Table B1 of Appendix – B) and Commencement of Design Activity | D + 15 days | 0.05% of accepted contract price per week of delay * |
| KD2 | Deployment of field equipment for Geotechnical investigations (in both the Depots, in parallel) and for any other field surveys, as required | D + 15 days | 0.025% of accepted contract price per week of delay |
| KD3 | Deployment of Engineers and Support staff (mentioned in Table B2 of Appendix – B) | D + 21 days | 0.05% of accepted contract price per week of delay |
| KD4 | Completion of Geotechnical investigations (in both the Depots) and any other field surveys, as required | D + 45 days | 0.05% of accepted contract price per week of delay |
| KD5 | Submission of Conceptual Design Report, Planning Criteria, Presentation of Design concepts, Layout alternatives and complete programme schedule | D + 45 days | 0.005% of accepted contract price per week of delay for the first 2 weeks and 0.05% of accepted contract price per week of delay, subsequently |
| KD6 | Submission of Report of outline & alternatives of Layout plans of Depots and facilities | D + 45 days | 0.025% of accepted contract price per week of delay |
| KD7 | Deployment of Engineers and Support staff (mentioned in Table B3 of Appendix – B) | D + 60 days | 0.025% of accepted contract price per week of delay |
| KD8 | Submission of reports of geotechnical Investigations, data interpretation, analysis of complete field survey and data for Detailed Design | D + 60 days | 0.05% of accepted contract price per week of delay |
| KD9 | Completion of Detection and Charting of Utilities and submission of plans showing all the Utilities and tentative alternatives of diversion schemes | D + 60 days | 0.005% of accepted contract price per week of delay for the first 4 weeks and 0.025% of accepted contract price per week of delay, subsequently |
| KD10 | Submission of Final Depot layout plan along with general arrangement. Layout of the complete area and Architectural plans of various buildings, structures and other services | D + 90 days | 0.1% of accepted contract price per week of delay |
| KD11 | Submission of draft bid document (for construction tender) comprising of tentative tender drawings, tentative BOQs, tentative cost estimates, tentative specifications, tentative scope of work, tentative Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | D + 90 days | 0.05% of accepted contract price per week of delay |

| | | | |
|-------|--|------------------------------------|---|
| KD12 | Submission of estimate for Construction tender | D + 105 days | 0.025% of accepted contract price per week of delay |
| KD13 | Final tender drawings for inclusion in the bid document of Construction tender, including E&M and Architectural works of all related buildings and structures | D + 105 days | 0.025% of accepted contract price per week of delay |
| KD14 | Submission of Final bid document (for construction tender) comprising of final tender drawings, final BOQs, final specifications, final scope of work, final Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | D + 120 days | 0.1% of accepted contract price per week of delay |
| KD15 | Submission of diversion plans including estimates for diversions, including approvals from related statutory authorities/Local bodies | D + 150 days | 0.002% of accepted contract price per week of delay |
| KD16 | Deployment of Engineers and Support staff (mentioned in Table B4 of Appendix – B) | D + 180 days | 0.005% of accepted contract price per week of delay for the first 6 weeks and 0.025% of accepted contract price per week of delay, subsequently |
| KD17 | Submission of "Good for Construction / Supply" drawings | As given below from KD17A to KD17E | As given below from KD17A to KD17E |
| KD17A | Civil, Structural and Architectural drawings | D + 180 days | 0.025% of accepted contract price per week of delay |
| KD17B | Water supply system, Rain water harvesting system, drainage system, sewerage system, Sewage Treatment Plant, Firefighting system and all other miscellaneous civil engineering related works, as directed by the Employer | D + 210 days | 0.025% of accepted contract price per week of delay |
| KD17C | Track Layout drawings | D + 210 days | 0.025% of accepted contract price per week of delay |
| KD17D | Combined services drawings and all balance drawings | D + 210 days | 0.025% of accepted contract price per week of delay |
| KD18 | Submission of draft bid document (for Plant & Equipment tender) comprising of tentative tender drawings, tentative BOQs, tentative cost estimates, tentative specifications, tentative scope of work, tentative Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | D + 240 days | 0.005% of accepted contract price per week of delay |
| KD19 | Submission of Final bid document (for Plant & Equipment tender) comprising of final tender drawings, final BOQs, final specifications, final scope of work, final Employer's Requirement etc. in the | D + 300 days | 0.1% of accepted contract price per week of delay |

| | | | |
|-------|--|--------------------|---|
| | formats approved by the Competent Authority of the Employer | | |
| KD17E | All drawings of Plant & Equipment (Electrical, Mechanical, HVAC etc.) | D + 300 days | 0.025% of accepted contract price per week of delay |
| KD20 | Submission of all Original detailed design reports including all documents, drawings etc. | D + 360 days | 0.025% of accepted contract price per week of delay |
| KD21 | Completion of all required services and checking of as built drawings and submission of reconciled calculations until completion of construction stage of first Depot | ** DCC1 + 60 days | 0.05% of accepted contract price per week of delay |
| KD22 | Obtaining IGBC Platinum Certification of first Depot | ** DCC1 + 90 days | 0.05% of accepted contract price per week of delay |
| KD23 | Completion of all required services and checking of as built drawings and submission of reconciled calculations until completion of construction stage of second Depot | *** DCC2 + 60 days | 0.05% of accepted contract price per week of delay |
| KD24 | Obtaining IGBC Platinum Certification of second Depot | *** DCC2 + 90 days | 0.05% of accepted contract price per week of delay |

* The DDC has to submit a certificate to this effect on or before the expiry of KD1. Else, it will be treated as delay and penalty will be imposed.

** DCC1 - Date of Completion of Construction of first Depot

*** DCC1 - Date of Completion of Construction of second Depot

Notes:

1. Depending on the progress of the work of construction of depots, the depot whichever gets/is expected to get completed first will be designated as first Depot and the other one will be designated as second Depot by the Employer.
2. All concerned deliverables as mentioned in Appendix-D shall be submitted.

APPENDIX-B**LIST OF MINIMUM KEY TECHNICAL PERSONNEL & SUPPORT STAFF**

The list of Minimum Key Technical personnel required for the work is as under. The DDC shall have a competent team of the following personnel, so as to complete the work satisfactorily as per various requirements of the contract. The contents in the tables below shall be read in conjunction with all the notes given underneath.

Table B1 - Key Experts to be engaged in Phase-1

| Sl. No | Position | Qualifications & Experience | Service Required |
|--------|--|--|---|
| 1 | Project Director (Max. Age: 65 Years) | Post Graduate/Graduate in Civil Engineering from a reputed institution, with 20 years of rich experience in various infrastructure projects, out of which, minimum 7 years in Detailed Design Consultancy works in Metro Rail projects or major infrastructure projects | As and when required (to achieve the Key Dates) |
| 2 | Team Head – Building and E&M Services (Max. Age: 62 Years) | Graduate in Electrical / Mechanical Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in Detailed Design Consultancy works in Metro Rail projects (including Buildings and Workshops/Sheds/Depots) or major infrastructure projects involving buildings and workshops/sheds | As and when required (to achieve the Key Dates) |
| 3 | Structural Design Engineering Expert (Max. Age: 62 Years) | Post Graduate in Structural Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in Structural design of Detailed Design Consultancy works in Metro Rail projects (including Buildings and Workshops/Sheds/Depots) or major infrastructure projects involving buildings and workshops/sheds | As and when required (to achieve the Key Dates) |
| 4 | Geotechnical and Foundation Engineer (Max. Age: 62 Years) | Post Graduate in Geotechnical Engineering from a reputed institution with 15 years of experience in Geotechnical investigation, foundation design etc. in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 5 | Contract Expert (Max. Age: 62 Years) | Graduate in Civil / Mechanical Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in Tendering and Contracting works in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 6 | Project Architect (Max. Age: 62 Years) | Graduate in Architecture from a reputed institution with 12 years of experience, out of which, minimum 7 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 7 | Utility & Service Expert (Max. Age: 62 Years) | Graduate in Civil Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in design /maintenance of Utilities such as water supply, sewerage etc. in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |

| Sl. No | Position | Qualifications & Experience | Service Required |
|--------|---|--|---|
| 8 | Interfacing Expert (Max. Age: 62 Years) | Graduate in Civil / Mechanical Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in interfacing works in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 9 | Electrical Engineering Design Expert (Max. Age: 62 Years) | Graduate in Electrical Engineering from a reputed institution with 15 years of experience in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 10 | Mechanical Engineering Design Expert (Max. Age: 62 Years) | Graduate in Mechanical Engineering from a reputed institution with 15 years of experience in Metro/ Railway/major infrastructure project of value at least Rs. 100 Crore | As and when required (to achieve the Key Dates) |
| 11 | Track Design Expert (Max. Age: 62 Years) | Graduate in Civil Engineering from a reputed institution with 15 years of experience, out of which, minimum 7 years in Track design in Metro Rail projects / Indian Railways / foreign Railways | As and when required (to achieve the Key Dates) |

Table B2 - Engineers and Support Staff to be engaged and stationed in Bengaluru in Phase-2

| Sl. No | Engineers and Support Staff | Qualification and Experience | Man Months |
|--------|--|--|------------|
| 12 | Resident Engineer cum Interfacing Expert | Graduate in Civil Engineering from a reputed institution with 10 years of experience, out of which, minimum 3 years of experience (particularly in interfacing issues) in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 50 Crore | 30 |
| 13 | Junior Structural CAD Engineer | Graduate/Diploma holder in Civil Engineering from a reputed institution with good knowledge in AutoCAD and 2 years of experience in Structural Drafting works | 30 |
| 14 | Data Entry Operators | Any Graduate with good typing speed of at least 30 wpm and 1 year of experience in Data entry and Document control Management | 75 |
| 15 | Field Assistants | Suitable person to assist in field works | 150 |

Table B3 - Engineers to be engaged and stationed in Bengaluru in Phase-3

| Sl. No | Engineers and Support Staff | Qualification and Experience | Man Months |
|--------|------------------------------|--|------------|
| 16 | Structural CAD Engineer | Graduate/Diploma holder in Civil Engineering from a reputed institution with good knowledge in AutoCAD and with 5 years of experience in Structural Drafting works | 8 |
| 17 | Senior Structural Engineer-I | Post Graduate in Structural Engineering from a reputed institution with 7 years of experience, out of which, minimum 3 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 25 Crore | 8 |

Table B4 - Engineers and Architect to be engaged and stationed in Bengaluru in Phase-4

| Sl. No | Engineers and Support Staff | Qualification and Experience | Man Months |
|--------|-----------------------------|--|------------|
| 18 | Structural Engineer-I | Post Graduate in Structural Engineering from a reputed institution with 7 years of experience, out of which, minimum 2 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 50 Crore | 12 |
| 19 | Architect-I | Graduate in Architecture from a reputed institution with 7 years of experience, out of which, minimum 2 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 50 Crore | 12 |
| 20 | Track Engineer | Graduate in Civil Engineering from a reputed institution with 7 years of experience, out of which, minimum 2 years in Track design in Metro Rail projects / Indian Railways / foreign Railways | 12 |
| 21 | Electrical Engineer | Graduate in Electrical Engineering from a reputed institution with 7 years of experience, out of which, minimum 2 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 50 Crore | 12 |
| 22 | Mechanical Engineer | Graduate in Mechanical Engineering from a reputed institution with 7 years of experience, out of which, minimum 2 years in Metro Rail projects / any other major infrastructure projects of total value at least Rs. 50 Crore | 12 |

Notes:

- 1) The man power shown in table-B1 is suggestive to achieve the progress and milestones. The DDC may vary as per the actual requirement, with the approval of the Employer. All other man power in the other tables is mandatory.

- 2) The quantities of man months shown above in Table nos. B3 & B4 may not be operated continuously. The same will be advised by the Employer, depending on the need, site requirement and the progress of construction. Certain personnel in Table nos. B3 & B4 may have to be disengaged when not required and re-engaged when required. The periods of dis-engagement/re-engagement will be advised by the Employer 3 to 4 weeks in advance. However, the maximum number of spells of dis-engagement cum re-engagement will be three (one dis-engagement and one re-engagement together will be counted as one spell of dis-engagement cum re-engagement).
- 3) The Employer, may, based on the requirement, redistribute the no. of man-months in the following manner. Redistribution of total no. of man-months of Sl. nos. 13 & 14 in table-B2 among those 2 categories, redistribution of the total number of man-months in Table-B3 among the 2 categories therein and redistribution of the total number of man-months in table-B4 among the 5 categories therein, duly limiting the maximum reduction to 50% in each category may be done by the Employer. Increase/decrease the total no. of man-months among Sl. no.15 in table-B2, duly redistributing the quantity of Sl. no.15 among Sl. nos. 15 & 14 in the ratio of 2:1, duly limiting the maximum reduction to 50% may be done by the Employer.
- 4) The no. of personnel in each category in tables B3 & B4 is normally one. However, the Employer may, as per the necessity, increase the number suitably, duly keeping the total no. of man-months the same. Total no. of man-months in the above sentence means the no. of man-months of in that table.
- 5) The CVs of all personnel shall be submitted for approval, at least 1 week in advance before deployment for approval of the Employer in respect of the personnel in Table-B1, at least 2 weeks in advance before deployment for approval of the Employer in respect of the personnel in Table-B2 and at least 4 weeks in advance before deployment for approval of the Employer in respect of the personnel in Tables B3 & B4. The Employer reserves the right to reject the candidatures of the personnel if not found suitable, and in such a case, other suitable personnel have to be proposed within a week of rejection. There is no limit on the number of rejections, in case the candidates are not found suitable. For this purpose, the DDC shall have a list of candidatures of meritorious candidates befitting the concerned roles along with their willingness to join.
- 6) The performance of the personnel engaged will be monitored during the progress of the work. In case of unsatisfactory performance of any person, as observed by the officials of the Employer, she/he shall be replaced at the earliest, but not later than 2 weeks. No plea on account of delay in finding a suitable replacement will be entertained and Liquidated Damages/Penalties will be imposed, in case of any delay in achieving the milestones mentioned in Appendix - A.
- 7) The scope and number/duration of Key Experts, Engineers and Support staff mentioned above is suggestive, and not exhaustive. If the above staff are found inadequate during any stage, then additional staff, as required, shall be engaged forthwith without compromising the quality of design or any other assigned work, by the DDC at their own cost, to complete all the activities within the time frames specified for the Key Dates. No plea that the scope/number/duration/expertise/experience of the Key Experts/Engineers/Support staff is/are insufficient to complete all the activities within the time frames specified for the Key Dates, will be entertained and Liquidated Damages/Penalties will be imposed, in case of any delay in achieving the milestones mentioned in Appendix - A. All the above personnel have to be approved by the competent authority of the Employer well before engagement.
- 8) In order to approve the candidates for various roles, the Employer needs sufficient time to go through the profiles and interact with the proposed candidates before allowing them to be engaged on the project. In view of this, though time limits for submitting the candidatures to the Employer have been specified above, it is in the earnest interest of the DDC to propose the candidates well in advance of those timelines.

APPENDIX - C

| Geotechnical investigation and associated works for Maintenance Depots | | | |
|--|---|--------|------|
| Schedule of Items to be performed (Quantities mentioned are for both the Depots) | | | |
| Sl. No | Description of Item | Unit | Qty. |
| 1 | Exploratory drilling of Boreholes | | |
| 1a | 0 m to 10 m | m | 150 |
| 1b | 10 m to 20 m | m | 150 |
| 1c | Drilling in rock | m | 150 |
| 2 | Conducting Standard penetration test as per IS code | Number | 15 |
| 3 | Collection of water samples at reqd. Intervals and conducting test such as PH value, chlorides, sulphates, TDS etc. as directed by the Engineer- in- charge | Number | 60 |
| 4 | Conducting soil resistivity (VES) with Schlumberger array as per IS code | Number | 6 |
| 5 | Conducting laboratory Tests on disturbed/ undisturbed samples collected as per relevant IS code | Number | 60 |
| 5a | Moisture content / Dry density | Number | 60 |
| 5b | Atterberg Limits | Number | 60 |
| 5c | Specific Gravity | Number | 60 |
| 5d | Grain Size distribution by sieving | Number | 60 |
| 5e | Grain Size distribution by Hydrometer analysis | Number | 60 |
| 5f | Direct Shear Test | Number | 60 |
| 5g | Consolidation Test | Number | 60 |
| 5h | Unconfined compression test of cohesive soils that are undisturbed, Remoulded specimens of cohesive soil | Number | 60 |
| 5i | Unconfined compression test of rock specimens obtained by core drilling | Number | 60 |
| 6 | Submission of <u>Geotechnical factual report</u> , <u>Geotechnical Assessment Report</u> (Including the profile of the Geological substrata such as the location of Water table, bedrock level and various other soil strata in Auto Cad for each Depot) and <u>Geotechnical Design Report</u> after completing Geotechnical Investigation and review of the three reports in succession by a certified agency like IIT/IISC/any other reputed University, as approved by K-RIDE. The reports shall be prepared in such a manner that it is possible for detailed structural designers to design the foundations of all structures. The three aforementioned reports shall be updated to include all the comments of review(s), as per the latest practices of IR & K-RIDE, which includes supply of one soft copy & 5 hard copies of each report. Note: Getting the review of the reports from IIT/IISC/any other reputed University falls in the scope of the work. | LS | 2 |

Note:

The scope/items/quantities of Geotechnical work mentioned above is/are suggestive, and not exhaustive. If the above items/quantities are found inadequate during the investigation, then additional items/quantities, as required, shall be taken up without compromising the quality of investigation/design, by the DDC at their own cost.

Appendix- D
List of Deliverables

| Key Date | Deliverables |
|--|--|
| KD5 | Conceptual Design Report & Presentation of Design Concepts |
| | Layout Alternatives |
| | Programme Schedule of Designs and all other works |
| KD6 | Report of outline & alternatives of Layout plans of Depots |
| | Detailed list of Depot facilities |
| KD8 | Field Data of Geotechnical Investigations and other surveys |
| | Geotechnical Investigations Reports |
| | Geotechnical Data Interpretation Reports |
| | Data for Detailed Design |
| KD9 | Field Data of Utility Survey |
| | Plans and Sections showing Detection and Charting of Utilities |
| | Tentative alternatives for Diversion schemes of Utilities along with drawings |
| KD10 | Final Depot Layout plan with General arrangement |
| | Detailed Layout plans of Structures and other services |
| | Architectural Plans of various buildings |
| KD11 | Draft Bid Document of Construction Tender |
| | Tentative Tender Drawings |
| | Tentative BOQs |
| | Tentative cost estimates with specifications |
| | Tentative Scope of Work |
| KD12 | Tentative Employer's Requirement |
| | Detailed Estimate for Construction Tender |
| KD13 | Final Tender Drawings (of all structures): |
| | a) Civil |
| | b) Electrical & Mechanical |
| | c) Architectural |
| KD14 | Final Bid Document for Construction Tender |
| | Final Tender Drawings (other than those mentioned in KD13) |
| | Final BOQs |
| | Final Specifications |
| | Final Scope of Work |
| KD15 | Final Employer's Requirement |
| | Diversion Plans along with estimates for diversion |
| KD18 | Approvals from related Statutory Authorities/ Local Bodies for Diversions |
| | Draft Bid Document for Plant & Equipment |
| | Tentative Tender Drawings |
| | Tentative BOQs |
| | Tentative cost estimates with specifications |
| | Tentative Scope of Work |
| | Tentative Employer's Requirement |
| All the above in approved formats by the Competent Authority | |
| KD19 | Final Bid Document for Plant & Equipment Tender comprising of the below mentioned documents in the format approved by Competent Authority; |
| | Final Tender Drawings |
| | Final BOQs |
| | Final Specifications |
| | Final Scope of Work |
| KD21 & 23 | Final Employer's Requirement |
| | Preparation and checking of As-Built Drawings for the concerned depot |

| | |
|-----------|--|
| | Reconciled calculations until completion of construction for the concerned depot |
| KD22 & 24 | All field data and documents for the above certification for the concerned depot |
| | Obtaining IGBC Platinum Certification for the concerned depot |

Appendix-E

Drawings

The drawings showing the location and other details of both the depots Akkupete and Soladevanahalli are attached below and the soft copies in PDF are available in kride.in.

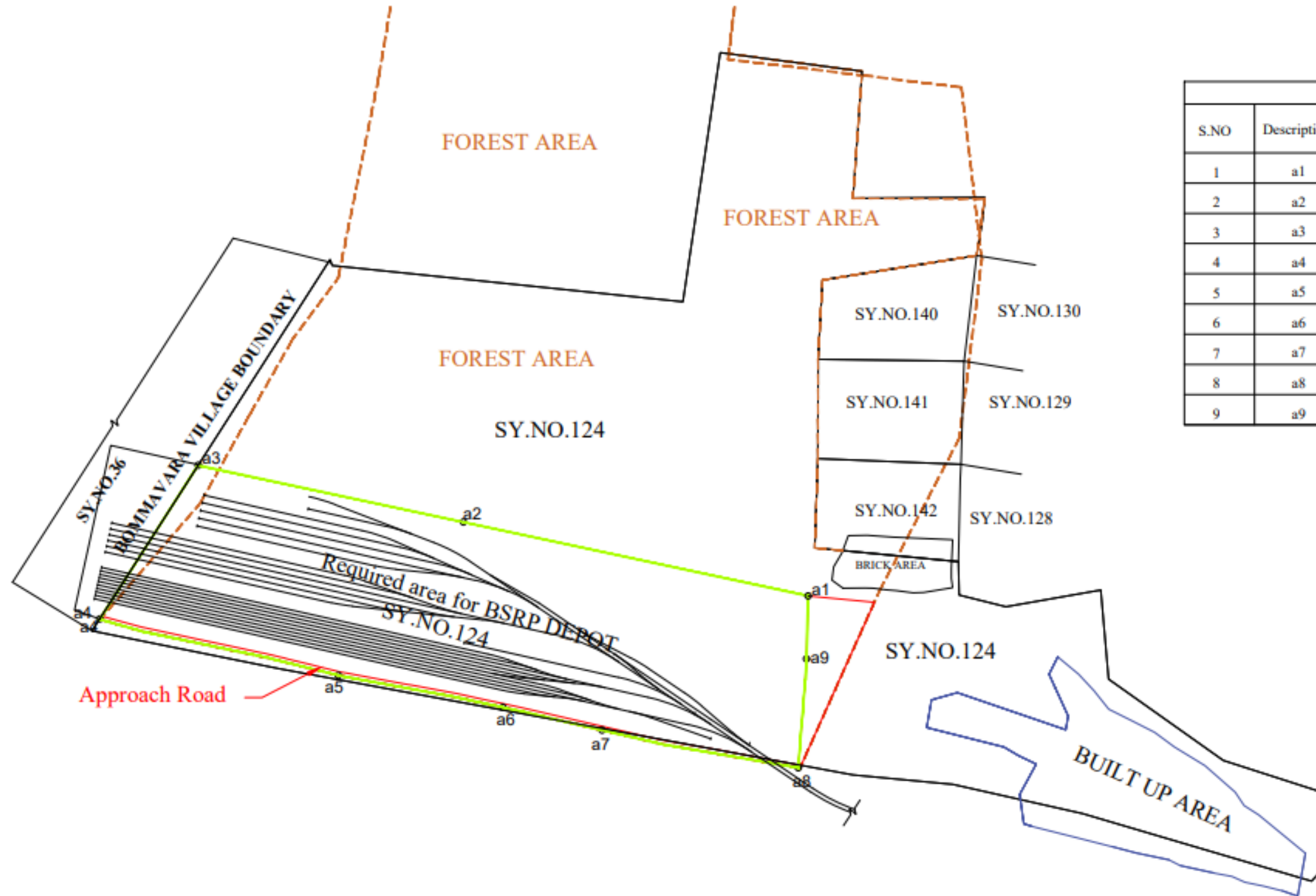
K-RIDE

APPENDIX-E

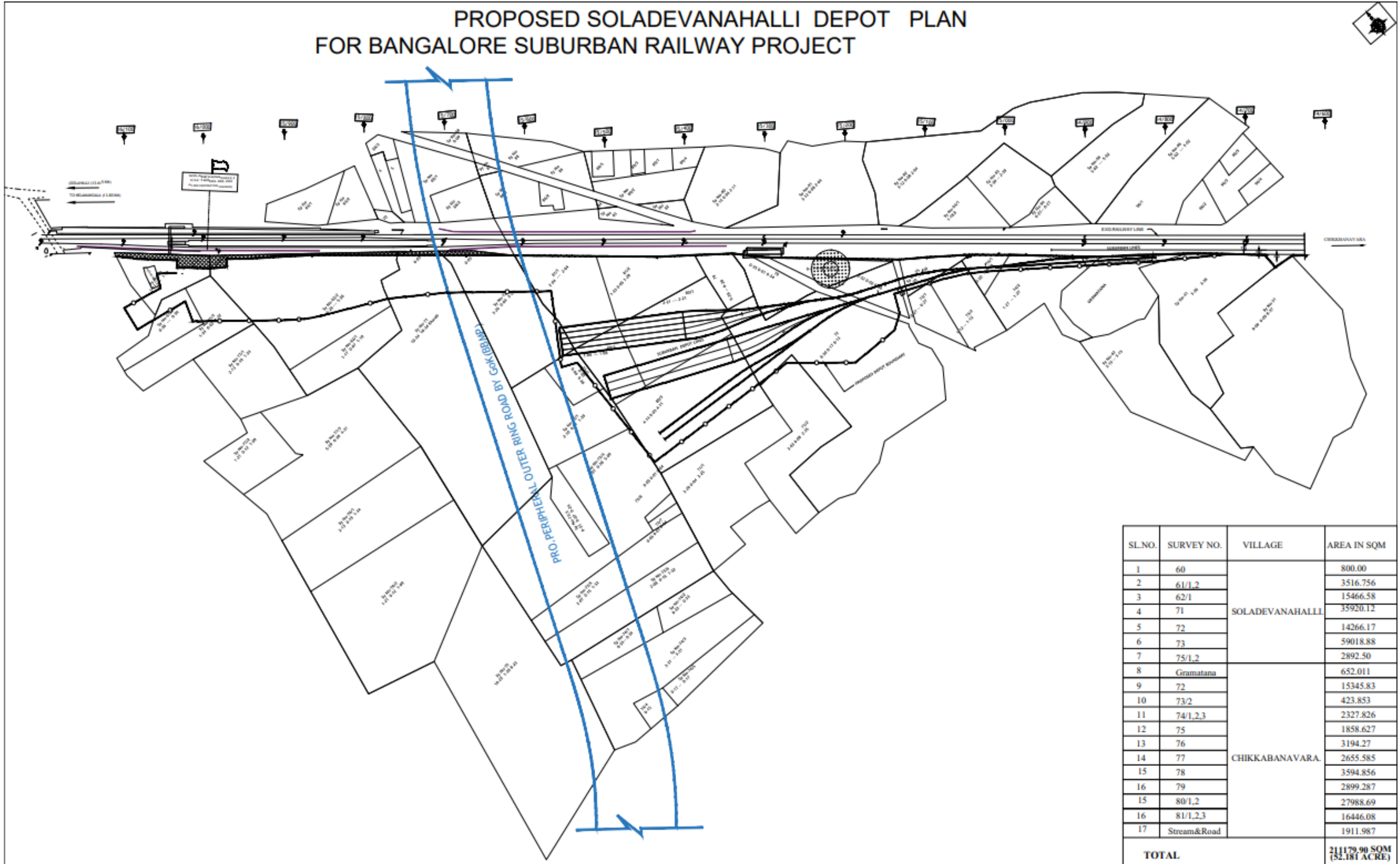
PROPOSED AKKUPETE DEPOT PLAN FOR BANGALORE SUBURBAN RAILWAY PROJECT



| Coordinates of Forest Land Boundary | | | | | |
|-------------------------------------|-------------|------------|-------------|-----------|-----------|
| S.NO | Description | UTM | | Latitude | |
| | | Easting | Northing | Easting | Northing |
| 1 | a1 | 792018.669 | 1466062.640 | 13.247338 | 77.694671 |
| 2 | a2 | 791583.337 | 1466155.908 | 13.248223 | 77.690666 |
| 3 | a3 | 791248.436 | 1466227.660 | 13.248904 | 77.687585 |
| 4 | a4 | 791123.961 | 1466033.479 | 13.247162 | 77.686418 |
| 5 | a5 | 791425.150 | 1465962.222 | 13.246489 | 77.689188 |
| 6 | a6 | 791633.279 | 1465921.757 | 13.246103 | 77.691103 |
| 7 | a7 | 791758.374 | 1465893.001 | 13.245831 | 77.692254 |
| 8 | a8 | 792006.233 | 1465845.327 | 13.245377 | 77.694534 |
| 9 | a9 | 792016.651 | 1465983.152 | 13.24662 | 77.694644 |



PROPOSED SOLADEVANAHALLI DEPOT PLAN FOR BANGALORE SUBURBAN RAILWAY PROJECT



SECTION – 9

PRICE SCHEDULE

**BANGALORE SUBURBAN RAIL PROJECT (BSRP)
PRICE SCHEDULES (FINANCIAL BID)
Tender No: KRIDE/2023-24/OW/WORK_INDENT4**

NAME OF WORK: Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP)

PREAMBLE

1. The Price Schedule shall be read in conjunction with the Instructions to Tenderers, Conditions of Contract, Particular Conditions, Contract Data, Notice Inviting Tender, Terms of Reference, Scope of work, Schedule, Annexures and Addendums and any other related documents in the Bid Document.
2. The amount shall be quoted in Schedule-A.
3. The amount shall be quoted in Indian Rupees both in figures and in words.
4. The whole cost of complying with all the provisions of the Contract is deemed to have been included in the quoted amount.
5. All columns in the "Summary of Price Schedule" and the total tender amount shown in the bottom shall be filled in figures and words as per the procedure mentioned in e-procurement portal. The person authorized to sign on behalf of the Tenderers shall sign in full at bottom of all pages and at the end of the schedule.
6. General directions and description of works and materials are neither repeated nor summarized in the Price Schedule. They are deemed to have been covered or described elsewhere in the Bid Document or implied as good practices adopted for similar works.
7. The method of measurement of works regulating the interim payment, wherever applicable, shall be in accordance with the requirements as stated in the individual sections of the Technical Specifications and Conditions of Contract.
8. The Tenderers shall note that, to perform this contract, nothing extra will be payable on account of field constraints, availability of front (except for the provisions made elsewhere in the Bid Document), preparation of detailed scheme, for taking necessary clearances and approvals from all the concerned authorities/ local bodies etc. The quoted value shall include the cost of all these items/aspects.
9. The Tenderer's offer shall be inclusive of all taxes and duties payable by them, labour cess and any other cess, levies etc. GST, Income Tax, and any other statutory taxes to be deducted at source, if any, will be deducted by the Employer in accordance with the Income Tax Act and any other acts in force and in accordance with instructions issued by the Authorities on this behalf, from time to time.
10. The Employer may, in any payment certificate, make any correction or modification that should have been reflected in any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Employer's acceptance, approval, consent or notice of no-objection to any of the documents of the DDC or to (any part of) the works.

| SUMMARY OF PRICE SCHEDULE | | | | |
|---|--------------|--|-------------------------------------|----------|
| (Centre of E-governance has disabled submission of documents pertaining to financial proposal in e-portal. Bidders are requested to enter the Financial Proposal in the respective cell provided in the e-portal. This format of Financial Proposal is only for reference.) | | | | |
| NAME OF WORK: Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP) | | | | |
| Tender no: KRIDE/2023-24/OW/WORK_INDENT4 | | | Date –06/06/2023 | |
| Sl. No. | Schedule | Description | Quoted by Tenderer | |
| | | | Quoted Amount in INR (Lumpsum Cost) | |
| | | | In Figures | In Words |
| 1 | 2 | 3 | 4 | 5 |
| 1 | Schedule - A | Providing Detailed Design and Drawings of all Buildings, Workshops/Sheds, Tracks, Plant and Equipment (Mechanical, Electrical and Civil), Water Supply System, Sewerage System and all other related Miscellaneous works including Geotechnical Investigations, Utility Investigations etc. for two Maintenance Depots of BSRP; Providing support in respect of all design issues during construction of these depots (including modification of designs and drawings, whenever and wherever necessary), ensuring the construction of depots as per the designs and drawings and providing solutions to all interface issues encountered during the construction of Two Maintenance Depots of BSRP | | |

Signature of the Tenderer

Notes:

- A. The quoted value covers all items of the work as detailed in the Terms of Reference in Section - 8 as well as conforming to all Particular Conditions of Contract in Section - 7 and all other stipulations laid down in the Bid Document in every other Section including all addenda/corrigenda thereof till the date of submission of Bids.
- B. The quoted value is inclusive of all costs of Designs, Drawings, Reports, Surveys, Office, Transport etc. till the end of Construction Phase, Insurance, Profit, Duties, GST, Taxes, Levies, Royalties as per applicable law, together with all associated risks etc., and all other liabilities and obligations set out or implied in all the sections of the contract.

SCHEDULE FOR ON ACCOUNT PAYMENTS UNDER LUMP SUM PORTION

Detailed Design Consultancy (DDC) services for Maintenance Depots of Bengaluru Suburban Railway Project (BSRP)

The payment would be governed by the stage payment as detailed below. Overall percentage 100% i.e., quoted lumpsum price is divided into the following heads. The Percentage breakup of cost component for each Head is as below.

| Head | Description of major item | Percentage distribution of accepted lumpsum price |
|------|---|---|
| A. | Deployment of all personnel, as given in tables B1 to B4 in Appendix-B of Section-8 (Terms of Reference) and establishment of office (with all furniture, computers and other equipment) in Bengaluru for the staff deployed in Bengaluru | 8% |
| B. | Conducting Geotechnical Investigations, Detailed Architectural and Structural planning, design of Depots buildings and allied works etc. preparation of Conceptual plans, specifications, schedule of materials/BOQ as defined in Section 8- Terms of Reference | 15% |
| C. | Preparation of Cost Estimates and Bid Documents for the construction of Depot tender and Plant & Equipment tender | 27% |
| D. | Submission of Detailed Designs and all Drawings (except As-Built Drawings) for Civil, Structural, Architectural, MEP, S&T, Plant & Machinery, Track layout drawings, Combined services drawings and revised drawings during construction, if any etc. | 35% |
| E. | As-Built Drawings, IGBC Platinum Certification, Completion of supply of all personnel given in tables B2 to B4 for all man-months and completion of any balance works | 15% |
| | Total (A to E) | 100% |

MODE OF PAYMENT FOR HEAD - A : 8% of accepted lumpsum price

Percentage distribution of accepted lumpsum price in respect of this head is further sub-divided into the following:

| Sl. No. | Activity | Stage Payment in percentage of lumpsum cost under this head |
|---------|---|---|
| 1. | Deployment of all personnel, as given in tables B1 to B2 in Appendix-B of Section-8 (Terms of Reference) and establishment of office (with all necessary furniture, computers and other equipment) in Bengaluru for the staff deployed in Bengaluru | 40% |
| 2. | Deployment of all personnel, as given in Table B3 in Appendix-B of Section-8 (Terms of Reference) with all necessary furniture, computers and other equipment in Bengaluru for the staff deployed in Bengaluru | 10% |
| 3. | Deployment of all personnel, as given in Table B4 in Appendix-B of Section-8 (Terms of Reference) with all necessary furniture, computers and other equipment in Bengaluru for the staff deployed in Bengaluru | 50% |

NOTE: Further breakup of the above stage payment for proportionate work/deliverables (within the overall activity) will be on mutual consent after award of work and part payment may be made proportionately.

MODE OF PAYMENT FOR HEAD – B : 15% of accepted lumpsum price

Percentage distribution of accepted lumpsum price in respect of this head is further sub-divided into the following:

| Sl. No. | Activity | Stage Payment in percentage of lumpsum cost under this head |
|---------|--|---|
| 1 | Completion of Geotechnical investigations and any other field surveys, as required, and submission of field data, in first Depot | 5% |
| 2 | Completion of Geotechnical investigations and any other field surveys, as required, and submission of field data, in second Depot | 5% |
| 3 | Submission of Conceptual Design Report, Planning Criteria, Presentation of Design concepts, Layout alternatives and complete programmed schedule, in first Depot | 5% |
| 4 | Submission of Conceptual Design Report, Planning Criteria, Presentation of Design concepts, Layout alternatives and complete programme schedule, in second Depot | 5% |
| 5 | Submission of reports of geotechnical Investigations, data interpretation, analysis of complete field survey and data for Detailed Design, in first Depot | 10% |
| 6 | Submission of reports of geotechnical Investigations, data interpretation, analysis of complete field survey and data for Detailed Design, in second Depot | 10% |
| 7 | Completion of Detection and Charting of Utilities and submission of plans showing all the Utilities, in first Depot | 3% |
| 8 | Completion of Detection and Charting of Utilities and submission of plans showing all the Utilities, in second Depot | 3% |
| 9 | Submission of diversion plans including estimates for diversions, including approvals from related statutory authorities/Local bodies, in first Depot | 7% |
| 10 | Submission of diversion plans including estimates for diversions, including approvals from related statutory authorities/Local bodies, in second Depot | 7% |
| 11 | Submission of Report of outline & alternatives of Layout plans of Depots and facilities, in first Depot | 5% |
| 12 | Submission of Report of outline & alternatives of Layout plans of Depots and facilities, in second Depot | 5% |
| 13 | Submission of Final Depot layout plan along with general arrangement. Layout of the complete area and Architectural plans of various buildings, structures and other services, in first Depot | 15% |
| 14 | Submission of Final Depot layout plan along with general arrangement. Layout of the complete area and Architectural plans of various buildings, structures and other services, in second Depot | 15% |

Notes:

1. Depending on the progress of the work of construction of depots, the depot whichever gets/is expected to get completed first will be designated as first Depot and the other one will be designated as second Depot by the Employer.
2. All concerned deliverables as mentioned in Appendix-D of Section-8 shall be submitted, wherever applicable.
3. Further breakup of the above stage payment for proportionate work/deliverables (within the overall activity) will be on mutual consent after award of work and part payment may be made proportionately.

MODE OF PAYMENT FOR HEAD – C : 27% of accepted lumpsum price

Percentage distribution of accepted lumpsum price in respect of this head is further sub-divided into the following:

| Sl. No. | Activity | Stage Payment in percentage of lumpsum cost under this head |
|---------|--|---|
| 1 | Submission of draft bid document (for construction tender) comprising of tentative tender drawings, tentative BOQs, tentative cost estimates, tentative specifications, tentative scope of work, tentative Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | 12% |
| 2 | Submission of detailed estimate for Construction tender | 10% |
| 3 | Final tender drawings for inclusion in the bid document of Construction tender, including E&M and Architectural works of all related buildings and structures | 28% |
| 4 | Submission of Final bid document (for Construction tender) comprising of final tender drawings, final BOQs, final specifications, final scope of work, final Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | 35% |
| 5 | Submission of draft bid document (for Plant & Equipment tender) comprising of tentative tender drawings, tentative BOQs, tentative cost estimates, tentative specifications, tentative scope of work, tentative Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | 5% |
| 6 | Submission of Final bid document (for Plant & Equipment tender) comprising of final tender drawings, final BOQs, final specifications, final scope of work, final Employer's Requirement etc. in the formats approved by the Competent Authority of the Employer | 10% |

Notes:

1. All concerned deliverables as mentioned in Appendix-D of Section-8 shall be submitted, wherever applicable.
2. Further breakup of the above stage payment for proportionate work/deliverables (within the overall activity) will be on mutual consent after award of work and part payment may be made proportionately.

MODE OF PAYMENT FOR HEAD – D : 35% of accepted lumpsum price

Percentage distribution of accepted lumpsum price in respect of this head is further sub-divided into the following:

| Sl. No. | Activity | Stage Payment in percentage of lumpsum cost under this head |
|---------|---|---|
| 1 | Submission of "Good for Construction / Supply" drawings | |
| A | Civil, Structural and Architectural drawings | 50% |
| B | Water supply system, Rain water harvesting system, drainage system, sewerage system, Sewage Treatment Plant, Firefighting system and all other miscellaneous civil engineering related works, as directed by the Employer | 10% |
| C | Track Layout drawings | 7% |
| D | Combined services drawings | 18% |
| E | All drawings of Plant & Equipment (Electrical, Mechanical, HVAC etc.) | 5% |
| 2 | Submission of revised drawings, if any, during construction and Submission of all Original detailed design reports including all documents, drawings and all balance drawings etc. | 10% |

Notes:

1. All concerned deliverables as mentioned in Appendix-D of Section-8 shall be submitted, wherever applicable.
2. Further breakup of the above stage payment for proportionate work/deliverables (within the overall activity) will be on mutual consent after award of work and part payment may be made proportionately.

MODE OF PAYMENT FOR HEAD – E : 15% of accepted lumpsum price

Percentage distribution of accepted lumpsum price in respect of this head is further sub-divided into the following:

| Sl. No. | Activity | Stage Payment in percentage of lumpsum cost under this head |
|---------|--|---|
| 1 | Completion of all required services and checking of as-built drawings and submission of reconciled calculations until completion of construction stage | 25% |
| 2 | Obtaining IGBC Platinum Certification along with all deliverables mentioned in the document | 25% |
| 3 | Completion of supply of all personnel mentioned in tables B2 to B4 of Appendix B of Section 8 (Terms of Reference) | 50% |

Notes:

1. All concerned deliverables as mentioned in Appendix-D of Section-8 shall be submitted, wherever applicable.
2. Further breakup of the above stage payment for proportionate work/deliverables (within the overall activity) will be on mutual consent after award of work and part payment may be made proportionately.

SECTION-10

BANK GUARANTEE

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TABLE OF FORMS

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Notes:

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

All italicized text is for guidance how to prepare the various forms and shall be deleted from the final documents.

FORMAT OF BANK GUARANTEE FOR SECURITY DEPOSIT

To, _____ (Name of the Employer)
 _____ (Address of the Employer)

Whereas _____ (Name and Address of the Consultant) (herein after called the Consultant) has undertaken, in pursuance of contract no _____ Dated: _____ (Name of the contract and brief description of the work) (herein after called the Contract)

AND WHEREAS it has been stipulated by you in the said Contract that the Consultant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Consultant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Consultant, up to a total of ₹. _____ [*amount of guarantee*] Rupees _____ [*in words*], and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [*amount of guarantee*] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Consultant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Consultant shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 28 days from the date of expiry of this Contract.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

FORM OF BANK GUARANTEE FOR PERFORMANCE SECURITY

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank).

From:

Name and Address of the Bank

To:

The Managing Director,
 Rail Infrastructure Development Company (Karnataka) Limited,
 "Samparka Soudha" , 1st Floor,
 B.E.P Premises (Opp. Orion Mall),
 Dr. Rajkumar Road,
 Rajajinagar 1st Block,
 Bangalore - 560 010

WHEREAS, Rail Infrastructure Development Company (Karnataka) Limited, hereinafter called the **Employer**, acting through **[Insert Designation and address of the Employer's Representative]**, has accepted the bid of **[Insert Name and address of the Consultant]**, hereinafter called the **Consultant**, for the work of **[Insert Name of Work]**, vide Letter of Acceptance No. **[Insert Letter of Acceptance No.]**

AND

WHEREAS, the consultant is required to furnish Performance Security for the sum of **[Insert Value of Performance Security required]**, in the form of bank guarantee, being a condition precedent to the signing of the contract agreement.

WHEREAS, **[Insert Name of the Bank]**, with its Branch **[Address]** having its Headquarters office at **[Address]**, hereinafter called the **Bank**, acting through **[Designation(s) of the authorised person of the Bank]**, have, agreed to give guarantee for performance security and additional performance security as hereinafter contained:

- 1 KNOW ALL MEN by these present that I/We the undersigned **[Insert name(s) of authorized representatives of the Bank]**, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay the Employer the full amount in the sum of **[Insert Value of Performance Security required]** as above stated.
- 2 The Bank undertakes to immediately pay on presentation of demand by the Employer any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Employer on the Bank shall be final, conclusive and binding, absolute and unequivocal not withstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Employer of Bank.
- 3 On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.
- 4 The Bank shall pay the amount as demanded immediately on presentation of the demand by Employer without any reference to the consultant and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.
- 5 The Bank Guarantee shall be unconditional and irrevocable.
- 6 The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Consultant.
- 7 The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Consultant, will in any way release

- us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.
- 8 This guarantee is valid and effective from the date of its issue, which is *[insert date of issue]*. The guarantee and our obligations under it will expire on *[Insert the date twenty-eight days after the expected end of defect liability period]*. All demands for payment under the guarantee must be received by us on or before that date.
 - 9 The Bank agrees that the Employers right to demand payment of aforementioned full amount in one instance or demand payments in parts totaling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Employer or the guarantee is released by Employer before the Expiry date.
 - 10 The Bank agrees that its obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.
 - 11 The expressions Bank and Employer herein before used shall include their respective successors and assigns.
 - 12 The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.
 - 13 The Guarantee shall be in addition to and without prejudice to any other security Guarantee (s) of the consultant in favour of the Employer available with the Employer. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Employer.
 - 14 This guarantee shall be valid for 28days from the date of expiry of this Contract.

Date _____

Place _____

_____ *[Signature of Authorized person of Bank/Guarantor]*

_____ *[Name in Block letters]*

_____ *[Designation]*

_____ *[P/Attorney] No.*

_____ *Bank's Name and Seal*

_____ *[P/Attorney] No.....*

Witness:

1. *Signature*
Name & Address & Seal
2. *Signature*
Name & address & Seal

Notes:

1. *All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.*
2. *In case the guarantee is issued by a foreign Bank, which does not have operations in India, the said bank shall have to provide a counter-guarantee by State Bank of India.*

FORM OF BANK GUARANTEE FOR ADDITIONAL PERFORMANCE SECURITY

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank)

From:

Name and Address of the Bank

To:

The Managing Director,
Rail Infrastructure Development Company (Karnataka) Limited,
"Samparka Soudha", 1st Floor,
B.E.P Premises (Opp. Orion Mall),
Dr. Rajkumar Road,
Rajajinagar 1st Block,
Bangalore - 560 010

WHEREAS, Rail Infrastructure Development Company (Karnataka) Limited, hereinafter called the **Employer**, acting through **[Insert Designation and address of the Employer's Representative]**, has accepted the bid of **[Insert Name and address of the Consultant]**, hereinafter called the **Consultant**, for the work of **[Insert Name of Work]**, vide Letter of Acceptance No. **[Insert Letter of Acceptance No.]**.

AND

WHEREAS, the consultant is required to furnish Performance Security for the sum of **[Insert Value of Performance Security required]**, in the form of bank guarantee, being a condition precedent to the signing of the contract agreement.

WHEREAS, **[Insert Name of the Bank]**, with its Branch **[Address]** having its Headquarters office at **[Address]**, hereinafter called the **Bank**, acting through **[Designation(s) of the authorised person of the Bank]**, have, agreed to give guarantee for performance security and additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned **[Insert name(s) of authorized representatives of the Bank]**, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay the Employer the full amount in the sum of **[Insert Value of Performance Security required]** as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the Employer any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Employer on the Bank shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Employer of Bank.
3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e., the aforementioned full amount less the payment made to the Employer.
4. The Bank shall pay the amount as demanded immediately on presentation of the demand by Employer without any reference to the consultant and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.
5. The Bank Guarantee shall be unconditional and irrevocable.
6. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Consultant.
7. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Consultant, will in any way release

- us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.
8. His guarantee is valid and effective from the date of its issue, which is *[insert date of issue]*. The guarantee and our obligations under it will expire on *[Insert the date twenty-eight days after the expected end of this Contract]*. All demands for payment under the guarantee must be received by us on or before that date.
 9. The Bank agrees that the Employers right to demand payment of aforementioned full amount in one instance or demand payments in parts totaling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Employer or the guarantee is released by Employer before the Expiry date.
 10. The Bank agrees that its obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.
 11. The expressions Bank and Employer herein before used shall include their respective successors and assigns.
 12. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.
 13. The Guarantee shall be in addition to and without prejudice to any other security Guarantee (s) of the consultant in favour of the Employer available with the Employer. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Employer.

Date _____

Place _____

[Signature of Authorised person of Bank]

[Name in Block letters]

[Designation]

[P/Attorney]

Bank's Seal

[P/Attorney] No _____

Witness:

1. *Signature*
Name & Address & Seal
2. *Signature*
Name & address & Seal

Notes:

- 1 *All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.*
- 2 *In case the guarantee is issued by a foreign Bank, which does not have operations in India, the said bank shall have to provide a counter-guarantee by State Bank of India.*

FORM OF BANK GUARANTEE FOR ADVANCE PAYMENTS

(On non-judicial stamp paper of appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank)

From

_____ [Name and Address of the Bank]

To

The Managing Director,
Rail Infrastructure Development Company (Karnataka) Limited,
"Samparka Soudha", 1st Floor,
B.E.P Premises (Opp. Orion Mall),
Dr. Rajkumar Road,
Rajajinagar 1st Block,
Bangalore - 560 010

Beneficiary/Employer: Rail Infrastructure Development Company (Karnataka) Limited.

Guarantee No.: [.... reference number of the guarantee...] **Dated:** [.....]

WHEREAS, Rail Infrastructure Development Company (Karnataka) Limited (**hereinafter called the Employer**) has entered into Contract No. [.... reference number of the Contract....] dated [.....] for the execution of [name of the contract] (**hereinafter called the Contract**) with [....name of the Consultant....] (**hereinafter called the Consultant**).

WHEREAS, according to the Conditions of the Contract, an advance payment is admissible to the consultant against submission of bank guarantee(s).

At the request of the Consultant, we [....name of the Bank....] with our branch at [....address....], having our Head Office at [....address....] (**hereinafter called the Bank**) have, agreed to give the said guarantee as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned [Insert name(s) of authorized representative(s) of the Bank....], being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantees to pay the Employer the sum of ₹. [....value in figure....] (Rupees [....value in words....] only (**hereinafter called the Full Amount**)).
2. The Bank undertakes to immediately pay to the Employer, without any demur, reservation or recourse, any amount up to and including aforementioned full amount upon first written demand/demands from the Employer.
3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.
4. The Bank shall pay the amount so demanded without any reference to the consultant and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.
5. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank, the Consultant or the Employer.
6. The Bank agrees that no change, addition, modification to the terms of the Contract Agreement or to any document, which have been or may be made between the Employer and the Consultant, will in any way release us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.
7. This guarantee is valid and effective from the date of its issue, which is [....date of issue....]. The guarantee and our obligations under it will expire on dated[....Please refer note 4 & 5....]. All demands for payment under the guarantee must be received by us on or before that date.

8. The Bank agrees that the Employer's right to demand payment of aforementioned full amount in one instance or demand payments in parts totaling up to the aforementioned full amount in several instances will continue until either the aforementioned full amount is paid to the Employer or the guarantee validity period expires.
9. The Bank agrees that it's obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.
10. The expressions Bank and Employer herein before used shall include their respective successors and assigns.
11. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Dated[_____]

Place[_____]

(Signature of the Authorized Person of the Bank)

(Name in Block Letters)

(Designation)

(Bank's Seal)

(Authorization No.)

Witness:

1. _____
Signature, Name & Address

2. _____
Signature, Name & Address

Notes:

1. All italicized text in brackets [...text...] is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.
2. In case the guarantee is issued by a foreign Bank, the said bank shall have operations in India and should be issued by Indian operations branch of the said bank.

3. **Mobilization Advance**

(a) For Single Entity

For each Installment of Advance, two Bank Guarantees of equal amounts (each equal to half of the first installment of advance plus 10%) shall be furnished. Each Bank Guarantee shall be valid for the stipulated completion period of the contract.

4. **Advance against Plant and Machinery**

(a) For Single Entity

For each Installment of Advance, a Bank Guarantee equal to the installment of advance plus 10% shall be furnished. The Bank Guarantee shall be valid for the stipulated completion period of the contract.