NOIDA METRO RAIL CORPORATION (NMRC) LIMITED

REQUEST FOR PROPOSAL (RFP)

E tender No. NMRC/Hort.-02/47/2018

Contract No. Hort.-02

Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line

November 2018

Issued by:

Noida Metro Rail Corporation (NMRC) Limited Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida -201301, District Gautam Budh Nagar, Uttar Pradesh, India

Disclaimer

This Request for Proposal (RFP) Document (or "E-Tender" or "E-Bid") for "Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line" contains brief information about the scope of work and selection process for the Bidder ('the Contractor' or "the Tenderer" or "the Applicant"). The purpose of the Document is to provide the Bidders with information to assist the formulation of their Bidding Documents.

While all efforts have been made to ensure the accuracy of information contained in this RFP Document, this Document does not purport to contain all the information required by the Bidders. The Bidders should conduct their own independent assessment, investigations and analysis and should check the reliability, accuracy and completeness of the information at their end and obtain independent advice from relevant sources as required before submission of their Bid/s. Noida Metro Rail Corporation Ltd. ("NMRC" or "the Corporation") or any of its employees or advisors shall incur no liability under any law, statute, rules or regulations as to the accuracy or completeness of the RFP Document.

NMRC reserves the right to change any or all conditions/information set in this RFP Document by way of revision, deletion, updating or annulment through issuance of appropriate addendum as NMRC may deem fit without assigning any reason thereof.

NMRC reserves the right to accept or reject any or all Bids without giving any reasons thereof. NMRC will not entertain or be liable for any claim for costs and expenses in relation to the preparation of the Bid/s to be submitted in terms of this RFP Document.

Glossary

- a) "Addendum / Amendment" means any written amendment / addendum /corrigendum to this RFP, from time to time issued by NMRC to the prospective bidders;
- b) "Agreement" means the Contract Agreement to be executed between NMRC and the selected bidder.
- c) "Applicable Laws" means all laws, brought into force and effect by Govt. of India, State Governments, local bodies and statutory agencies and rules / regulations / notifications issued by them from time to time. It also include judgments, decrees, injunctions, writs and orders of any court or judicial authority as may be in force and effected from time to time.
- d) "Bidder" or "Tenderer" means Sole proprietorship, registered partnership firm, public limited company, private limited company or Consortium of any of the above and its Successor in title and assigns which is submitting its bid pursuant to RFP Documents
- e) "Bid Due Date" means Bid Submission end date and time given in the E-tender
- f) "Commencement Date" means the date of commencement of Contract Agreement as mentioned in NOA
- g) "Earnest Money Deposit (EMD)" means the refundable amount to be submitted by the Bidder along with RFP documents to NMRC
- h) "Interest Free Security Deposit/ Performance Security" means interest free amount to be deposited by the Contractor with NMRC as per terms and conditions of Contract Agreement as a security against the performance of the Contract agreement.
- i) "NMRC" means Noida Metro Rail Corporation Limited (or "Corporation")
- j) "Party" means Contractor or Corporation (together they are called "Parties")
- k) "Performance Bank Guarantee/ Security Deposit" means interest free amount to be deposited by the Contractor with NMRC as per terms and conditions of Contract Agreement as a security against the performance of the Contract agreement
- I) "Permits" shall mean and include all applicable statutory, environmental or regulatory Contracts, authorization, permits, consents, approvals, registrations and franchises from concerned authorities
- m) "Re. or Rs. or INR" means Indian Rupee
- n) "Revenue Operations Date (ROD)" means the date of operation of metro
- o) "Selected Bidder" means the bidder who has been selected by NMRC, pursuant to the bidding process for award of Contract.

The words and expressions beginning with capital letters and defined in this document shall, unless repugnant to the context, have the meaning ascribed thereto hereinabove.

Data Sheet

1	Name of the Bid	RFP for Development and Maintenance of Horticultural Work Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line	
2	Approximate Cost of Work	INR 2.36 Crore (including GST)	
3	Time-period of contract	3 (Three) years	
4	Method of selection	Cost Based Selection (Lowest –L1)	
5	Bid Processing Fee	INR 23,600/- (including GST) (Rupees Twenty Three Thousand Six Hundred only) through RTGS/NEFT only payable in favour of Noida Metro Rail Corporation Limited	
6	Ernest Money Deposit (EMD)	INR 2.36 Lakh (Rupees Two Lakh Thirty Six Thousand only)	
7	Financial Bid to be submitted together with Technical Bid	Yes	
8	Name of the Corporation's official for addressing queries and clarifications	GM (Technical) Noida Metro Rail Corporation, Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida 201301 Email: nmrcnoida@gmail.com Website:www.nmrcnoida.com, http://etender.up.nic.in	
9	Bid Validity Period	180 days	
10	Bid Language	English	
11	Bid Currency	INR	
	Schedule of Bidding Process		
	Task	Key Dates	
	Uploading of Bid	26/11/2018	
12	Pre-bid Meeting	04/12/2018, 1200 hrs (IST)	
12	Last date of issuing amendment, if any	07/12/2018	
	Last Date of Bid Submission	15/12/2018, 1500hrs (IST)	
	Date of Technical Bid Opening	17/12/2018, 1230 hrs (IST)	
13	Consortium to be allowed	Yes	
14	Account details	For Bid Processing Fee & EMD State Bank of India (04077) – Sector 18, Noida Gautam Budh Nagar, Uttar Pradesh -201301 IFSC Code: SBIN0004077 A/c No. 37707840592 Noida Metro Rail Corporation Ltd.	

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1. Section 1: General Information

1.1. Background

- a. Noida and Greater Noida are being developed as the satellite towns to New Delhi and more and more people from Delhi and other areas are shifting to these towns in search of fresh air, greenery and better infrastructure. There is a need of providing an efficient, reliable and comfortable transportation system for the population intending to settle in these towns and also the public coming to these areas for education, service and business.
- b. Noida Metro Rail Corporation is a Special Purpose Vehicle (SPV) formed for planning and executing urban transport projects in Noida, Greater Noida regions. The Company desires to provide a world-class Public Transportation System with state-of-the-art technology. As such, the overarching criterion for setting up of the Company is to help create an efficient, safe, reliable, economical and affordable public transport system
- c. An elevated metro line between Noida and Greater Noida is already under advanced stages of construction.
- d. NMRC invites E-Bids for selection of Contractor for granting the Contract for Development and Maintenance of Horticultural work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.
- e. In this regard, the Corporation now invites the interested Bidder/s to submit their proposals as per provisions of this Request for Proposal Document.
- f. NMRC will shortlist the Bidders on the basis of evaluation criteria mentioned in this RFP Document. On the basis of the minimum evaluation criteria, qualified Bidders will be shortlisted. Financial proposal of only qualified Bidders will be opened.

1.2. About Metro Locations

The metro corridor is 29.7 km long and is known as Noida Greater Noida Metro Rail Corridor. It comprises 21 metro stations starting from Noida Sector 51 in Noida and ends up at Depot Station in Greater Noida. The Development & Maintenance of horticultural work will be required for the following stations including Depot and staff quarters. The map is in 8.1.Appendix 1: Metro Alignment.

S.NO.	Name of the Station	
1.	Knowledge Park II station	
2.	Pari Chowk station	
3.	Alpha-1 Station	
4.	Delta -1 station	
5.	GNIDA Office station	
6.	Depot station	
7.	Depot	
8.	Staff Quarters	

1.3. Communication

All communications should be addressed to: GM (Technical) Noida Metro Rail Corporation (NMRC) Limited Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida -201301 District Gautam Budh Nagar, Uttar Pradesh

Email: nmrcnoida@gmail.com

2. Section 2: Terms of Reference

2.1. Scope of Development and Maintenance of Horticultural Work

SCOPE OF WORKS

HORTICULTURE WORKS

The scope of work, inter-alia, includes the following but not limited to:

- 1. Trenching in ordinary soil, Spreading good earth, Spreading sludge/manure, Mixing of good earth and sludge/manure.
- 2. Renovation of lawns, Uprooting rank vegetation and weeds and preparing the ground for planting grass, Excavation and trenching for preparation of beds for hedge and shrubbery.
- 3. Digging holes for planting trees, Filling mixture of earth & sludge over manure, Excavation of dumped stone or malba.
- 4. Flooding the ground with water and making kiaries etc, Fine dressing the ground, Uprooting weeds from trenched areas.
- 5. Brooming & cleaning of entire horticulture area including surrounding on daily basis.
- 6. Deployment of manpower as per technical specifications.

(VERTICAL GARDEN)

- 1. The contractor will execute the work i.e. "Development and Maintenance of Horticultural work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line." Contractor shall prepare the drawings/work method statement /bar chart as per tender drawing & approval of the NMRC as per requirement.
- 2. The above mentioned work shall be carried out with contractors own material & labour as per the specifications & drawings.
- 3. The Brief scope of work is mentioned in NDSR/DSR/BOQ and as per site requirement. The work under this contract shall consist of, but not limited to, all materials, labour, Equipment's, tools, plants and necessary machinery as required to completely execute In hours:
 - a.) Providing, fixing and erecting cuboidal/cylindrical type profile on piers/columns at different locations of metro viaduct area for developing vertical garden on the same. The erection profile shall be based on DEXTAR MODEL (details of which are provided in tender documents). Pre & post site inspection by experts and consultants of contractors (which shall include vertical garden horticulturists and irrigation). The rates shall include all cost of labour, material & transportation freight charges for logistics and infrastructure, plants and other installation related items. The item is based on the following specifications as mentioned below including six months maintenance period from commissioning of vertical garden wall.
 - b.) Employing of design consultant: Complete designing & drawing submission by team of vertical garden based on detail site survey on scientific & technical

- parameters. The design shall be approved by Engineer in Charge and then be used at site. The species of plants will also be approved..
- c.) Base frame: MS (Mild Steel) Frame of size 50mm x 80mm x 3mm pipe coated with anti-rust epoxy primer & paint and fixing will be as per approved design.
- d.) DTMP Hybrid Cups (Debacle Thermoplastic Malleable Vertical Planter): DTMP wall-planters Holder of size 6" x 1'6" & hybrid cups of size 5" x 2.5" x 4" designed to retain the temperature range & keep the centre of gravity of the growing planting within the planter, Interior lining of foam to keeps the percolation holes unclogged. Coated with anti-rust paint.
- e.) DTMP Drain Tray: To hold water percolating from the wall planters and then this water is to be directed to a drain point or into a water holding reservoir for reuse.
- f.) TFG NET (Tennace Fabric Green Net): TFG Net to cover the Green wall from back, so that panels do not come with direct contact with the structure behind.
- g.) Outdoor plants variety: Six month old rooted, antifungal and anti bacterial Outdoor Plants (Mix of Seasonal & All Season Plants) Plants are selected on the basis of temperature incidence of light and relative humidity on site, extra plants are budgeted for damage on the way and in the post-installation period and as per the direction of Engineer in Charge. Substrate: Cocopit, coco chips, mix of npk, specially treated with 17 minerals, thermocol balls for aeration. Plant variety: Golden Money plant, Green Money plant, Scindapsus Money plant, Marble Money Plant, Philodendron cylon, Philodendron Zanadu, Asperagus Merri, Asperagus Springirri, Chlorophytum Varigated, Chlorophytum Comosum, Ophiphogon Varigated, Ophiphogon Green, Dianella, Cryptanthus Red, Cryptanthus Chocklate, Cryptanthus Pink, Syngonium No. 1, Schefflera Hicour, Schefflera Green, Schefflera Varigated, aralia Golden Mini, Aralia Green, Aralia White, Roheo Varigated, Roheo Green, Roheo Golden, Song of India, Cryptantuhus Red, Cryptanthus Chocklate, Cryptanthus Pink, Begonia, Pepromia Green, Perpromia Varigated, Chrysothemis Pulchella, Maranta, Stromanthea.
- h.) Maintenance of installed vertical garden on columns/piers by team of experts. All the installed plants shall be given regular care and maintained including feeding, manuring & nurturing. Plants will be replaced on seasonal basis and for damages as & when required. Any available varieties from the above list of plants apart from the variety installed at site will only be planted after the approval of Engineer in Charge. The rates shall include all labour, material & transportation etc and for other maintenance related items like wall garden structures & irrigation system. The safety, unity of wall garden &equipments will be the responsibility of the contractor. The water tanker with spray jet/shower arrangement for regular watering will be arranged by contractor within maintenance cost. water conducive for these plants will be arranged by the agency. The maintenance period will start after six months from the date of completion of vertical garden.

(CREEPER PLANTS)

(i) Providing, fixing and erecting cuboidal/cylindrical type profile on piers/columns at different locations of metro viaduct area for developing creeper plants on the same having contents Tuflex Garden fencing Hexagonal net/or equivalent of green colour (Weight grams/sqm. 510 (+/- 8%)) in width of 60 cm. with bamboo of 90 cm. length. The bamboo should be painted with green colour paint of approved brand and manufacture (two or more coats) and fixed 30 cm. below

ground level and 60 cm. above ground level at a distance of 1.50 mtrs. The net and bamboo should be binded with 2 mm. G.I. Wire at three places properly as per direction of

Engineer-in-charge. Pre & post site inspection by experts and consultants of contractors (which shall include creeper plants horticulturists and irrigation).

The contractor shall plan & execute the work in such a way that the work proceeds smoothly for provision & maintenance of vertical garden on columns/piers to the satisfaction of engineer in charge.

- The Contractor shall attend regular coordination meetings convened by the employer/engineer for interface and adhere to the decisions taken in the meeting.
- Access will be provided to the staff of the contractor appointed by employer for carrying out their works and bringing materials and Equipments at site. However, the security of materials and Equipments brought at the site will be the responsibility of the Contractor.
- The Contractor shall take all necessary precautions to ensure safety of the staff, adjoining structures, materials &equipments and the work in progress as per the directions of engineerin-charge.
 - i. Other miscellaneous items as per instructions of engineer in charge.
 - The contractor shall plan & execute the work in such a way that the work proceeds smoothly to the satisfaction of engineer.
 - The Contractor shall attend regular coordination meetings convened by the employer/engineer for interface and adhere to the decisions taken in the meeting.
 - Access will be provided to the staff of the contractor appointed by employer for carrying out their works and bringing materials and Equipments at site. However, the security of materials and Equipments brought at the site will be the responsibility of the Contractor.
 - The Contractor shall take all necessary precautions to ensure safety of the staff, adjoining structures, materials &equipments and the work in progress as per the directions of engineer-in-charge.
 - In case of discrepancy among Standard codes of Practice, Technical Specifications and provision in sub-clause in this NIT, the order of precedence will be as below:
 - (i) Provision in NIT/BOQ.
 - (ii) Technical Specifications
 - (iii) CPWD Specifications
 - (iv) Standard Code of Practice.

In case of discrepancy among Standard Codes of Practice, the order of precedence will be IRS, IRC, IS, BS, DIN.

(iv)Time Schedule:

The contract period for execution of the above mentioned work is for 3 year & the work should start immediately post issuance of particular sub-work order by the

competent authority. However the emergency works arisen should be attended promptly if asked to do so.

2.2 Tenure

The tenure for Development and Maintenance of Horticultural WorkContract Agreement shall be for a period of 03 (three) years.

2.3 Personnel

The personnel deployed for the Development and Maintenance of Horticultural Workshould be qualified and trained in the relevant work and have the knowledge of safety procedures. The contractor shall submit to Employer requirement duly completed by each staff prior to their deployment on work site. The minimum qualification and experience of housekeeping personnel should be as mentioned below.

S. No.	Description	Minimum	Minimum Experience
		Qualification required	required in Similar
			Works
1.	Engineer& Equivalent	Graduate In	Total minimum
		Agriculture	experience of 03 years
		Engineering or	in supervision of
		Science	horticulture &
			landscaping works
2.	Supervisor	Diploma in agriculture	5 to 7 years
			experience of
			horticulture &
			landscaping works.
3	Gardner/maali		3 years experience of
			horticulture &
			landscaping works

The Personnel deployed should be covered with all statutory requirements at the cost of the contractor. The payment to staff is made through bank except in unavoidable circumstances. Details of payments duly certified by the bank to be submitted with next month's bill without which payment will not be released.

The personnel should be smartly dressed in neat and clean uniforms having firms logo, the uniform and personal protection equipment (Shoes, helmet, gloves etc.) should be provided free of cost by the contractor.

2.4 Specifications

The details pertaining to number of stations and alignment are mentioned in Appendix 1 :- Station wise details.

The deployment of minimum number of personnel for the Development and Maintenance of Horticultural Workpurpose for the package is mentioned in Appendix 2.

3. Section 3: Instructions to Bidders

3.1. General instructions

- a. A tenderer shall submit only one bid in the same tendering process, either individually as a tenderer or as a partner of a J.V. A tenderer who submits or participates in, more than one bid will cause all of the proposals in which the tenderer has participated to be disqualified. No tenderer can be a sub-contractor while submitting a bid individually or as a partner of a JV in the same bidding process. A tenderer, if acting in the capacity of subcontractor in any bid, may participate in more than one bid, but only in that capacity.
- b. The Bidder shall initiate, and actively pursue and involve itself in all investigations and enquiries, Corporation feedbacks, information, convening of and attendance at meetings, and in any other activities as are or may be necessary for producing high quality work as per the requirements.
- c. The Bidder shall carry out the services in compliance with the provisions of this Agreement. Any and all changes necessary to ensure that the Bidder's documents conform to the intent and purpose set out in the Agreement, shall be made at the Bidder's own expense. The Bidder represents that it is a professional and experienced company, and hereby agrees to bear full responsibility for the correctness and technical merit of the services performed.
- d. Bidders shall be evaluated on the basis of the Evaluation Criteria specified in this document. Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Selection Process will be given and that NMRC's decisions are without any right of appeal whatsoever.
- e. Any entity which has been barred by the Central/State Government in India or by any entity controlled by them, from participating in any project, and the bar subsists as on the date of Bid, would not be eligible to submit an e Bid.
- f. Bidders are encouraged to inform themselves fully about the assignment and the local conditions before submitting the e-Bid by paying a visit to the Corporation and/or by sending written queries to NMRC before the last date for receiving queries/clarifications.
- g. NMRC shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to e-Bid or the Selection Process, including any error or mistake therein or in any information or data given by NMRC.
- h. The currency for the purpose of the Proposal shall be the Indian Rupee (INR).
- i. Tenderers shall not have a conflict of interest. All Tenderers found to have a conflict of interest shall be disqualified. Tenderers shall be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - A tenderer has been engaged by the Employer to provide consulting services for the preparation related to procurement or implementation of the project;

- ii. A tenderer is any associates/affiliates (inclusive of parent firms) mentioned in sub paragraph above; or
- iii. A tenderer lends, or temporarily seconds its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for an implementation of the project, if the personnel would be involved in any capacity on the same project.

3.1.1. Cost of Bid Document / e-Tender processing Fee

- a. The tenderer shall bear all costs associated with the preparation and submission of its e-Bid and Noida Metro Rail Corporation Ltd. ("NMRC" or "the Corporation"), will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the e-Bid process.
- b. This tender document is available on the web site http://etender.up.nic.in or on NMRC website (www.nmrcnoida.com) to enable the tenderers to view, download the e-Bid document and submit e-Bids online up to the last date and time mentioned in e-Tender notice/e-tender document against this e-Tender. The tenderers shall have to pay cost of bid document/ e-Tender processing fee of as mentioned in Data Sheet through RTGS/NEFT only payable in favor of Noida Metro Rail Corporation Limited in the A/c No. mentioned in Data Sheet. The scanned copy of RTGS/NEFT receipt with transaction Id certified by the same bank must be enclosed along with the e-Bid. This cost of bid document/ e-Tender processing fee as mentioned in Data Sheet will be non-refundable. Tender without cost of bid document/ e-Tender processing fee in the prescribed form, will not be accepted.

3.1.2. Acknowledgement by Bidder

It shall be deemed that by submitting the e-Bid, the Bidder has:

- a. made a complete and careful examination of the e-Bid;
- b. received all relevant information requested from NMRC;
- c. acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the e-Bid or furnished by or on behalf of NMRC;
- d. satisfied itself about all matters, things and information, necessary and required for submitting an informed Application and performance of all of its obligations the render;
- e. acknowledged that it does not have a Conflict of Interest; and
- f. Agreed to be bound by the undertaking provided by it under and in terms hereof.

3.1.3. Availability of Bid Document

This Bid document is available on the web site http://etender.up.nic.in or on Noida Metro website www.nmrcnoida.com to enable the Bidders to view, download the e-Bid document and submit e-Bids online up to the last date and time mentioned in e-Bidder notice/ e-Bid document. The Bidder's shall have to pay e-Bid document fee and EMD as mentioned in Data sheet through RTGS/ NEFT on addresses given in data sheet. The scanned copy of RTGS/ NEFT with transaction ID certified by the same bank must be enclosed along with the e-Bid. This e-Bid document fee will be non-refundable. Bid without Bid fee in the prescribe form will not be accepted.

3.1.4. Clarifications of e-Bid

- a. During evaluation of e-Bid, NMRC may, at its discretion, ask the Bidder for a clarification of his/her e-Bid. The request for clarification shall be in writing.
- b. Any queries or request for additional information concerning this RFP shall be submitted in writing or by fax and e-mail to the GM (Technical), NMRC only before or during Pre-Bid Meeting held at NMRC. The envelopes/ communication shall clearly bear the following identification/ title: "Queries/ Request for Additional Information: RFP for Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line ". The responses will be posted to all such queries on the official Website www.nmrcnoida.com. NMRC reserves the right not to respond to any questions or provide any clarifications, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring NMRC to respond to any question or to provide any clarification.
- c. A pre- submission meeting shall be called on the date mentioned in **Data Sheet** at NMRC Office. Any change corresponding to date, if any, shall be communicated to the Bidder vide NMRC/ e-Tendering website.
- d. In case the Bidder seeks for any queries, he shall send letter or e-mail to the correspondence address given in Data Sheet.
- e. However, NMRC shall not entertain any correspondence from the Bidders during the period of e-Bid opening to selection of the successful Bidder. Any wrong practice shall be dealt in accordance with the Section 5.14 of this e-Bid document under Fraud and Corrupt Practices.
- f. The Tenderer is advised to visit and examine the Site of Works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the Tender and entering into a contract for the proposed work. The costs of visiting the Site shall be borne by the Tenderer. It shall be deemed that the Contractor has undertaken a visit to the Site of Works and is aware of the site conditions prior to the submission of the tender documents.
- g. The Tenderer and any of his personnel will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the Tenderer, and his personnel, will release and indemnify the Employer and his personnel from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of the inspection.

3.1.5. Amendment of e-Bid Document

- a. At any time prior to the deadline for submission of e-Bid, NMRC may, for any reason, whether at its on in iterative or in response to a clarification requested by a prospective Bidder, modify the e-Bid document by amendments. Such amendments shall be uploaded on the e-procurement website http://etender.up.nic.in or NMRC's website www.nmrcnoida.com. The relevant clauses of the e-Bid document shall be treated as amended accordingly.
- b. It shall be the sole responsibility of the prospective Bidder to check the web site http://etender.up.nic.in and NMRC's website www.nmrcnoida.com from time to time for

- any amendment in the e-Bid documents. In case of failure to get the amendments, if any, NMRC shall not be responsible for it.
- c. In order to allow prospective e-Bids a reasonable time to take the amendment into account in preparing their e-Bids, NMRC, at the discretion, may extend the deadline for the submission of e-Bids. Such extensions shall be uploaded on the e-procurement website http://etender.up.nic.in NMRC's website www.nmrcnoida.com.

3.2. Preparation and submission of Bids

3.2.1. Language of e-Bid

The e-Bid prepared by the Bidder, as well as all correspondence and documents relating to the e-Bid exchanged by the Bidder and NMRC shall be written in English language. Only English numerals shall be used in the e-Bid. The correspondence and documents in any other language must be accompanied by transcripts verified by the Embassy of Home Country or equivalent.

3.2.2. Documents constituting the e-Bid

The e-Bid prepared by the Bidder shall comprise the following components:

- a. Technical e-Bid- Technical e-Bid will comprise of
 - i. Fee details Details of Bid processing fee and prescribed EMD
 - ii. Eligibility details Includes copies of required documents in PDF format justifying that the Bidder is qualified to perform the contract if his/her bid is accepted and the Bidder has financial & technical capability necessary to perform the contract and meets the criteria outlined in the Qualification requirement and technical specification and fulfill all the conditions of the contract.
 - iii. **Technical evaluation -** Details of all documents needed for Technical evaluation as mentioned in this RFP

b. Financial e-Bid -

i. **Price bid** – Bill of Quantities in XLS format to be filled in after downloading from the e-Procurement website for this e-tender (http://etender.up.nic.in). There shall be a single financial quote for the package for which the bid is submitted.

3.2.3. Documents establishing Bidder's Qualification

- a. The Bidder shall furnish, as part of its technical e-Bid, documents establishing the Bidder's qualification to perform the contract if its e-Bid is accepted. The documentary evidence should be submitted by the Bidder electronically in the PDF format.
- b. The documentary evidence of Bidder's qualification to perform the contract if its e-Bid is accepted shall be as per qualification requirements specified in e-Bid document.

3.2.4. **E-Bid form**

The Bidder shall complete the e-Bid form and the appropriate price schedule/BOQ furnished in the e-Bid document.

3.2.5. E-Bid Currency

Prices shall be quoted in Indian Rupees only.

3.2.6. Formats and Signing of e-Bid

- a. The Bidder shall prepare one electronic copy of the technical e-Bid and financial e-Bid separately.
- b. The e-Bid document shall be digitally signed, at the time of uploading, by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. The later authorization shall be indicated by a scanned copy of written power-of attorney accompanying the e-Bid. All the pages/documents of the e-Bid that are to be uploaded shall be digitally signed by the person authorized to sign the e-Bid.
- c. Bidders should provide all the information as per the RFP and in the specified formats. NMRC reserves the rights to reject any proposal that is not in the specified formats.
- d. In case the Bidders intends to provide additional information for which specified space in the given format is not sufficient, it can be furnished in duly stamped and signed PDFs.

3.2.7. Deadline for submission of e-Bid

E-Bid (Technical and financial) must be submitted by the Bidder at e-procurement website http://etender.up.nic.in not later than the time specified on the prescribed date (as the server time displayed in the e-procurement website). NMRC may, at its discretion, extend this deadline for submission of e-Bid by amending the e-Bid document, in which case all rights and obligations of NMRC and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

3.2.8. Submission of e-Bid

- a. The bid submission module of e-procurement website http://etender.up.nic.in enables the Bidders to submit the e-Bid online in response to this e-Bid published by NMRC.
- b. Bid submission can be done only from the bid submission start date and time till the bid submission end date and time given in the e-Bid. Bidders should start the bid submission process well in advance so that they can submit their e-Bid in time.
- c. The Bidder should submit their e-Bid considering the server time displayed in the e-procurement website. This server time is the time by which the e-Bid submission activity will be allowed till the permissible time on the last/end date of submission indicated in the e-Bid schedule.
- d. Once the e-Bid submission date and time is over, the Bidders cannot submit their e-Bid. For delay in submission of e-Bid due to any reasons, the Bidders shall only be held responsible.

The Bidders have to follow the following instructions for submission of their e-Bid:

- a. For participating in e-Bid through the e-Biding system it is necessary for the Bidders to be the registered users of the e-procurement website http://etender.up.nic.in. The Bidders must obtain a user login Id and password by registering themselves with U.P. Electronics Corporation Ltd., Lucknow if they have not done so previously for registration.
- b. In addition to the normal registration, the Bidder has to register with his/her digital signature certificate (DSC) in the e-Biding system and subsequently he/she will be

allowed to carry out his/her e-Bid submission activities. Registering the digital signature certificate (DSC) is a one-time activity. Before proceeding to register his/her DSC, the Bidder should first log on to the e-Biding system using the user login option on the home page with the login Id and password with which he/she has registered.

For successful registration of DSC on e-procurement website http://etender.up.nic.in the Bidder must ensure that he/she should possess class-2/class-3 DSC issued by any certifying authorities approved by controller of certifying authorities, Government of India, as the e-procurement website http://etender.up.nic.in is presently accepting DSC issued by these authorities only. The Bidder can obtain user login Id and perform DSC registration exercise given above even before the e-Bid submission date starts. NMRC shall not be held responsible if the Bidder tries to submit his/her e-Bid at the moment before end date of submission but could not submit due to DSC registration problem.

- c. The Bidder can search for active Bids through "search active tenders" link, select a Bid in which he/she is interested in and then move it to 'My Tenders' folder using the options available in the e-Bid submission menu. After selecting and the Bid, for which the Bidder intends to e-Bid, from "My tenders" folder, the Bidder can place his/her e-Bid by clicking "pay offline" option available at the end of the view Bid details form. Before this, the Bidder should download the e-Bid document and price schedule/bill of quantity (BOQ) and study them carefully. The Bidder should keep all the documents ready as per the requirements of e-Bid document in the PDF format except the price schedule /bill of quantity (BOQ) which should be in the XLS format (excel sheet).
- d. After clicking the 'pay offline' option, the Bidder will be redirected to terms and conditions page. The Bidder should read the terms & conditions before proceeding to fill in the Bid fee and EMD offline payment details. After entering and saving the Bid fee and EMD details form so that "bid document preparation and submission" window appears to upload the documents as per technical (fee details, qualification details, e-Bid form and technical specification details) and financial (e-Bid form and price schedule/BOQ) schedules/packets given in the Bid details. The details of the RTGS/NEFT should tally with the details available in the scanned copy and the date entered during e-Bid submission time otherwise the e-Bid submitted will not be accepted.
- e. Next the Bidder should upload the technical e-Bid documents for fee details (e-Bid fee and EMD), Qualification details. Before uploading, the Bidder has to select the relevant digital signature certificate. He may be prompted to enter the digital signature certificate password, if necessary. For uploading, the Bidder should click "browse" button against each document label in technical and financial schedules/packets and then upload the relevant PDF/XLS files already prepared and stored in the Bidder's computer. The required documents for each document label of technical (fee details, qualification details, e-Bid form and technical specification details) and financial (e-Bid form and price schedule/BOQ) schedules/packets can be clubbed together to make single different files for each label.
- f. The Bidder should click "Encrypt" next for successfully encrypting and uploading of required documents. during the above process, the e-Bid document are digitally signed using the DSC of the Bidder and then the documents are encrypted/locked electronically with the DSC's of the bid openers to ensure that the e-Bid documents are protected, stored and opened by concerned bid openers only.

- g. After successful submission of e-Bid document, a page giving the summary of e-Bid submission will be displayed confirming end of e-Bid submission process. The Bidder can take a printout of the bid summary using the "print" option available in the window as an acknowledgement for future reference.
- h. NMRC reserves the right to cancel any or all e-Bids without assigning any reason.

3.2.9. Late e-Bid

- a. Bids received by NMRC after the specified time on the Bid Due Date shall not be eligible for consideration and shall be summarily rejected.
- b. The server time indicated in the bid management window on the e- procurement website http://etender.up.nic.in will be the time by which the e-Bid submission activity will be allowed till the permissible date and time scheduled in the e-Bid.
- c. Once the e-Bid submission date and time is over, the Bidder cannot submit his/her e-Bid. Bidder has to start the bid submission well in advance so that the submission process passes off smoothly. The Bidder will only be held responsible if his/her e-Bid is not submitted in time due to any of his/her problems/faults, for whatsoever reason, during e-Bid submission process.

3.2.10. Withdrawal and resubmission of e-Bid

- a. At any point of time, a Bidder can withdraw his/her e-Bid submitted online before the bid submission end date and time. For withdrawing the Bidder should first log in using his/her login id and password and subsequently by his/her digital signature certificate on the e-procurement website http://etender.up.nic.in. The Bidder should then select "My bids" option in the bid submission menu. The page listing all the bids submitted by the Bidder will be displayed. Click "View" to see the details of the bid to be withdrawn. After selecting the "bid withdrawal" option the Bidder has to click "Yes" to the message "Do you want to withdraw this bid?" displayed in the bid information window for the selected bid. The Bidder also has to enter the bid withdrawing reasons and upload the letter giving the reasons for withdrawing before clicking the "Submit" button. The Bidder has to confirm again by pressing "OK" button before finally withdrawing his/her selected e-Bid.
- b. No e-Bid may be withdrawn in the interval between the deadline for submission of e-Bids and the expiration of period of e-bid validity. Withdrawal of an e-Bid during this interval may result in the forfeiting of Bidder's e-Bid security.
- c. The Bidder can re-submit his/her e-Bid as when required till the e-Bid submission end date and time. The e-Bid submitted earlier will be replaced by the new one. The payment made by the Bidder earlier will be used for revised e-Bid and the new e-Bid submission summary generated after the successful submission of the revised e-Bid will considered for evaluation purposes. For resubmission, the Bidder should first log in using his/her login Id and password and subsequently by his/her digital signature certificate on the e-procurement website http://etender.up.nic.in. The Bidder should then select "My bids" option in the bid submission menu. The page listing all the bids submitted by the Bidder will be displayed. Click "View" to see the detail of the e-Bid to be resubmitted. After selecting the "bid resubmission" option, click "Encrypt & upload" to upload the revised e-Bids documents.

- d. The Bidder can submit their revised e-Bids as many times as possible by uploading their e-Bid documents within the scheduled date & time for submission of e-Bids.
- e. No e-Bid can be resubmitted subsequently after the deadline for submission of e-Bids.

3.2.11. NMRC's right to accept any e-Bid and to reject any or all e-Bids.

- a. Notwithstanding anything contained in this e-Bid, NMRC reserves the right to accept or reject any Bid and to annul the Selection Process and reject all Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof.
- b. NMRC reserves the right to reject any Bid if:
 - At any time, a material misrepresentation is made or uncovered, or
 - The Bidder does not provide, within the time specified by NMRC, the supplemental information sought by NMRC for evaluation of the e-Bid.
- c. Such misrepresentation/ improper response may lead to the disqualification of the Bidder. If such disqualification /rejection occurs after the e-Bid have been opened and the highest ranking Bidder gets disqualified / rejected, then the NMRC reserves the right to consider the next best Bidder, or take any other measure as may be deemed fit in the sole discretion of NMRC, including annulment of the Selection Process.

3.2.12. Period of validity of e-Bid

- a. e-Bid shall remain valid for 180 days after the date of e-Bid opening prescribed by NMRC. An e-Bid valid for a shorter period shall be rejected by NMRC as nonresponsive.
- b. In exceptional circumstances, NMRC may solicit the Bidder's consent to an extension of the period of e-Bid validity. The request and the response thereto shall be made in writing.

3.2.13. Correspondence with the Bidder

- a. Save and except as provided in this e-Bid, NMRC shall not entertain any correspondence with any Bidder or its Technical Partners in relation to acceptance or rejection of any e-Bid.
- b. Subject to Clause 3.4.5 no Bidders or its Technical Partners shall contact NMRC on any matter relating to his e-Bid from the time of Bid opening to the time contract is awarded.
- c. Any effort by the Bidder or by its Technical Partners to influence NMRC in the Bid evaluation, Bid comparison or contract award decisions, may result in the rejection of his Bid.

3.3. Earnest Money Deposit

3.3.1. Earnest money deposit (EMD)

a. The tenderer shall furnish, as part of its e-Bid, an e-Bid security/ EMD as stated in Data Sheet in form of RTGS/NEFT only in favour Noida Metro Rail Corporation Limited in the A/c No. mentioned in **Data Sheet**. The scanned copy of RTGS/NEFT receipt of Security/ EMD with transaction Id certified by the same bank must be enclosed along with the e-Bid. Tender without Earnest Money in the prescribed form, will not be accepted.

- b. Bidders submitting bids for more than one package shall be required to submit EMD for each package as mentioned in **Data Sheet** for which bid is submitted.
- c. Any e-Bid not secured in accordance with above shall be treated as non-responsive and rejected by NMRC.
- d. Unsuccessful Bidder's EMD will be returned within 45 days after conclusion or discharge of the tender.
- e. No interest will be paid by the Purchaser on the Earnest Money Deposit.
- f. The successful Bidder's e-Bid EMD will be adjusted with Performance Bank Guarantee, if applicable, to be submitted by the Bidder upon signing the contract.
- g. The EMD may be forfeited:
 - i. If Bidder (a) withdraws its e-Bid during the period of e-Bid validity specified by the Bidder on the e- bid form: or (b) does not accept the correction of errors or (c) modifies its e-Bid price during the period of e-Bid validity specified by the Bidder on the form.
 - ii. In case of a successful Bidder, if the Bidder fails to sign the contract with the Corporation.
- h. In case of joint venture/consortia, Bank Guarantee/FDR for tender security shall be in the name of joint venture/consortia and not in name of individual members.

3.4. Opening and Evaluation of Bids

3.4.1. Opening of technical e-Bid by NMRC

- a. NMRC will open all technical e-Bids, in the presence of Bidder's representatives who choose to attend on the prescribed date of opening at NMRC Office. The Bidder's representatives who are present shall submit the letter to NMRC on the letter head of the company stating that the representative (name) is authorized to attend the meeting (Please note The representative is required to carry a copy during pre-bid and other related meetings as well). He / She shall sign a register evidencing their attendance at NMRC. In the event of the specified date e-Bid opening being declared a holiday for the Corporation, the e –bids shall be opened at the appointed time and place on the next working day.
- b. The Bidder who is participating in e-Bid should ensure that the RTGS/NEFT of Bid Processing Fee and EMD must be submitted in the prescribed account of NMRC within the duration (strictly within opening & closing date and time of individual e-Bid) of the work as mentioned in Bid notice, otherwise, in any case, e-Bid shall be rejected.
- c. The Bidders names and the presence or absence of requisite e-Bid security and such other details as NMRC at its discretion may consider appropriate, will be announced at the opening.

3.4.2. Opening of financial e-Bid

- a. After evaluation of technical e-Bid, through the evaluation committee NMRC shall notify those Bidders whose technical e-Bids were considered non-responsive to the conditions of the contract and not meeting the technical specifications and qualification requirements indicating that their financial e-Bids will not be opened.
- b. NMRC will simultaneously notify the Bidders, whose technical e-Bids were considered acceptable to the Corporation. The notification may sent by e-mail provided by Bidder.
- c. The financial e-Bids of technically qualified Bidders shall be opened in the presence of technically qualified bidders who choose to attend. The date and time for opening of financial bids will be communicated to the technically qualified Bidders subsequently after completion of technical bids evaluation through e-mail provided by the Bidder.

3.4.3. Correction of Errors

- a. Financial Bids determined to be responsive will be checked by NMRC for any arithmetic errors. Where there is a discrepancy between the rate quoted in the Financial Bid, in figures and in words, the amount in words will prevail over the amounts in figures, to the extent of such discrepancy.
- b. The amount stated in the Financial Bid will be adjusted by NMRC in accordance with the above procedure for the correction of errors and shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected quoted rate of e-Bid, his e-Bid will be rejected, and his Bid Security shall be liable for forfeiture in accordance with Clause 3.3.1g.

3.4.4. Examination of e-Bid document

- a. The NMRC will examine the e-Bid to determine if:
 - i. They are complete;
 - ii. They meet all the conditions of the contract;
 - iii. The required e-Bid Processing fee, EMD and other required documents have been furnished;
 - iv. The documents have been properly digitally signed; and
 - v. The e-Bids are in order.
- b. Any e-Bid or e-Bids not fulfilling these requirements shall be rejected.

3.4.5. Contacting NMRC

- a. No Bidder shall contact NMRC on any matter relating to his/her e-Bid, from the time of the e-Bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of NMRC, he/she can do so in writing.
- b. Any effort by a Bidder to influence NMRC in its decisions on e-Bid evaluation, e- bid comparison or contract award may result in rejection of the Bidder's e-Bid.
- c. In the event of any information furnished by the Bidder is found false or fabricated, the minimum punishment shall be debarring /blacklisting from Noida Metro works and legal proceeding can also be initiated. EMD of such bidders will be forfeited.

3.4.6. Confidentiality

- a. Information relating to the examination, clarification, evaluation, and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising NMRC in relation to or matters arising out of, or concerning the Bidding Process. Any effort by a Bidder to exert undue or unfair influence in the process of examination, clarification, evaluation and comparison of Proposal shall result in outright rejection of the offer, made by the said Bidder.
- b. NMRC shall treat all information, submitted as part of Bid, in confidence and shall require all those who have access to such material to treat the same in confidence. NMRC may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or NMRC or as may be required by law or in connection with any legal process.

3.5. Award of Contract

3.5.1. Award Criteria

- a. NMRC will award the contract as per evaluation criteria stated in the RFP Document.
- b. NMRC will award the contract to the successful Bidder whose bid has been determined to be responsive to all the conditions of the contract and meeting the eligibility requirement of the bidding document.

3.5.2. Notice of Award (NOA)

- a. Prior to the expiration of the period of e-Bid validity, NMRC will notify the successful Bidder in writing, by letter/e-mail/fax, that its e-Bid has been accepted.
- b. The acceptance of NOA will constitute the formation of the contract.

3.5.3. Signing of contract

At the same time as NMRC notifies the successful Bidder that it's e-Bid has been accepted, the successful Bidder shall have to sign the Agreement with relevant document as mentioned in the RFP. The agreement draft along with other related terms and conditions will be same as furnished in this e-Bid. Any refusal will not be allowed. The Bidder need not download and submit in hard copies of these documents.

3.5.4. NMRC's right to accept any e-Bid and to reject any or all e-Bids

NMRC reserves the right to accept or reject any e-Bid, and to annul the e-Bid process and reject all e-Bids at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers.

3.6. Minimum Organization structure Required

Minimum level of supervision & qualification/ experience of site staff is as follows:

S. No.	DESIGNATION	QUALIFICATION	EXPERIENCE LEVEL
1.	ENGINEER & EQUIVALENT	Graduate In Agriculture Engineering or Science	Total minimum experience of 03 years in supervision of horticulture & landscaping works
2.	SUPERVISOR	Diploma in agriculture	5 to 7 years experience of horticulture & landscaping works.

3.7. RESOURCES PROPOSED FOR THE PROJECT - PERSONNEL

The figures indicated below are the minimum number of Personnel required which are to be deployed as per the minimum level of supervision and qualification/experience of site-staff is given as follows:

S. No.	Designation of Personnel	Minimum Requirement
1	ENGINEER OR EQUIVALENT	1
2	SUPERVISOR	1
3	MANPOWER /GARDENER	As per technical specification (Clause-8)

Notes:

- 3.7.1.1. The contractor shall deploy resources as per the above mentioned minimum requirement and also confirm to deploy manpower over and above the minimum numbers indicated above, if the work requires so.
- 3.7.1.2. These minimum resources are as per the requirements of the various activities at different stages of works. All resources need not to be mobilised simultaneously, resources as per the requirement of various stages of works shall be mobilised in accordance with the instructions of the Engineer. The decision of the Engineer shall be final and bonding.
 - 3.7.1.3. The performance of project personal deployed will be evaluated periodically by Employer during the contract period. In case the performance of any of the personnel is not satisfactory, the contractor shall replace them with good personnel immediately as per the directions of the Engineer.

4. Section 4: Eligibility, Evaluation and Selection Process

4.1. Eligibility Criteria

The Bidder's competence and capability is proposed to be established by the following parameters. The Bidder should meet all the criteria given in this section.

- a. Sole proprietorship, registered partnership firm, public limited company, private limited company or Consortium of any of the above can submit the Bidder. The firms and the companies should be registered in India.
- b. The Bidder should have a minimum experience of having satisfactorily completed similar works during last 7 (seven) years period ending last day of month previous to the one in which the bids are invited should be either of the following:
- i. One similar completed work costing not less than the amount equal to **Rs.63 lakh** (Rupees sixty three lakh only)or
- ii. Two similar completed works each costing not less than the amount equal to **Rs.39.33Lakh** (Rupees thirty nine lakh thirty three thousand only)or
- iii. Three similar completed works each costing not less than the amount equal to **Rs. 31.46 Lakh** (Rupees thirty one Lakh forty six thousand only)

Definition of Similar Works - Works involving Development and Maintenance of Horticultural Work in Railways/Metros/Airports/Bus Depots/Office Premises/Shopping Malls/ Hospitals/ Hotels/ Institutes utilizing similar machinery, chemicals and manpower.

<u>In case of JV/ Consortium-</u> Full value of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in Consortium having different constituents, then the value of work as per their percentage participation in such Consortium shall be considered. This is to be substantiated with documentary evidence.

c. The Bidder should have minimum Average Annual Turnover from similar work of **Rs.63** lakh (Rupees sixty three lakh only) in the last 3 (three) Financial Years (2015-2016, 2016-17, 2017-18) preceding the Bid Due Date.

<u>In case of JV/ Consortium</u> - The averages annual turnover of JV will be based on percentage participation of each member.

Example: Let member1 has percentage participation = M and Member 2 has percentage = N, Let the averages annual turnover of member 1 is A and that of member 2 is B, then average annual turnover of JV will be = (AM+BN/100)

d. The Bidder should not have been blacklisted/ banned/ declared ineligible for corrupt and fraudulent practices by the Government of India/ any State Government/ Government Agency and Supreme court and contracts have been terminated/ foreclosed by any company / department due to non- fulfilment of Contractual obligation in last 5 (five) financial years.

In case of JV/ Consortium: All Members should provide the Undertaking

In case of a Bid by a Consortium of firms, following shall be abided by (failing which shall result in the disqualification of the Bidder)-

- i. The Lead Member of the Consortium shall maintain a minimum percentage share of 51% of the aggregate shareholding of the Consortium during full tenure of Agreement.
- ii. Any change in percentage stake of Consortium members without prior written approval of NMRC shall be treated as Material Breach of Contract and Contractor's Event of Default entitling NMRC to encash Security Deposit/Performance Security and /or to terminate the Agreement after 30 days notice.
- iii. Minimum percentage stake of any member in Consortium during contract period shall not be less than 15%.
- iv. Partners having less than 26% participation shall be considered as non-substantial partner and shall not be considered for evaluation which means that their eligibility shall not be considered for evaluation of Consortium.
- v. All members of such entity shall be jointly and severely liable for the due performance of Agreement.

The Bidder shall also furnish the following documentary proof (for all members in case of JV/ Consortium, as per eligibility criteria):

- a. For above criteria 4.1a
- i. Statutory proof of existence as the legal entity
 - ii. PAN certificate as per legal entity
- b. For above criteria 4.1b
 - i. 9.4.Form4: Work Experience with documentary evidence as mentioned in the form
- c. For above criteria 4.1c
 - i. Form 5: Financial Capability Details
 - ii. A copy of the Audited balance sheets and Profit and Loss Statements for the last 3 (three) financial years
 - In case the Financial Statements for the latest financial year are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor/charted accountant shall certify the same. In such a case, the Bidder shall provide the Audited Financial Statements for 2 (two) years preceding the year for which the Audited Financial Statement is not being provided. Also, pertaining to latest financial year, the bidder shall submit an affidavit certifying that "The Annual Accounts have not been audited so far. We are submitting the CA certified provisional accounts, which shall be substantiated by the Audited Accounts, when prepared."
 - iii. Self attested copy of ITR
- d. For above criteria 4.1d
 - i. 9.7.Form 7: Undertaking

4.2. Deleted

4.3. Information of the Technical and Financial Proposal

- a. The financial proposal of only technically qualified Bidders shall be opened for evaluation.
- b. The Bidder satisfying the criteria under Clause 4.1 shall be considered as qualified.
- c. The financial proposal of only qualified Bidders shall be opened for evaluation.
- d. The Bidder with the lowest quoted price for the entire term of 03 years in the financial quote (L1 bidder) shall be selected for the award of contract.

4.4. Selection of Bidder

NMRC shall award the Contract for **Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line** to the Lowest Tendered (L1 bidder), whose tender has been determined to be substantially responsive and compliant to the requirements contained in the Tender Documents.

- a. In case, two or more technically qualified bidders quote the same rate in the Commercial Bid, and become Lowest (i.e. L-1), then the tender would be awarded to the bidder who has the highest / higher Average Annual Turnover from 'Similar Works' (as per Minimum Eligibility Criteria defined in Section 4 under "Definition of Similar Work") during the last 3 years ending on the last day of the month preceding the month in which the tender has been floated. Experience certificate / work completion certificate on client's letter head is mandatory to ascertain the nature, period and value of work which shall be required to be uploaded by the bidder by the last date of tender submission.
- b. Prior to the expiry of the period of bid validity, NMRC will notify the successful bidder in writing, either through Notice of Award (NOA), that his bid has been accepted.
- c. The NOA would be sent in duplicate to the successful bidder, who will return one copy to NMRC duly acknowledged, signed and stamped by the authorized signatory of the bidder, as an unconditional acceptance of the NOA, within 10 (ten)days from the date of issue of NOA.
- d. No correspondence will be entertained by NMRC from the unsuccessful bidders.

4.5. Notice of Award and Execution of Contract Agreement

- a. NMRC will notify the Successful Bidder by a NOA that its bid has been accepted.
- b. The Selected Bidder shall, within 10 (ten) days of the receipt of the NOA, sign and return the duplicate copy of the NOA in acknowledgement thereof along with letter of acceptance of NOA. In the event, the duplicate copy of the NOA duly signed by the Selected Bidder and letter of acceptance of NOA is not received by the stipulated date, NMRC may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as mutually agreed genuine pre-estimated loss and damage suffered by NMRC on account of failure of the Selected Bidder to acknowledge the NOA

- c. The Successful Bidder shall execute the Contract Agreement within 30 (thirty) days of the letter of acceptance of NOA or such extended period as may be decided by the Corporation.
- d. Failure of the Successful Bidder to comply with the requirement of acknowledgement of NOA shall constitute sufficient grounds for the annulment of the NOA, and forfeiture of the bid security.
- e. The Purchaser reserves the right to increase or decrease the quantity up to 25% of the quantity offered by the successful tenderer. The bidder is bound to accept the increase or decrease in the tendered quantity up to 25% under this clause without any change in unit price.
- f. In case the variation in individual items or the group of items as stipulated above, is more than 25% on plus side, the rate for the varied quantity beyond 25% shall be negotiated between the NMRC and the Contractor and mutually agreed rates arrived at before actual execution of the extra quantity. In case the contractor executes the extra quantity without written approval of the NMRC with specific instructions to execute pending the finalization of rates, the payment shall be made at contract rate only. In the event of disagreement, the Engineer shall fix such rates of price as are, in his opinion appropriate and shall notify the Contractor accordingly, with a copy to the Employer. Until such time as rates or prices are agreed or fixed, the Engineer shall determine provisional rates or prices to enable on account payments to the Contractor. Alternatively, in the event of disagreement, the Contractor shall have no claim to execute extra quantities/new items and the Engineer shall be free to get such additional quantities beyond 25% new items executed through any other agency. However, if the Engineer or the Employer so directs the Contractor shall be bound to carry out any such additional quantities beyond the limits stated above original quantities and or new items and the disagreement or the difference regarding rates to be paid for the same shall be settled in the manner laid down under the conditions for the settlement of dispute.

4.6. Performance Bank Guarantee / Security Deposit

- a. To fulfill the requirement of performance bank guarantee during the implementation period, the Successful Bidder (herein referred to as the "Contractor") shall deposit 5% of the Contract Price in form of FDR/ DD or unconditional and irrevocable Bank Guarantee bond issued by a scheduled bank in favor of NMRC valid for 5 years within 30 days from Notice of Award.EMD amount of successful bidder shall be adjusted in the performance bank guarantee, if applicable. For unsuccessful bidder, EMD shall be refunded without any interest. In case of extension of tenure by 6 months, the performance bank guarantee shall be extended by 6 months as well.
- b. In case of joint venture/consortium, the Performance Security is to be submitted in the name of the JV / Consortium. However, splitting of the performance security (while ensuring the security is in the name of JV / Consortium) and its submission by different members of the JV / Consortium for an amount proportionate to their scope of work is also acceptable.
- c. It is to note that if contract value increases by more than 25% of the original contract value, the performance bank guarantee shall be increased accordingly.

- d. A Contract agreement will have to be signed by the Contractor at his cost on proper stamp paper. Without performance guarantee by Contractor, Contract agreement shall not be signed.
- e. NMRC reserves the right for deduction of NMRC dues from Contractor's Performance Bank Guarantee/ Security Deposit (interest free) for Any penalty imposed by NMRC for violation of any terms and conditions of agreement committed by the Contractor.
- f. Any amount which NMRC becomes liable to the Government/Third party due to any default of the Contractor or any of his director/ employees/ representatives/ servant/ agent, etc.
- g. Any payment/ fine made under the order/judgment of any court/consumer forum or law enforcing Contractor or any person duly empowered in his behalf.
- h. Any outstanding payment/ claims of NMRC remained due after completion of relevant actions as per agreement.
- i. Once the amount under above Clause is debited, the Contractor shall replenish the Security Deposit/ Performance Bank Guarantee to the extent the amount is debited within 15 days period, failing which, it shall be treated as Contractor Event of Default and will entitle NMRC to deal with the matter as per the provisions of RFP and Contract Agreement.

4.7. Contract during Proposal Evaluation

- a. Proposals shall be deemed to be under consideration immediately after they are opened and until such time NMRC makes official intimation of award/ rejection to the Bidders. While the Proposals are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain from contacting by any means, NMRC and/ or their employees/ representatives on matters related to the Proposals under consideration till the time Contract is awarded
- b. Any effort by a Bidder to influence NMRC in its decisions on e-Bid evaluation, e-Bid comparison or contract award may result in rejection of the Bidder's e-Bid.
- c. In the event of any information furnished by the agency is found false or fabricated the minimum punishment shall be debarred/ blacklisting and the legal proceeding may also be initiated.
- d. If the Bidder wishes to bring additional information to the notice of NMRC, he/she can do so in writing. All correspondence/ enquiry should be submitted to the following in writing by fax/ post/courier:

GM (Technical)

Noida Metro Rail Corporation (NMRC) Limited

Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,

Noida -201301

District Gautam Budh Nagar, Uttar Pradesh

Email: nmrcnoida@gmail.com

e. No interpretation, revision, or other communication from NMRC regarding this solicitation is valid unless in writing and signed by the competent authority from NMRC.

4.8. Other Instruction

- a. Canvassing in connection with the tenders is strictly prohibited and the tenders, submitted by Bidder, who resort to canvassing, are liable to be rejected. EMD will be forfeited of those tenders who will be found non serious and if it is felt by the tender committee that the Bidders submitted their tender only to influence the tendering process.
- b. On acceptance of the tender, the name of the accredited representative of the Contractor, who would be responsible for taking instructions from the NMRC or the official deputed by NMRC, shall be communicated to the NMRC or the official deputed by NMRC in writing.

4.9. Project Financial Terms

4.9.1.**Tenure of Agreement**

The tenure for **Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line** Contract Agreement shall be for a period of 03 (Three) years from the Commencement Date which has been agreed by the parties.

4.9.2. Schedule of Payment

- a. The payment will be made on a monthly basis as per the accepted rates based on the activities carried out as in the Schedule of work defined in Annexures of tender document.
- b. The value of all work done in accordance with the Contract, and the amount which is finally due, and for the purpose of On-account payment, the contractor shall submit detailed activities carried out as per BOQ recorded in Measurement sheets, Abstract sheets along with recorded bill for the item actually executed for checking and payment. Payment will be effected based on unit rates as approved in the Bill of Quantities.
- c. Joint Payment Procedure Payment shall be made monthly. Attendance of the staff (verifiable record) and details of deployment of machinery and chemicals is maintained at stations on daily basis. Preferably online disbursal of wages of staff/ workers to be done and complied statement to be submitted to NMRC for verification. These records shall be submitted by 25th of each month to enable NMRC to release 75% of due payment for the current month payment may be released by 5th of the next month so that wages shall be paid by 7th of next month by the agency. The detail bills complying all the statutory provisions shall be submitted by 15th of the next month so that balance 25% payment of preceding month shall be released.
- d. No overtime is considered to achieve higher level of safety standards. The tenderer should consider execution of work in shifts as per Employer's Requirement. The agency must ensure timely payment of Salary, PF, ESI etc. and prompt medical facility to sick/injured and to all staff.
- a. The payment of monthly bills will be released only after receipt of documentary evidence towards
 - Payments of agreed wages to the personnel deployed in NMRC through Bank Account
 - ii. Details of EPF and ESI amount deposited for the previous month along with copies of challan and list of workers/ employees for which such EPF, ESI contribution amount has been deposited. (It is to be noted that Separate

Provident Fund Code No./ ECR to be created for personnel deployed at NMRC). Copy of bill period month's contract specific EPF Challan, ECR and ESI Challan.

- iii. Copy of bill period month's contract specific GST Challan /confirmation
- iv. Necessary undertakings /annexure(s).
- v. Any other document demanded by NMRC.
- b. A requisite portion of the bill or whole of the bill amount shall be held up till such proofs are not furnished, at the discretion of the NMRC
- c. The payment shall be done after deducting direct/indirect tax and labour cess etc. as applicable.
- d. No amount of interest will be payable by NMRC, in case of delay or on any other count.
- e. Necessary certificate of deduction of Income Tax at source shall be issued and furnished to the Contractor.
- f. Any type of statutory taxes applicable on services under this tender (either in force at present or made applicable in future by a competent order/notification) will be borne by the Contractor and the Corporation would make no extra payment on this account.
- g. No advance payment will be made to the Contractor.

4.9.3. Payment Terms

The Contractor shall preferably be made the payment of the Contract fee and other dues to NMRC by E-Mode i.e. RTGS/NEFT for credit of the designated account of the Contractor.

- a. Payment for manpower shall be made by NMRC in (INR) Indian Rupees against the documents as mentioned in Clause above.
- b. The Rates, Per 9 Hours Shift with 1 hour of break Per Day, accepted by NMRC shall remain fixed/firm through-out the contract period without any variation/escalation, except on account of revision in Minimum Wages as notified by UP Government, and will be applicable uniformly for all working days including Weekdays, Weekends, Gazette Holidays, National Holidays, Festivals etc.
- c. For the purpose of On-account payment, the Contractor shall submit detailed duty hours shifts actually carried out at stations/other locations as per NMRC prescribed format for checking and payment, as required. Payment will be effected based on unit rates as approved in the Bill of Quantities.
- d. The contractor shall be required to make a written request, on their company's letter head, for release of 75% of the billing amount corresponding to the services rendered as communicated by concerned office of NMRC. The contractor shall be required to submit the same to concerned office of NMRC within two working days from the date of intimation by concerned office of NMRC about the shifts manned by the contractor. No other document is required to be submitted by the contractor with this request.
- e. In case the contractor fails to submit the completed bill of a particular billing period for which 75% running account payments has been made then running account payment for the subsequent month's services rendered will be reduced to 50% only.

- f. The payment shall be made on a monthly basis for numbers of days /Shifts worked in a month. Payment shall be made only as per attendance recorded in registers in all circumstances. At the end of the month, the contractor shall submit necessary documents & Bill in the standard format for payment.
- g. If the contractor fails to submit the completed bills of a particular month even after lapse of 2 subsequent months then necessary action for termination of the contract shall be initiated.

5.Section5: Special Conditions of Contract

Special Conditions of Contract (SCC)

	Special Conditions of Contract (SCC)		
S. No.	Reference to GCC Sub Clause No.	Description	
1	Sub-Clause 3.2	Functions of Engineer	
		In addition to the duties mentioned in Clause 3.2 of General Conditions of Contract:	
		(i) Shall watch and inspect the Works, monitor and examine any material to be used and workmanship employed by the Contractor in connection with the Works;	
		(ii) Shall carry out such duties and exercise such powers vested in the Engineer in accordance with the provisions of the Contract;	
		(iii) Shall issue instructions which in his opinion are necessary for the execution of the Works; and	
		(iv) May issue any other instruction which in his opinion is desirable in connection with the Works.	
		In case The Engineer is employee of any agency hired by the Employer, the Engineer shall take the approval of the Employer for all technical and financial matters otherwise he shall be deemed to have taken the approval of the Employer.	
2	Sub-Clause 4.2.1	PERFORMANCE SECURITY	
		The amount of Performance Security for this contract will be 5% of contract value instead of 10% stipulated in the GCC. If the contract value increases by more than 25% of the original contract value, the Performance Security will be increased accordingly for complete revised value on every increase.	
3	Sub-Clause 4.4	Coordination with other Contractors The contractor for this package shall plan and execute work in coordination and in co-operation with other contractors working for adjacent/other packages	
4	Sub-clause 4.5	Sub-contractors The work should not be sublet without the written approval of Engineer-in-Charge.	
5	Sub-Clause 4.10	Sufficiency of Tender The Tenderer shall be entirely responsible for sufficiency of rates quoted by him in his tender.	
		The Contractor (Successful Tenderer) shall be paid for only at quoted/accepted rates for the items of works executed as per BOQ.	
6	Sub-Clause 4.11	Access Route All operations for the execution of the Works shall be carried out so as not to interfere unnecessarily with the convenience of the public or the access to public or private roads or footpaths or properties owned by the Employer or by any other person.	
		The Contractor shall select routes, choose and use vehicles so that movement of Contractor's Equipment, Plant and Materials from and to the Site is limited so that traffic is not delayed and damage to highways and bridges is prevented. If there is any delay or damage or injury, the	

		cost of rectification or reconstruction of highways or bridges shall be borne by the Contractor. The Contractor shall indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters
7	Sub-Clauses 4.16 and 6.7	Safety Precautions The Contractor is required to make himself aware of all the requirements of the Employer's Safety, Health and Environmental Manual in this regard and comply with them. The Site Safety Plan shall include detailed policies, procedures and regulations which, when implemented, will ensure compliance with Sub-Clauses 4.16 and 6.7 of General Conditions of Contract.
		The Contractor shall, from time to time and as necessary or required by the Engineer, produce supplements to the Site Safety Plan such that it is at all times a detailed, comprehensive and contemporaneous statement by the Contractor of his site safety and industrial health obligations, responsibilities, policies and procedures (under the laws of India) or as stated in the Contract or elsewhere relating to work on Site If at any time the Site Safety Plan is, in the opinion of the Engineer, insufficient or requires revision or modification to ensure the security of the Works and the safety of all workmen upon, and visitors to the Site, the Engineer may instruct the Contractor to revise the Site Safety Plan. The Contractor shall, within 14 days, submit the revised plan to the Engineer for review.
8	Sub-Clause 4.18	Electricity and Water
		Electricity and water shall be provided by NMRC at one point.
		a) The contractor shall make his own arrangements to tap the
		Electricity from the nominated and existing sockets/ points.
		The contractor shall tap the Electricity as per IE Rules & IE Act (Latest) duly complying all safety precautions.
		b) The Contractor should make his own arrangements to draw
		the water from the available water point to the working place
		without affecting the premises
9		Employer Supplied Machinery and Materials
	Sub-Clause 4.19	The Employer will not provide any machinery or materials under
		the Contract.
10	Sub Clause 4.27	Security of the Site
		The Contractor shall take all measures necessary to ensure such
		security, including exercising control over all persons and
		vehicles which are employed or engaged on the Site or in connection with the Works or the other works comprising the
		Project and with the security arrangements applicable to any
		other site within the Project.
		The Contractor shall arrange the issue of passes for the
		admission of all persons and vehicles to the Site or to any part
		thereof and may refuse admission to or remove from the Site any person or vehicle failing to show an appropriate pass on demand
		to any duly authorized person.
11	Sub Clause 5.3	Manufacture, Installation and Construction Methods
		The Contractor shall submit complete documents and information pertaining to the methods of manufacture, installation and construction of framing work which the Contractor proposes to adopt or use, (and if applicable such calculations of stresses, strains and deflections and the like that will or may arise in the Works or to the other works comprising the Project or any parts thereof during installation from the use of such methods). The Engineer will then check to see whether, if
	<u> </u>	1 400 or such mothous. The Engineer will then oneon to see whether, if

such methods are adhered to, the Works can be executed in accordance with the Contract and without detriment to the Works (when completed) and to other works comprising the Project and in a manner which minimizes disruption to road and pedestrian traffic.

The Engineer shall inform the Contractor in writing within 21 days after receipt of the above information;

- (a) that the Contractor's proposed methods of manufacture, installation and construction of framing work have the consent of the Engineer; or
- (b) in what respects, in the opinion of the Engineer the Contractor's proposed methods of manufacture, installation and construction of framing work:
- (i) fail to comply with the Employer's Requirements and/or the Definitive Design and/or the Final Design;
- (ii) would be detrimental to the Works and/or to the other works comprising the Project;
- (iii) do not comply with the other requirements of the Contract;
- (c) as to the further documents or information which are required to enable the Engineer to properly assess the proposed methods of manufacture, installation and construction of framing work.

In the event that the Engineer does not give his consent, the Contractor shall take such steps or make such changes in the said methods or supply such further documents or information as may be necessary to meet the Engineer's requirements and to obtain his consent. The Contractor shall not change the methods of manufacture, installation and construction of framing work which have received the Engineer's consent without further review and consent in writing of the Engineer.

Notwithstanding the foregoing provisions of this Clause, or that certain of the Contractor's proposed methods of manufacture, installation and construction of framing work may be the subject of the consent of the Engineer, the Contractor shall not be relieved of any liability or obligation under the Contract.

12 Sub-Clause 6.4

Labour Laws and NMRC Labour Welfare Fund

10.1 The Contractor shall, if required by the Employer, deliver to the Engineer or to his office; a return in detail, in such form and at such intervals as the Employer may prescribe, showing the number of labour employed in different categories by the Contractor for the entire work.

The contractor must ensure compliance of all the labour laws including obtaining labour licence and registration of workers with BOCW Board.

10.2 In case of death of staff, the agency is required to deposit ₹1,00,000/- in NMRC Labour welfare fund to enable NMRC to release ₹2,00,000/- for heir apparent as immediate relief to his dependent. Subsequently agency should facilitate compensation on priority. Violation of these basic provisions shall attract a penalty of 5% of contract value and repeated violations shall lead to termination of contract.

13	Sub-Clause 6.6	Housing Facilities	
		The Contractor shall have to make his own arrangements for	
		housing facilities for his staff.	
14	Sub-Clause 6.7	Health and Safety	
		Contractors are required to have tie-up with well equipped	
		reputed hospitals having facilities of MRI, CT Scan , Ultrasound,	
		Blood Bank, specialist Doctors like neurosurgeon, orthopedic as	
		mandatory requirement and fire station located in the	
		neighbourhood for attending to the casualties promptly and	
		emergency vehicle kept on standby duty during the working	
		hours for the purpose.	
15	Sub Clause 10.1	Defect liability period	
		The Defect liability period (DLP) shall be 12 months from the	
		date of issue of the latest Taking over Certificate for the whole of	
40	0	the works.	
16	Sub-Clause 11.0	Contract Price & Payment	
16.1	Sub-Clause	Duties, Taxes Octroi, Royalty etc.	
10.1	11.1.1	The contract price, subject to any adjustment thereto in	
	11.1.1	accordance with contract conditions shall be inclusive of all taxes	
		like Value Added tax (VAT), paid under Delhi VAT act 2005 or	
		Value Added Tax (VAT) paid under other state Govt. VAT Act(s),	
		duties, levies, royalties Service Tax etc. or any tax in	
16.2	Sub-Clause	replacement of such taxes like GST.	
	11.1.4		
		Change in Taxes Duty	
		"Change in Taxes/Duties/Levies" means the occurrence or	
		coming into force of the following, at any time after the date of	
		submission of tender.	
		(a) any new tax which is imposed after the due date of	
		submission of tender	
		(b) change in the rate of any existing tax.	
		The Contract Price shall not be adjusted due to any of the	
		above two conditions and its impact shall be considered	
		covered in the price indices of various components and thus	
		compensated in Price Variation Clause. Also, the Contract	
		price shall not be adjusted on account of fluctuations in the	
		rates of exchange between the foreign currencies of the	
		Contract and Indian Rupees from the last date of submission	
		of tender.	
		In case where price variation is not allowed under clause 22	
		of SCC, the contract price shall not be adjusted due to any of	
		the above two conditions and its cost shall be deemed	
47	Cub alares	included in the quoted contract price.	
17	Sub clause 11.1.3	Price Variation This is a fixed price contract and no Price Variation is admissible	
	11.1.3	This is a fixed price contract and no Price Variation is admissible in this contract.	
18	Sub-Clause 11.2	Advance	
		No Advance is admissible in this contract.	
19	Sub-Clause 11.6	Payment	
		For the purpose of On-account payment, the contractor shall	
		submit detailed activities carried out as per BOQ recorded in	
		Measurement sheets, Abstract sheets along with recorded bill for	
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		the item actually executed for checking and payment. Payment will be effected based on unit rates as approved in the Bill of Quantities. The payment shall be made on a monthly basis for the activities carried out as per the work orders in a month. At the end of the month, the contractor shall submit necessary documents & Bill in the standard format for payment.
20	Sub-Clause 15.0	Insurance 18.1 All of the contractor's employees drawing monthly wages up to Rs.15,000/- or as applicable as per the enhanced limit, shall have to be covered under ESI. The Contractor shall take insurance policy as specified in the Employee's Compensation Act only for those employees who are not covered by ESI.
		18.2 The contractor shall insure against liability to third parties in the joint name of the Employer and the contractor for any loss, damage, death or injury which may occur to any physical property (except things insured otherwise) or any person (except person insured by employer, staff of other contractor working in the premises, contractor's staff under sub clause 18.1) which may arise out of the performance of the contract. The insurance shall be at least for the amount of ₹7,50,000/- for each incident.
		18.3 Insurance cover for Contractor's All Risk shall be full value of Contract price.
21	Sub-Clause 18.1	Notices and Instructions The Contractor shall furnish to the Employer/Engineer the postal address of his office at Delhi/ New Delhi. Any notice or instructions to be given to the Contractor under the terms of the contract shall be deemed to have been served on him if it has been delivered to his authorized agent or representative at site or if it has been sent by registered post to the office, or to the address of the firm last furnished by the Contractor. The Contractor shall establish an office in the National Capital
		Territory of Delhi in consultation with the in charge for planning, co-ordination and monitoring the progress of the Work and intimate the same in writing to in charge. In addition, the Contractor may set up field offices at convenient and approved locations for co-ordination and for monitoring the progress of fieldwork at his own cost.

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6.Section6: Technical Specifications

TECHINICAL SPECIFICATION & CONDITIONS FOR Development and Maintenance of Horticultural Work.
(INCLUDING ALL FEATURES)

1. GENERAL

1.1 The technical specifications and conditions of **Development and Maintenance of Horticultural Work** should be read in conjunction with other conditions of contract.

2. SCOPE OF WORK

- 2.1 The scope of the contract covers all **Development and Maintenance of Horticultural Work** in respect of existing features as detailed under Para 3 below, which includes lawns, ground covers, rockeries, flower beds, creepers & climbers, shrubs, topiary works, ornamental and flowering trees, fruit trees, planters at all levels of the building, indoor plants and other pot plants, nursery and all self-grown trees within the campus, if required to be retained.
- 2.2 This also includes cutting and removal of all rank vegetation and wild bushes within the right of way on both sides of the roads and in specified planted areas at least twice in a year and when directed by the Engineer- in-charge as per requirement.
- 2.3 The Engineer-in-charge has the right to carry out further Landscape development in these areas and minor extensions will be included in the scope of work but major projects will be dealt with separately.
- 2.4 All garden area including plantation areas are to be kept neat & tidy throughout the period of contract.

3. AREA & LOCATION OF WORK

- 3.1 The entire garden area which falls under this scope of work including maintenance of Nursery within the campus
- 3.2 Detail of garden areas & other features: the detail of various garden features & area is as Annexure-I. These are approximate areas for guidance only and the tenderers should ascertain the correctness of the details at site before submitting the tenders.

4. PERIOD OF CONTRACT

4.1 Work as per LOA and BOQ items or as directed by Engineer-in-charge shall be completed within the stipulated period and maintenance period of new plants will be 12 months for the survived plants and 15 months for replaced plants (on casualty) from the date of actual completion of work.

5. **GENERAL SUPERVISION**

5.1 The maintenance will be carried out under the general supervision of the Engineer- in –charge or his representative.

- 5.2 The areas will be regularly or/ and surprisingly without any notice by the authorized staff of the department to check the work and maintenance, material used and for general supervision. In any case, contractor staff shall be at site.
- 5.3 The instructions of departmental staff are to be carried out promptly. In case of difference of opinion/ interpretation of specifications and conditions, the matter is to be referred by the contractor to the Engineer- in charge for his decision, which shall be final and binding.

6. CONTRACTOR'S SUPERVISION

6.1 The contractor must engage one full time supervisor and one qualified technical staff, who preferably should be an experienced horticulturist.

OR

- 6.2 Retired (Garden Supervisor) from C.P.W.D, M.C.D, N.D.M.C, D.D.A or other Government Department, undertaking or Firms of repute with good physique & health, with sound knowledge of the subject and he should be literate enough to maintain the required records.
- 6.3 The Supervisor should be provided with any kind of vehicle to ensure efficient supervision & mobile phone etc. for speedy communication & better liaison/ contact.
- The contractor must submit with the tender documents, the Bio-data of the supervisor with the copies of certificate and testimonials and Driving license. Suitability of supervisor will be decided by the Engineer–in–charge in consultation with the contractor but the decision of the Engineer- in- charge shall be final and binding.
- 6.5 The staff engaged by the contractor shall not be substituted except for sickness/ approved leave or otherwise found unfit for the job.
- 6.6 Minimum one supervisor to be engaged for 10 nos. of staff. He must possess the qualification as mentioned in Para 6.1 & 6.2 above.
- 6.7 In case the staff is to be changed by the contractor for any reason, he must obtain prior approval of the Engineer- in- charge and submit the documents that the substitute has the required qualification & capabilities.

7. CONTRACTOR'S MANPOWER AND MANAGEMENT

- 7.1 The contractor must engage gardeners and other staff of agriculture/ landscape background with adequate experience, and not construction labour for landscape& maintenance works.
- 7.2 The numbers of field staff for different garden features and operation is specified as per approved yardstick of Government of India or is based on actual requirement as experienced where yardstick is not prescribed. The contractor should examine this strength and in case of disagreement on field staff strength, he should make submission with valid reasons well before the submission of tender documents or along with the tenders for consideration of the Engineer- in- charge whose decision shall be final.
- 7.3 Contractor shall have to engage the minimum agreed staff all the time. Due to exigencies or otherwise, if some additional staff is required to be deployed no additional payments will be made to the contractor if work are to be carried out within the maintained area and within the scope of work.

- 7.4 The contractor shall maintain attendance and other records of the manpower engaged by him required under the rules and must observe all the formalities required under the labour act and required by the law of land.
- 7.5 The normal working hours will be 8 hours a day from 9.00 hrs. to 18.00 hrs. with 1 hour lunch break from 13.00 hrs. to 14.00 hrs. subject to staggering of duty hours as per actual requirements.
- 7.6 During Sunday & other holidays, the contractor must deploy essential staff to ensure minimal maintenance, particularly for watering of pots and maintenance of nursery.
- 7.7 In case of exigency, contractor shall deploy the required number of staff beyond normal duty hours if directed so to carry out the works within the scope of agreement.

8. MINIMUM REQUIREMENT FOR 15000 SQM AREA OR PART THEREOF:

- 8.1 **Manpower:** Supervisor: 1 No. Skilled Gardeners: 4 No., Gardeners: 6 No. Supervisor will have on-ground experience of about 5-7 years in the field of horticulture maintenance. Skilled gardeners will have more than 10 years of experience in garden and machine maintenance at site
- 8.2 **Machinery:** Electric lawn mower 18" with electrical cable: 1 No., Manual lawn mower 16" with roller: 1 No., Chain saw heavy duty: 1 No., Brush Cutter heavy duty: 2 No., Hedge Trimmer: 1 No.
- 8.3 **Fertilizer & Chemicals:** All organic & inorganic manures, fertilizers, weedicides, pesticides, insecticides, termiticides etc. will be supplied as per season and infestation at site. Some of them are well decomposed farm yard manure, urea, Diammonium phosphate, malathion, bavistin, cypermethrin, chropyriphos and many more.
- 8.4 **Mortality replacement**: Any mortality noticed during maintenance because of poor maintenance will be replaced. All the horticultural practices required for plantation of new plants will be strictly followed.
- 8.5 **Garden Tools**: Required tools and tackles, irrigation pipes, wheel barrow, hedge shears, hedge trimmers etc. will be supplied and maintained at site.
- 8.6 **Consultancy:** 1 weekly visit by experienced horticulturist.
- 8.7 **Watering:** Source of water may be provided by the department within or nearby working area if available. Necessary arrangements for further piping, sprinkling or drip irregation will be arranged by the maintenance agency at own cost.

9. Horticulture works (Execution / Development)

- 9.1 Horticulture work shall be started on ground previously leveled & dressed to required formation levels & slopes.
- 9.2 All superfluous building construction rubbish/ malba, shall be removed by the construction contractor up to the original ground level and any foundations, macadam road, bajri path, dumped malba shall also be removed by the civil contractor & ground should be made good to required formation levels and handed over to the landscape contractor for commencing the works.

9.3 The horticulture works shall be carried out as per BOQ items along with relevant specifications, wherever stipulated and as per CPWD specifications, if not mentioned otherwise, with up to date correction slips and instructions/ guidelines issued by the NMRC time to time.

10Material

10.1 Good earth

The soil shall be suitable for gardening, free from kankar, moorum, shingle, rocks, stones, bricks-bats, building rubbish and any other foreign matter. The earth shall be free from clods or lumps & broken to fine particles. It shall have pH value between 6 to 8.5. The contractor shall get pH value tested at his cost from any recognized laboratory, one sample for every 300 cum or part there of ignoring less than 85 cum.

10.2 Farm yard manure/ Sludge manure

It shall be well decayed, free from grits, saw dust, saving, refuse and any other harmful chemicals, straw leaves or inorganic debris, free of weeds & any unwanted materials of size more than 25mm (one inch or as specified). Finely broken manure should be spread over the ground & mixed in upper layer of the soil or mixed properly in the pits.

10.3 Oil cake

Neem oil cake shall be free from any adulteration & other foreign materials, preferably in cake/ pellet form to minimize the chances of adulteration. Fertilizers shall be in company sealed bags.

11. Plants & plantation

- 11.1 It shall include cost of plants; transportation to site and their maintenance at site prior to actual plantation and any damage to the plants before or after planting shall be responsibility of the contractor.
- 11.2 Plants shall be healthy, vigorous, robust, free from diseases & pest and as per specifications with required shape and size.
- 11.3 Plants shall not be recently transplanted in bags/ containers and root bound also, but should have normal growth habit, developed branches, densely foliage with vigorous and fibrous root system.
- 11.4 Plants shall be well established in containers & properly labeled indicating Botanical name, variety etc, free from defects & injuries; bark shall be free from abrasion.
- 11.5 The plants on arrival at site shall be kept under proper shade & shelter & watered at least for 3-4 days prior to direct/ actual planting.
- 11.6 In case of non-availability of certain plant material, it may be substituted with the prior approval of the engineer in charge, with equitable adjustment of price.
- 11.7 Engineer in charge, reserves the right to inspect the plant in the field or nursery i.e. source of supply or may ask to bring the plant as sample at site of work, before commencing the actual supply.

- 11.8 Shrubs shall be well formed with a crown typical of the species and variety. Shrubs height dimension, shall be the average height of the top of all stems and not of the longest stem.
- 11.9 The plants material shall be acclimatized to Delhi/NCR Agro climate conditions and Engineer reserves the right to inspect plants at source of availability for approval.
- 11.10 All the tree pits shall be dug as per the landscape-planting plan with the given spacing as per C.P.W.D. specification. Horticulture operations shall be started on ground previously leveled and dressed to required formation levels and shape.
- 11.11 All trees and other plants soon after planting shall be copiously watered & properly staked, supported to ensure their safety against wind or other factors, which may affect treated at base with a non-toxic wood preservative. Preferably PVC stakes should be used. The height of stake shall be in accordance to the height of plant, to hold the plant strongly and properly, in case, multi stakes are required to hold the tree, it shall be provided, depending on size and age of the tree. This shall continue during the maintenance also, till plants are self-stand. The stake or stakes should be tied with any kind of tie, which should be strong and rigid enough to hold the tree stem in all probable weather conditions. It should be approximately dimensioned to allow the tree stem to grow naturally without damage. No material should be used as ties that may rub back the stem.
- 11.12 Planting shall be done by experienced workmen familiar with planting procedures, under the supervision of an experienced / qualified supervisor.
- 11.13 Existing vegetation that is mentioned to be retained or as per direction should be protected from damage and maintained in good and effective conditions.

12. Maintenance

12.1 General Maintenance

The maintenance shall include watering, fertilizing, plant protection from pests & diseases, sweeping & disposal of garden refuse, weeding & cultivation, periodical cutting & removal of wild growth from planting areas, painting of wooden poles, trees guards and stakes etc. and all other necessary landscape operations for the growth of garden features and presenting a high standard of maintenance throughout the period of contract. This includes any other procedure, cultural operation and practices, consistent with good horticultural practice, necessary to ensure normal, vigorous and healthy growth of all planted areas.

12.2 Supervision

The development or/ and maintenance work shall be carried out under the overall supervision of Engineer- in- charge or his designated representative on behalf of NMRC.

12.3 Contractor's Supervision & Manpower

The contractor must engage a qualified and experienced supervisor for the supervision of these works that should be familiar with the landscape operations in this region.

The other field staff must have adequate experience. The contractor must submit full details of the staff in respect of their numbers, qualifications and experience along with acceptance letter. The contractor must engage minimum number of gardeners & other staff throughout the year of agricultural background experience & not construction labour. He shall engage labour more than the specified at his cost, if his manpower does not give required & desired output.

Contractor shall arrange all T&P, machinery equipment (including water tankers) required for execution & maintenance purposes.

Contractor staff shall wear the Personal Protection Equipments as approved by the Engineer-in-charge.

12.4 Irrigation

Watering of all plants shall be done as per schedule. In case NMRC arrange source of water within the vicinity of plantation area, cost of water lines and spraying system will be borne by the contractor. Washing / spraying of trees, shrubs and other plants regularly but at least once a month should also be done to remove dust and improve their capacity for photosynthesis.

Watering is to be done according to weather and stage of growth of plant. All new planting should be thoroughly watered before and after planting to bring the soil to optimum moisture content.

Watering shall not be carried out in strong daylight. It should be done early in the morning or late in the evening. Excessive watering is damaging to plants, therefore should not be over watering. Watering should be done with a hose fixed with sprinkler or sprayer. Very hot or very cold water shall not be used for watering. During effective rainfall, watering shall be discontinued but shall be promptly resumed when so directed or required.

The contractor must ensure that unnecessary wastage of water does not occur at any time and must protect the irrigation fittings etc. from any damage due to mishandling or digging in the garden area. Any damage to existing irrigation system shall be made good by the contractor at his cost.

Initial installation of irrigation system including bore well/ tube well/ STP treated water lines etc. may be done as specified in special conditions of contract. The maintenance of irrigation system will be done by the contractor at his own cost. If proper irrigation system is not possible as envisaged above, in that case, water for irrigation shall be imported for which contractor should quote in the rates or separately by inspection of site before tendering.

The contractor shall make his own arrangement at his risk and cost for source of water, cost of water, water tankers / tractor trolley fitted with water tankers of appropriate quantities fitted with arrangements for proper watering including obtaining permission etc. from any Govt. Authority, if required, however, recommendatory letter may be given by NMRC.

OR

Keeping in view restrictions by Jal Board, other civic bodies etc, regarding use of water / sale of water for irrigation and other purposes, NMRC shall provide the water from nearby source and contractor shall arrange water tankers, tractor trolley fitted with water tankers of appropriate quantities, fitted with arrangements for proper

watering including obtaining permission etc from any authority if required, however, recommendatory letter may be issued by the NMRC.

12.5 Minimum Watering Frequency

Minimum Quantity of water and Frequency will be decided as per requirement of garden and recommendation of horticulturist

However, to maintain the plants green, healthy and to achieve the proper growth throughout the year, irrigation dose and frequency shall be increased as per requirement and directions for which nothing shall be paid extra, other than quoted/ accepted rates.

12.6 Manure and Fertilization

Manures and fertilizers specified by horticulturist shall be applied under the direction of Engineer in charge. However, time schedule and quantities are subject to change in planting schemes and other landscape operations, ago-climatic conditions etc. Only well decayed and fully decomposed organic manure shall be used. Quantity of organic manure and their frequency of application would depend on type of soil, however regular manuring in small doses should be done instead of causal heavy manuring. Raw manure should not come in direct contact with plant. For inorganic fertilizer application specialist's advice, should be taken before application. This would depend considerations sought such as size, age, condition and species of tree, soil type, pH and nutrient state of soil.

12.7 Plant Protection

Preventive plant protection measures are necessary therefore; preventive mechanical or/and chemical plant protection measures should be sought by the contractor to avoid harboring and infestation of pests and disease, which will minimize the attack occurrence of pest, and diseases.

Periodic / frequent and regular checks to be carried out for pests and diseases and in the event of infestation, prompt spraying of appropriate pesticide/fungicide etc. should be done in accordance with the manufacturer's instructions or as per the direction.

12.8 Sweeping

The following daily operations are envisaged:

Light garden sweeping, removal and disposal of garden refuse and cut grass to a dumping place approved by the Engineer- in- charge. No grass/ refuse to be left over night in the garden area.

12.9 **Pruning**

Upon completion of planting work all trees, which require pruning should be pruned and injuries repaired.

Quantum of pruning shall be limited to the minimum necessary to remove dead or injured twigs and branches and to compensate for the loss of roots as result of transplanting operations.

Pruning should be done so as not to change the nature habit or special shape of the tree. However, cutting of hedges, edges, in designing and training, shaping standard as topiary, shall be done as per direction.

Wounds should be smoothed so as not to retain water. The cuts should be treated to prevent growth of fungus.

Engineer-in-charge should be consulted to understand the ideal time for pruning of different species and behavior of growth of plants.

Clipping and training if hedges, edges and trimming of shrubs plants, trees, creepers and bougainvillea will be at regular intervals including Staking of plants whenever required.

12.10 Cultivation

Regular weeding, making basins of trees pits and hoeing will be done.

12.11 Weeding

Weeds shall be removed with their roots and dumped away from planted areas. In some seasons, more weeding will be necessary and weeding should be continued until areas are weed free.

Only selective weed killers approved by competent authority shall be applied if desirable. The contractor shall be held liable for ensuring that all chemicals are stored and supplied strictly in accordance with the manufacturers instruction and any damage/injury caused to plant material due to use of incorrect dose or negligence.

12.12 Hoeing or Forking

Surface soil around the plants shall be loosened up to 150 mm and turned inside out, so as to keep it porous and improve moisture retention capacity.

12.13 Material at Site

The contractor must ensure that all garden machinery/ tools/ hosepipes etc. are removed from the site or kept in hidden places to avoid public view during off hours.

13 GENERAL MAINTENANCE

The maintenance shall include watering, fertilizing, plant protection from pests & diseases, moving & up keep of lawns, sweeping & disposal of garden refuse, weeding & cultivation, cutting of edges, pruning & clipping of hedges, Topiary work & pruning standards, top dressing, raking, preparation & planting of seasonal flowers, biennials, perennials, periodical cutting & removal of wild growth from planting areas, minor repair works, annual or as per requirement, painting of steel frames, G.I pipes, wooden poles, trees guards and stakes etc. and all other necessary landscape operations for the growth of garden features and presenting a high standard of maintenance throughout the maintenance period of contract. This includes any other procedure, cultural operation and practices, consistent with good horticultural practice, necessary to ensure normal, vigorous and healthy growth of all planted areas. This also includes maintenance of plants material displayed in containers. The general maintenance includes but not limited to the works specified in the following paragraphs.

14. LAWN MOWING AND SWEEPING

14.1 Lawn should be mowed at regular intervals and grass should not be allowed to over grow under any circumstances. The frequency of lawn mowing in the following order is to be observed except in case of unavoidable circumstances. Trimming of grass, hedge & mowing margins with the help of garden sword/ hedge sheer/ edge sheer/ Khurpa etc. should be done immediately after mowing.

14.2 Mowing once in 10 days July, August, September.

Mowing once in 15 days October, November, February, March, April,

May & June

Mowing once in a month December, January

14.3 The following daily operation is envisaged; daily clearing of litter by light garden sweeping is must.

- 14.4 Removal and disposal of all garden refuse, dry branches etc. and machine cut grass to an appropriate dumping area as specified by the departmental staff.
- 14.5 No grass/ refuse is to be left overnight in the garden area or near the garden or in nearby storm water drains.

15 PRUNING AND TRAINING

- 15.1 Clipping & training of hedges, edges and trimming of shrubs, trees, creepers, bougainvillea and other standard at regular intervals is to be done.
- 15.2 Stacking of plants wherever required and stakes & supports will be adjusted from time to time. This also requires replacement of damaged tree belts/ tree ties by the contractor. The contractor shall arrange small stakes or bamboo sticks. However, stakes of G.I. pipes & topiary frames, tree guards, if required shall be supplied by the department.
- 15.3 Pruning, cutting & clipping, deadwoods, water sprouts suckers shall be removed, hedges and other standard required to achieve formal and geometric shape shall be so clipped.
- 15.4 Regular cutting back of certain types of plants to encourage bushiness. Pruning is to done in such a manner as not too much change their natural habit and normal shape.
- 15.5 Standards should be so trained so that they present a uniform shape.

16. CULTIVATION & WEEDING

Regular weeding of lawn, ground covers and flowers beds, making basins of trees and shrubs pits and hoeing is to be done. The garden is to keep free from weeds or alien plants. This operation must be carried out at frequent intervals throughout the year to kept the garden neat and tidy all the year around.

16. SEASONAL FLOWERS AND PLANT MATERIAL

16.1 The flowerbeds are to be maintained by planting winter & summer seasonal flowers. This includes preparation of flowers beds, submission of planting schemes at least three months in advance of planting indicating the varieties/ colours planting beds and proper care. The contractor must raise the seedlings in nursery as far as

possible. The contractor will prepare the planting schemes for full year. The minimum number of seedlings to be planted per sqm is 12- 25 nos. approximately. Any damage to the seedlings/ flowers will be made good by the contractor. In case the department is to plant/ supply seedlings or flowers pots when the contractor fails to comply with instructions promptly or is otherwise unable, the necessary recovery shall be made from the contractor, double the rate at which such seedlings or plants are procured.

16.2 The cost of seedlings if procured in containers to recoup the last time, delayed by the contractor's negligence or fault, shall be borne by the contractor itself.

OR

Seeds & seedlings shall be supplied by the department, planting and other care maintenance should be done by the contractor. However, any loss, damage to the seedlings due to the negligence of the contractor shall be made good by him.

- 16.3 The flowerbeds should be thoroughly dug and prepared at least 3 to 4 weeks before actual plantation.
- 16.4 Time schedule for planting seasonal flowers:

<u>WINTER SEASON: -</u> Planting shall be started in first week of October except in August for very early flowers and must be completed by first week of November for late varieties.

<u>SUMMER SEASON & RAINY SEASON: -</u> As per directions and availability of water etc., the above planting schedule is tentative, may vary as per directions of the departmental staff.

- 16.5 Gladiola& other bulbs, Dahlia cuttings, Chrysanthemum cuttings, if to be planted shall be arranged by the contractor.
- 16.6 Any addition, alteration, replacement to existing plant material due to change in planting schemes, landscape designs etc. shall be done by the contractor.

17. MATERIAL AT SITE & STORES

- 17.1 The department will provide a suitable place to store garden machinery, tools, chemicals etc. preferably within the vicinity of plantation area. The contractor must ensure that all garden machinery/ tools/ hosepipes etc. are removed from the site during off hours.
- 17.2 Any lose and damage to the machinery by any reason including theft etc. shall be the responsibility of the contractor.

18. REPAIR AND REPLACEMENTS

18.1 The contractor shall carry out all repairs to garden features damaged due to digging in the area, negligent handling by the staff, excessive erosion caused by watering/ rains and all replacements of plants that die during the period of maintenance or those that are un-healthy, unsightly or of impaired condition, to be made as soon as practicable after damage is evident. Any replacement/ substitution suggested by the department shall be done by the removal of existing plant material etc. making pits for new ones and actual planting. Newly replaced plants in any area should be protected from hot sun and high winds and from frost etc.

18.2 The contractor is required to repaint all steel frames, G.I. Pipes and wooden pots etc. with grass green paint once a year after the rains.

19. PATH, FOUNTAINS ETC.

19.1 The contractor must ensure that the paths, fountains and other hard landscape features in the garden area including electrical fittings and lights etc. are not damaged in any manner while carrying out landscape operations.

OR

Routine cleaning, sweeping, washing etc. of paths, fountains etc. shall be done by the horticulture contractor, however, any additional work and major repair work etc. shall be done by the Department.

19.2 The contractor must take adequate precautions to project the edge of kerbs, paths and no P.O.L. shall spill over the concrete area while operating/ cleaning agricultural machinery.

20. PROTECTION OF GARDEN

- 20.1 The contractor must take adequate precautions and handle the work carefully to protect the various garden features from damage by his staff and also protect the garden features from other agencies and vandalism. Signboards etc. fixed in the garden area must be protected from any damage by the garden staff.
- 20.2 Any agency that wishes to carry out any work involving damage to garden must obtain NOC from Engineer-In-charge. On the presentation of such NOC, the horticulture contractor will allow such agencies to carry out the work and should ensure that the damage caused is made good by that agency as per clause of NOC.
- 20.3 The contractor must report to the department immediately an occurrence of any damage to garden features by accident or other natural calamities.
- 20.4 The damages caused to the garden features by natural calamities, accidents and due to implementing any departmental schemes will be made by the contractor by engaging existing labour for the maintenance work but the plant material required will be borne by the department.

21. RIGHT TO COLLECT PLANT MATERIAL

- 21.1 The right to collect such plant material as required by the department i.e. seeds, fruits, cut flowers, grass stolen, other propagation and multiplication material etc. rest with the department.
- 21.2 The contractor is forbidden to remove, sell or gift any item from the garden area to any person or organization without the prior written permission of the department.

22. CERTIFICATE OF WORK DONE, PAYMENTS & PENALITIES

- 22.1 All payments to the contractor shall be based on the monthly invoice/ bills submitted by the contractor and supported with certificate of work done and verified by the Engineer- In-charge.
- 22.2 In case the contractor fails to carry out the instructions, the cost of work not done will be deducted from the monthly bills of the contractors as proposed by the Engineer

and decide by the Engineer- in- charge, which may be double the cost of actual procurement cost or as decided by the Engineer- in- charge.

23. TOOLS & PLANTS/ AGRICULTURAL MACHINARY

23.1 All the tools & plants/ agricultural machinery required for the proper maintenance of landscape works is to be arranged by the contractor at his cost including Hose pipes, Manual or Bullock driven or Power driven lawn movers, manually or power operated sprayers, hand carts, garden tractors/ tillers, water tankers/ water trolley, trucks or tempos etc but not limited to.

24 Assurance of proper, natural growth:

During the maintenance period, reasonable, natural growth per year and cumulative growth at the termination of contract shall be assured by the contractor, merely, replacement of dead/ damaged tree in between or/ and at the termination of contract, will not suffice. This lapse shall make the contactor liable to pay compensation, as deemed fit by the NMRC.

25 Maintenance of additional plantation to be done in already planted or maintained area:

As per yardstick, maintenance of plantation done within the garden/plantation area is included in the cost of maintenance of garden/plantation itself. Therefore, no maintenance charges shall be paid for the plantation likely to be planted in the garden/plantation area, already under maintenance with some other agency, under different contract and the same shall be for the cost of water and watering. However, in case, cost of water and watering is being paid for imported water separately, it should be paid for new plantation proportionally. The payment shall be made on submission of bill by the contractor verified by the NMRC representative/ Engineer Incharge.

- 25.1 The payment shall be regulated proportionately on pro-rata basis or as per BOQ items in case of any increase or decrease in the area or / and quantity in future.
- 25.2 The horticulture works / planting grassing etc. is done on different dates and likely to take months together to complete the work, however, plant material being living requires maintenance from the day of plantation. To overcome this problem and to regulate payment, inventory / site order book should be maintained in the prescribed Performa and payment should be regulated accordingly.

CONTRACTOR'S LABOUR CAMP

1. EMPLOYER NOT TO PROVIDE QUARTERS FOR CONTRACTOR'S LABOUR

The Employer will not provide living accommodation for the use of the Contractor or any of his staff or labour employed on the Works. Living accommodation shall not be established on any land provided to the contractor by the Employer.

2. PROVISION OF LABOUR CAMP

The Contractor, shall, at his own expense, make adequate arrangements for the housing, supply of drinking water and provision of bathrooms, latrines and urinals, with adequate water supply, for his staff and workmen directly or through sub-contractors employed on the Works at the location authorized by Engineer. No labour camp shall be allowed at work site or any unauthorized place.

The Contractor at his own cost shall maintain all campsites in a clean and sanitary condition. The Contractor shall obey all health and sanitary rules and regulations, and carry out at his cost all health and sanitary measures that may from time to time be prescribed by the Local/Medical Authorities and permit inspection of all health and sanitary arrangements at all times by the Employer, Engineer and the staff of the local municipality or other authorities concerned. Should the Contractor fail to provide adequate health and sanitary arrangements these shall be provided by the Employer and the cost recovered from the Contractor.

The Contractor shall at his own cost, provide First Aid and Medical facilities at the Labour Camp and at work sites on the advice of the Medical Authority in relation to the strength of the Contractor's staff and workmen, employed directly or through subcontractors.

The Contractor shall at his own cost, provide the following minimum requirements for fire precautions:

- Portable Fire Extinguishers.
- Manual Fire Alarms.
- Water Supply for use by the Fire Service.

The Contractor at his own cost shall provide necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers. He should also ensure that electrical installations are done by Trained Electricians. These installations shall be maintained and daily maintenance records must be made available for inspection of the Engineer.

3. CAMP DISCIPLINE

The Contractor shall take requisite precautions, and use his best endeavors to prevent any riotous or unlawful behavior by or amongst his workmen, and others, employed directly or through sub-contractors. These precautions shall be for the preservation of the peace and protection of the inhabitants and security property in the neighborhood of the Works. In the event of the Employer requiring the maintenance of a Special Police Force at or in the vicinity of the site, during the tenure of the work, the expenses thereof

shall be borne by the Contractor and if paid by the Employer, shall be recoverable from the Contractor.

The sale of alcoholic drinks or other intoxicating drugs or beverages upon the work, in any labour camp, or in any of the buildings, encampments or tenements owned or occupied by, or within the control of, the Contractor or any of his employees directly or through sub-contractors employed on the work, shall be forbidden, and the Contractor shall exercise his influence and authority to secure strict compliance with this condition. The Contractor shall also ensure that no labour or employees are permitted to work at the site in an intoxicated state or under the influence of drugs.

The Contractor shall remove from his camp such labour and their families, as refuse protective inoculation and vaccination when called upon to do so by the Engineer on the advice of the Medical Authority. Should Cholera, Plague or any other infectious disease break out, the Contractor shall at his own cost burn the huts, bedding, clothes and other belongings of or used by the infected parties. The Contractor shall promptly erect new huts on healthy sites as required by the Employer, within the time specified by the Employer, failing which the work may be done by the Employer and the cost recovered from the Contractor.

4. LABOUR ACCOMMODATION

The Contractor shall provide living accommodation that is equal to or exceeds the minimum criteria established in the following sub-sections, needed to house his staff, workers employed directly or through sub-contractors. The buildings shall be constructed so as to have a minimum life of not less than the length of the Contract.

- a. The roofs shall be watertight and laid with suitable non-flammable materials permissible for residential use under local regulations and for which the consent of the Engineer has been obtained.
- b. Each hut shall have suitable ventilation. All doors, windows, and ventilators shall be provided with security leaves and fasteners. Back to back units may be avoided.
- c. The minimum height of each unit shall be 2.10m and shall have separate cooking place.
- d. Suitable no. of common toilet/bath shall be provided.

5. WATER SUPPLY

The Contractor shall provide an adequate supply of water for the use of labourers in the Camp. The provision shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which be of metal or masonry shall be provided. The Contractor shall also at his expense make arrangements for the provision and laying of water pipe lines from the existing mains wherever available and shall pay for all the fees and charges thereof.

6. DRAINAGE

The Contractor shall provide efficient arrangements for draining away sewage water so as to keep the camp neat and tidy. Surface water shall be drained away from paths and roads and shall not be allowed to accumulate into ditches or ponds where mosquitoes can breed.

7. SANITATION

The Contractor shall make arrangements for conservancy and sanitation in the labour camps according to the rules and regulations of the Local Public Health and Medical Authorities.

The Contractor shall provide a sewage system that is adequate for the number of residents in the camp, and

7.Section7: Draf	t Contract	Agreement
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Budh referre identifi 3rd FI Nagar by virte NMRO repugr	Nagar, led to as ication Nagar, Gar, Gar, Gar, Uttar I ue of his cant to the	Uttar Pradesh "NMRC"), a co umber: U6023 nga Shopping Pradesh, India designation au after called as	n theday of Between Noida Me ompany incorporated to 1UP2014SGC066849 of Complex, Sector-29 a represented by and authorization by Shathe "Corporation"), who eaning thereof be deer	tro Rail Corporunder Companies and having its rego, Noida -201301	Act 2013, vid gistered office a I, District Gau of the mall unless exc	I (Hereafter e corporate at Block-III, utam Budh e company, ng Director, luded by or
AND						
office unless	at exclude	ed by or repug d permitted as Works/	(herein after called t nant to the context or signs) of the other par Services	he "Contractor" meaning thereof t. WHEREAS the known	represent, which expresent to be deemed to be Corporation as	ted by ession shall o include its desires that the
be exe	ecuted by		r, and has accepted a			
The Co	orporatio	n and the Cont	ractor agree as follows):		
1.		•	ords and expressions to them in the Contract			ngs as are
2.		owing docume eement -	nts shall be deemed to	form and be read	d and construe	ed as part of
Refere	ence:					

- (i) Tender No. Dated
- (ii) Bid Documents duly accepted and submitted by dated
- (iii) The Bidding Documents which include all the Sections specified below:
 - a. Section 1: General Information
 - b. Section 2: Terms of Reference
 - c. Section 3: Instructions to Bidders
 - d. Section 4: Eligibility, Evaluation and Selection Process
 - e. 5.Section5: Special Conditions of Contract
 - f. Section 6: Technical Specifications
 - g. Section 7: Draft Contract Agreement

- h. 8.Section8: Appendices
- i. Section 9: Forms
- j. Section 10: General Conditions of Contract (GCC)
- k. Amendment/ Modification, if any
- (iv) Notice of Award (.....) issued by NMRC
- (v) Letter of Acceptance of NOA (...... given by to NMRC
- (vi) Any other admitted correspondence documents between NMRC and the Bidder.

3. Duration of Contract

The Corporation intends to appoint a Contractor to NMRC for a period of 3 (Three) years, which may be extended for a further period of 6(six) months after reviewing the performance of the Contractor and depending upon the requirement and administrative convenience of NMRC in mutual agreement with the Bidder.

4. Price Schedule

NMRC shall consider the following Total Contract Price, as quoted by the Contractor as part of financial bid.

- **5.** The courts at District Gautam Budh Nagar, Uttar Pradesh shall have the exclusive jurisdiction to try all disputes arising out of this agreement between the parties.
- 6. In consideration of the payments to be made by the Corporation to the Contractor as specified in this Agreement, the Contractor hereby covenants with the Corporation to execute the Works/ Services and to remedy defects therein in conformity in all respects with the provisions of the Contract and Notice of Award issued. "Any conditions, deviation, assumption, exclusion, suggestion of alternative clauses, request of amendments in conditions & specifications of work submitted by bidders along with his Technical Bid or Financial bid, which is different from the Tender Document. Corrigendum, Addendum uploaded by NMRC on the E-Tender (http://etender.up.nic.in) and any other correspondence in this regard, shall not be treated as a part of the contract Agreement & shall not be binding upon NMRC in anyway whatsoever at any stage of work during execution or thereafter."
- **7.** The Corporation hereby covenants to pay the Contractor in consideration of the execution and completion of the Works/Services, 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 and NOA.

IN WITNESS where of the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year specified above.

Signature of the authorized official

Signature of the authorized official

Name of the official

Name of the official

Stamp/Seal of the Contractor Stamp/Seal of the Corporation

In the presence of:	In the presence of:
Sign of Witness 1	Sign of Witness
Name	Name
Address	Address
Sign of Witness 22	Sign of Witness
Name	Name
Address	Address

8. Section 8: Appendices

8.1.Appendix 1: Metro Alignment

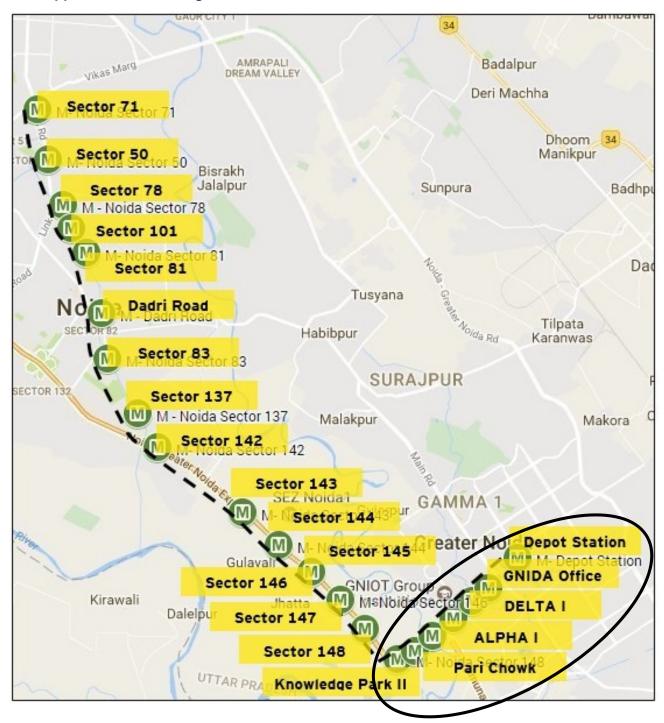


Fig: The Upcoming Metro Line

Please Note: The map shown above is indicative (not to scale)

S.NO.	Name of the Station
1.	Knowledge Park II station
2.	Pari Chowk station
3.	Alpha-1 Station
4.	Delta -1 station
5.	GNIDA Office station
6.	Depot station
7.	Deopt
8.	Staff Quarters

8.2. Appendix 2: RESOURCES PROPOSED FOR THE PROJECT – PERSONNEL

The figures indicated below are the minimum number of Project-Personnel required which are to be deployed as per the minimum level of supervision and qualification/experience of site-staff is given as follows:

S. No.	Designation of Project Personnel	Minimum Requirement
1	Engineer& Equivalent	
2	Supervisor	
3	Gardner/Maali	

Notes:

- 1. The contractor shall deploy resources as per the above mentioned minimum requirement and also confirm to deploy manpower over and above the minimum numbers indicated above, if the work requires so.
- 2. These minimum resources are as per the requirements of the various activities at different stages of works. All resources need not to be mobilised simultaneously, resources as per the requirement of various stages of works shall be mobilised in accordance with the instructions of the Engineer. The decision of the Engineer shall be final and bonding.
- 3. The performance of project personal deployed will be evaluated periodically by Employer during the contract period. In case the performance of any of the personnel is not satisfactory, the contractor shall replace them with good personnel immediately as per the directions of the Engineer.

Undertaking

- 1. We confirm to deploy Project Personnel required to achieve progress of work as per approved construction of work program.
- 2. We confirm to deploy man power requirement of SHE Organization as required under conditions of contract on Safety, health and Environment, NMRC(O&M) confirm to deploy man power over and above the minimum numbers, if the work requires so.

SIGNATURE OF AUTHORIZED SIGNATORY ON BEHALF OF TENDERER

Section 9: Forms

9.1.Form1: Letter of Proposal Submission

[Location, Date]

To

GM (Technical)
Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,
Noida -201301
District Gautam Budh Nagar, Uttar Pradesh

Subject: Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.

Dear Sir,

We, the undersigned, offer to provide *RFP for* Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Lineate Noida Metro Rail Corporation Ltd. Stations in accordance with your RFP Document dated [Insert Date] and our Proposal. We are hereby submitting our Technical and Financial Proposal. We confirm that we have read the RFP Document in totality and abide by the terms and conditions stated in the document.

We acknowledge that we have

- Studied and analyzed and satisfied ourselves about all the requirement of the tender including but not limited to market and market conditions
- Carefully assessed the commerciality of Project and that we will be fully responsible for all its assessment in this regard.
- Seen / visited / assessed the potential locations of the Metro Stations and fully understand and comprehend the technical, financial, commercial and investment requirements.

We confirm and declare that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this Contract 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 tender price will not include any such amount.

We have filled the complete information correctly in Form20: Bid Details

Authorized signatory Name: Date:

Name of the Bidder with seal

9.2. Form 2: Firm Details

1.	Title and name of the Project:								
	Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.								
2.	State the structure of the Bidder's organization (Bidders to complete/delete as appropriate) Sole Bidder/Consortium								
3.	For Bidders who are individual companies or firms, state the following: Name of Company or firm: Legal status: (e.g. incorporated private company, proprietorship, etc.) Registered address: Year of incorporation. Principal place of business: Contact person: Contact person's title: Address, telephone, facsimile number and e-mail ID of contact person:								
4.	In case of a consortium, state the following: Names of Legal Status Registered address and participation (Name, principal place or business Percentage participation (Name, Mobile No., Email Address)								
5.	Employees Provi	dent Fund No. (a	ttach documentar	ry proof) -					
6.	Employees State	Insurance Acts in	n India No. (attac	h documentary p	roof) -				
7.	GST Registration	No. (attach docu	ımentary proof) -						
8.	PAN (attach doc	umentary proof) -	-						

9.3.Form3:Capability Statement

It is Compulsory for the bidder to fill this statement and the bidder must upload those document that support this statement

Tender Reference No:	
Name of Work:	
Name of Bidder:	

S.No.	ELIGIBILITY CRITERIA	(To be filled by the Bidder)
1	Sole proprietorship, registered partnership firm, public limited company, private limited company or Consortium of any of the above can submit the Bidder. The firms and the companies should be registered in India.	
2	The Bidder should have a minimum experience of having satisfactorily completed similar works period ending last day of month previous to the one in which the bids are invited should be either of the following:	
	 i. One similar completed work costing not less than the amount equal to Rs. 63 Lakh (Rupees Sixty three lakh only)or 	
	ii. Two similar completed works each costing not less than the amount equal to Rs. 39.33 lakh (Rupees Thirty Nine lakh and thirty three thousand only)or	
	iii. Three similar completed works each costing not less than the amount equal to Rs. 31.46 Lakh (Rupees Thirty one lakh and forty six thousand only)	

S.No.	ELIGIBILITY CRITERIA	(To be filled by the Bidder)
3	The Bidder should have minimum Average Annual Turnover from similar work of Rs. 63 lakh (Rupees Sixty three lakh only) in the last 3 (three) Financial Years (2015-2016, 2016-17, 2017-18) preceding the Bid Due Date. FY 2017-18 FY 2015-16 Total	
4	The Bidder should not have been blacklisted/ banned/ declared ineligible for corrupt and fraudulent practices by the Government of India/ any State Government/ Government Agency and Supreme court and contracts have been terminated/ foreclosed by any company / department due to non-fulfilment of Contractual obligation in last 5 (five) financial years.	

9.4.Form4: Work Experience

The following format shall be used for statement of experience of Bidder:

S	Similar	Contract	Award	Emplo	Role in	contract	If in	Compl etion cost	Value
•	ct ation	ation Number	Nation & Nat	yer's Name, addres s, telepho ne numbe r, e- mail etc	Indivi dual	JV/ Consor tium	JV/conso rtium then % participat ion		of similar work in compl eted work
1									
2									
3									
4									
	Add required number of rows								

-	4.				4
Δı	uth	Ari7	an e	IAN:	atorv
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Name:

Date:

Name of the Bidder with seal

NOTE:

- 1. Only the value of contract as executed by the applicant/member in his own name should be indicated. Where a work is undertaken by a group, only that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence (Experience Certificate/Work Completion Certificate on Client's Letter Head will only be considered) which clearly mentioned the amount for the "Housekeeping" work.
- 2. The tenderer shall upload details of work executed by them in the prescribed format for the works to be considered for qualification of work experience criteria. Documentary proof such as completion certificates from the client clearly indicating the nature/scope of work, actual completion cost and actual date of completion for such work should be uploaded. In case work is executed for private client documentary proof such as copy of work order, Bill of quantities, Bill wise details of payment received certified by CA, TDS certificates for all the payments received, copy of final/ last bill paid by the client should be uploaded. The offers submitted without this documentary proof will not be evaluated.

- 3. Value of successfully completed portion of any ongoing work up to the last day of the previous month of tender submission will also be considered for qualification of work experience criteria.
- 4. For completed works, value of work done shall be updated to the last day of the previous month of tender submission price level assuming 5% inflation for Indian Rupees every year and 2% for foreign currency portions per year. The exchange rate of foreign currency shall be applicable 28 days before the submission date of tender.
- 5. In case of joint venture / Consortium, full value of the work, if done by the same joint venture shall be considered. However, if the qualifying work(s) were done by them in JV/Consortium having different constituents, then the value of work as per their percentage participation in such JV/Consortium shall be considered. This is to be substantiated with documentary evidence.
- 6. If the above work(s) comprise(s) other works also, then client's certificate clearly indicating the amount of work done in respect of the "similar work" shall be furnished by the tenderer in support of work experience along-with their tender submissions.

9.5. Form 5: Financial Capability Details

This	is	to	certify	that	the	Average	Annual	Turnover,	Net	Worth	and	Profitability	of	M/s
having registered office at														
, as applicable, is as below:														

S.No.	Financial year	Name of the Bidder	Turnover from Similar Work
1.	2017-18		
2.	2016-17		
3.	2015-16		
	Average Annual Turnover		

Certificate of the Chartered Accountants/Statutory Auditors

Based on Audited Accounts and other rele	evant documents of	(Name of
Bidder), we M/s	, Chartered Accountants/ Statutory	Auditors,
certify that the above information pertaining to	FY 2015-16, 2016-17 and FY 2017-18 is	s correct.

Signature and Seal of Chartered Accountants/Statutory Auditors(with membership no.)

Authorized Signatory

(Name & Designation of Authorized Signatory)

In case the Financial Statements for the latest financial year are not audited and therefore the Bidder cannot make it available, the Bidder shall give an undertaking to this effect and the statutory auditor/charted accountant shall certify the same. In such a case, the Bidder shall provide the Audited Financial Statements for 2 (two) years preceding the year for which the Audited Financial Statement is not being provided. Also, pertaining to latest financial year, the bidder shall submit an affidavit certifying that "The Annual Accounts have not been audited so far. We are submitting the CA certified provisional accounts, which shall be substantiated by the Audited Accounts, when prepared."

NOTE:

- 1. All such documents reflect the financial data of the bidder and not that of sister or parent company.
- 2. The financial data in above prescribed format shall be certified by CA/ Company Auditor under his signature and stamp in original along with membership no.
- 3. The Bidder shall provide the audited annual financial statements as required.

9.6.Form 6: Memorandum

Name of Work: **Development and Maintenance of Horticultural Work from Knowledge** park II station to Depot station, Depot and Staff Quarters of Aqua Line.

I/We agree to keep the quoted rate open for acceptance for 180 days from the due date of submission thereof and not make any modification in its terms and conditions.

I/We/ any of the consortium members hereby declare that I/We/ consortium members shall treat the quotation documents, drawings and other records connected with the works as secret/ confidential documents and shall not communicate information derived there from to any person other than the information in any manner prejudicial to the safety of NMRC.

Signature of the bidder with seal Dated:
Witness:

Occupation

Address:

Note: To be signed by the Bidder/ lead member in case of a Consortium

9.7.Form 7: Undertaking

Name of Work: Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.

I confirm that We (Tenderer, including any member in case of JV/ Consortium), _____

- a. Have not been banned /declared ineligible for corrupt and fraudulent practices by any government/government-undertaking/ semi-government/ govt. controlled institutions, any court of law having jurisdiction in India for the past 5 (five) years.
- b. Do not have any pending litigation & non-performing contracts during last 5 (five) years. Further, has not been barred by any government/government-undertaking/ semi-government/ govt. controlled institutions
- c. Have not abandoned any work in last 5 (five) years.
- d. Have not delayed in similar work completion during orders executed in last 5 (five) years.
- e. Do not ever been terminated due to poor performance.
- f. Have not suffered Bankruptcy/ insolvency in last 5 (five) years.
- g. Have not been blacklisted/debarred by any organization.
- h. Have not been be involved in any illegal activity and/or has not been charge sheeted for any criminal act during the last 5 (five) years.
- i. Have not submitted any misleading information in the Bid.
- j. Are financially sound to perform the work.

Authorized signatory

Name:

Date:

Name of the Bidder with seal

9.8.Form 8: Power of Attorney

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We(name and address
of the registered office of the Bidding Company) 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 our behalf all or any of the acts, deeds or things necessary or incidental to
submission of our Bid for 'Development and Maintenance of Horticultural Work from
Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.' in
response to the RFP Document dated issued by Noida Metro Rail Corporation ("NMRC"
or "the Corporation"), including signing and submission of the Bid and all other documents
related to the Bid, including but not limited to undertakings, letters, certificates, acceptances,
clarifications, guarantees or any other document which the Corporation may require us to
submit. The aforesaid Attorney is further authorized for making representations to the NMRC or
any other authority, and providing information / responses to the NMRC, representing us in all
matters before the NMRC, and generally dealing with the Corporation in all matters in
connection with our Bid till the completion of the bidding process as per the terms of the RFP
Document and further till the Contract is entered into with the NMRC and thereafter till the
expiry of the Contract.
We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this
Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be
binding on us and shall always be deemed to have been done by us.
All the terms used herein but not defined shall have the meaning ascribed to such terms under
the RFP Document.
Signed by the within named
[Insert the name of the executant company]
through the hand of
Mr
duly authorized by the Board to issue such Power of Attorney
Dated this day of
Accepted
Signature of Attorney
(Name, designation and address of the Attorney)
(Name, designation and address of the Attorney)
Attested
(Signature of the executant)

(Name	, designation and address of the executant)
Signatu	ure and stamp of Notary of the place of execution
	on seal of has been affixed in my/our presence pursuant to Board of or's Resolution dated
	(Signature) Name
2.	Designation(Signature)
Notes:	Designation

- (1) 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 the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.
- (2) In the event, power of attorney has been executed outside India, the same needs to be duly notarized by a notary public of the jurisdiction where it is executed.
- (3) Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a board resolution / power of attorney, in favour of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

9.9.Form 9: Statement of Legal Capacity (To be forwarded on the letterhead of the Bidder/ Lead Member of Consortium)

Ref. Date:
То
GM (Technical) Noida Metro Rail Corporation (NMRC) Limited Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida -201301 District Gautam Budh Nagar, Uttar Pradesh
Dear Sir,
We hereby confirm that we/ our members in the Consortium (constitution of which has been described in the Bid) satisfy the terms and conditions laid out in the RFP document.
We have agreed that (Insert member's name) will act as the Lead Member of our consortium.*
We have agreed that
Thanking you,
Yours faithfully,
(Signature, name and designation of the authorized signatory)
For and on behalf of
*Please strike out whichever is not applicable

9.10.Form10: Power of Attorney for Lead Member of Consortium

Whereas the GM (Technical), Noida Metro Rail Corporation Limited (NMRC) has invited applications from interested parties for the **Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line**. (the "Project").

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We,	having	our	registered	office	at	,M/s.
	having	our	registered	office	at	,M/s.
ha	aving c	our	registered	office	at	,and
ha	aving our	registe	red office at .			,(hereinafter collectively
referred to as the "P	rincipals")	do her	eby irrevocabl	y design	ate, no	ominate, constitute, appoint
and authorise M/S .			. having its re	gistered	office	at,being
one of the Members	of the Cons	sortium	, as the Lead	Member a	and tru	e and lawful attorney of the
Consortium (hereina	fter referre	ed to a	s the "Attorne	ey"). We	hereby	rirrevocably authorise the
Attorney (with power	r to sub-	delegat	e) to conduc	t all bus	iness	for and on behalf of the
Consortium and any	one of us	during	the bidding pr	ocess ar	nd, in tl	he event the Consortium is
awarded the concess	sion/contra	ct, duri	ng the execut	ion of the	Proje	ct and in this regard, to do
on our behalf and or	behalf of	the Co	nsortium, all o	r any of	such a	cts, deeds or things as are
necessary or require	d or incider	ntal to t	the pre-qualific	ation of t	he Cor	nsortium and submission of
its bid for the Project	including	but not	limited to sign	ing and s	submis	sion of all applications, bids
and other document	s and writi	ings, p	articipate in b	idders ar	nd othe	er conferences, respond to
queries, submit info	ormation/	docum	ents, sign ai	nd exect	ute co	ntracts and undertakings
consequent to acce	ptance of	the b	id of the Co	nsortium	and g	generally to represent the
Consortium in all its	dealings v	with the	NMRC, and/	or any o	other G	Sovernment Agency or any
person, in all matters	in connec	tion wi	th or relating t	o or arisi	ng out	of the Consortium's bid for
the Project and/ or u	pon award	I there	of till the Cond	ession A	greem	ent is entered into with the
NMRC.						

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Consortium.

For(Signature)
(Name & Title)
For(Signature)
(Name & Title)
For(Signature)
(Name & Title) Witnesses:
1.
2.
(Executants)
(To be executed by all the Members of the Consortium)

Notes:

- 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.
- Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder..
- For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Appostille certificate

9.11.Form 11: Consortium Agreement / Memorandum of Understanding

(To be executed on Stamp paper of appropriate value)
This Consortium Agreement/Memorandum of Agreement is executed at on this
day of, 2018.
BETWEEN
Mr R/o OR
M/s, a Company incorporated under the Companies Act, 1956 and
having its registered Office at acting through its
duly authorized by a resolution of the Board of Directors dated
(hereinafter referred to as the 'LEAD MEMBER' which expression unless excluded by or
repugnant to the subject or context be deemed to mean and include its successors in interest,
legal representatives, administrators, nominees and assigns) of the ONE Part;
AND
Mr
M/s, a Company incorporated under the Companies Act, 2013 and
having its Registered Office at and acting through its,
duly authorized by a resolution of the Board of Directors dated (hereinafter
referred to as the ('Participant member') which expression unless excluded by or repugnant to
the subject or context be deemed to mean and include its successors in interest, legal
representatives, administrators, nominees and assigns) of the OTHER/SECOND PART
AND
Mr. P/o
Mr R/o OR M/s, a Company incorporated under the Companies Act, 2013 and
having its Registered Office at and acting through its, duly authorized by a resolution of the Board of Directors dated (hereinafter
referred to as the ('Participant member') which expression unless excluded by or repugnant to
the subject or context be deemed to mean and include its successors in interest, legal
representatives, administrators, nominees and assigns) of the third PART]
Whereas Noida Metro Rail Corporation Limited (hereinafter referred to as 'NMRC') has invited
Bids for the Licensing of
in terms of the RFP documents issued for the said purpose and the eligibility conditions
required that the Bidders bidding for the same should meet the conditions stipulated by NMRC
for participating in the bid by the Consortium for which the Bid has been floated by NMRC.
AND WHEREAS in terms of the bid documents all the parties jointly satisfy the eligibility criteria
laid down for a bidder for participating in the bid process by forming a Consortium between
themselves.
AND WHEREAS all the parties hereto have discussed and agreed to form a Consortium for
participating in the aforesaid bid and have decided to reduce the agreed terms to writing.

NOW THIS CONSORTIUM AGREEMENT/MEMORANDUM OF AGREEMENT HEREBY

WITNESSES:

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1.	That in the premises contained herein the Lead Member and the Participant Member having decided to pool their technical know-how, working experiences and financial resources, have formed themselves into a Consortium to participate in the Bid process for Licensing of
	of the Bid invited by Noida Metro Rail Corporation Ltd., (NMRC).
2.	That all the members of the Consortium have represented and assured each other that they shall abide by and be bound by the terms and conditions stipulated by NMRC for awarding the Bid to the Consortium so that the Consortium may take up the aforesaid license, in case the Consortium turns out to be the successful bidder in the bid being invited by NMRC for the said purpose.
3.	That all the members of the Consortium have satisfied themselves that by pooling their technical know-how and technical and financial resources, the Consortium fulfils the eligibility criteria stipulated for a bidder, to participate in the bid for the said Bid process for
4.	That the Consortium have agreed to nominate any one of, and as the common representative who shall be authorized to represent the Consortium for all intents and purposes for dealing with the Government and for submitting the bid as well as

5. That the shareholding of the members of the Consortium for this specified purpose shall be as follows:

documents as may be necessary for this purpose.

doing all other acts and things necessary for submission of bid documents such as Bid Application Form etc., Mandatory Information, Financial Bid. etc. and such other

- I. The Lead Member shall have _____per cent (___%) of shareholding with reference to the Consortium for this specified agreement.
- II. The Participant Member shall have ____ (___%) of shareholding with reference to the Consortium for this specified agreement.

That in case to meet the requirements of bid documents or any other stipulations of NMRC, it becomes necessary to execute and record any other documents amongst the members of the Consortium, they undertake to do the needful and to participate in the same for the purpose of the said project.

That it is clarified by and between the members of the Consortium that execution to this Consortium Agreement/Memorandum of Agreement by the members of the Consortium does not constitute any type of partnership for the purposes of provisions of the Indian Partnership Act and that the members of the Consortium shall otherwise be free to carry on their independent business or commercial activities for their own respective benefits under their own respective names and styles. This Consortium Agreement is limited in its operation to the specified project.

That the Members of the Consortium undertake to specify their respective roles and responsibilities for the purposes of implementation of this Consortium Agreement and the said project if awarded to the Consortium in the Memorandum to meet the requirements and stipulations of NMRC.

IN FAITH AN	ID TESTIMONY WHERE	OF THE PARTIES HERE	TO HAVE SIGNED THESE
PRESENTS (ON THE DATE, MONTH AN	ID YEAR FIRST ABOVE \	WRITTEN.
1.() 2.() 3.()
	gnatory Authorized Signato		
() () ()
For (Name of	company) For (Name of co	mpany) For (Name of con	npany)
Enclosure: Bo	pard resolution of each of th	e Consortium Members a	uthorizing:
(i) Execution of	of the Consortium Agreeme	nt, and	
(ii) Appointing	the authorized signatory fo	or such purpose	

9.12.Form 12: Personnel Details

Name of Work: Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.

Month/Year	Personnel and Grade	Number of Personnel	Proof (ESI/PPF challans)

				4
Aiith	Arizo	''	เคก	21AK/
Auu	ULIZE	:u 5	ıuıı	atory
			. 3	,

Name:

Date:

Name of the Bidder with seal

9.13.Form 13: Saleable Form for Tender Document Job No. The required fee of tender form has been deposited in _______ Bank A/c No. ______ RTGS/NEFT and the scanned copy of UTR receipt with Transaction Id is being enclosed with E-tender documents. If the copy of UTR receipt is not uploaded with the E-tender the tender shall be rejected. DETAILS OF ERNEST MONEY ATTACHED The required amount of Earnest money has been deposited in ______ Bank A/c No. ______ RTGS/NEFT and the scanned copy of UTR receipt with transaction Id is being enclosed with E-tender documents. If the copy of UTR receipt is not uploaded with the E-tender the tender shall be rejected.

BIDDER

9.14. Form 14: Declaration of Refund of Earnest Money

Noida Metro Rail Corporation (NMRC) Limited Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida -201301, District Gautam Budh Nagar, Uttar Pradesh, India

1	Bidder Name	
•	Didder Hairie	
2	Bidder Address	
3	Bank Name	
4	Bank Branch	
5	A/c No	
	710110	
6	IFSC Code	
7	PAN No.	
•	TAIL ITO.	
8	Tin/TAN No.	
_	CCT No	
9	GST No.	
10	Phone No.	
11	Mobile No.	
12	Email-Id	
13	Type of Account	
14	Party Unique Id	
• •	. a.t. omgaona	

The above provided information is true to the best of my knowledge.

Date:	Signature with Stamp/Seal

9.15.Form 15: Deployment of Personnel

(To be filled in by the	he Contractor for each Station)
Station Name:	

SI.No.	Category	Min No of Personnel	Min No of Personnel proposed to be deployed (Per Day)	Educational qualification	Relevant Years of Experience in Agriculture/Horticulture
1					
2					
3					

NOTE: -

- 1. The major work will be carried out in night shift with specified machinery and required manpower.
- No Deviation in the Deployment of minimum number of personnel for Development and Maintenance of Horticultural Work shall be acceptable. If any Tenderer proposes deviation in the Tender, such Tender shall not be considered and shall be rejected.
- 3. The minimum number of personnel as mentioned above are required to be deployed on a daily basis in various shifts of the day as specified in this Tender.
- 4. The minimum number of personnel required to be deployed (i.e. Engineer)have to be physically deployed on every day basis and therefore any personnel required to be deployed for taking care of Leave Reserve & Rest givers etc. have to be additionally provided by the contractor as per the Statutory norms or rules etc. as applicable.
- 5. The CVs of the Team Leaders and Supervisors are to be submitted along at office of the station Manager/Station controller and intimate the office of NMRC.
- 6. The personnel should be smartly dressed in neat and clean uniforms having the firm's logo. The uniforms and Personal Protective Equipment (eg. Shoes, helmet, gloves etc.) should be provided free of cost by the Tenderer/contractors.
- 7. Team Leader and Supervisors should be well trained in Horticulture Work practices through reputed institutes. A certificate/documentary proof to this effect shall be submitted before the start of work.

9.16. Form 16: Resources proposed for the Plant & Equipment

- 1. We hereby confirm to deploy the minimum resources as per mentioned minimum requirement in the tender document.
- 2. We further confirm that we shall only mobilize "Truck Transmission type" Pick and Carry Hydra Crane 2nd Generation models, wherever Hydra Cranes will be required.
- 3. We confirm that the age of the following Construction Plant & Machinery has been restricted by NMRC as given below. If any of these machinery is used by us at the site, the machinery shall abide by the following age restrictions:

S.No	Construction Plant & Machinery	Maximum Permissible Age	No. of Equipment
1`	Man lifter	10 years	1
2	Mobile Tyre Mounted Hydraulic Cranes	10 years	1
3	All other plant and machinery like, Dumpers,, Excavators, Diesel Generator Sets etc.	10 years	According to requirement of site

Note:These resources are for peak period of each activity. All plants and equipments need not to be mobilized simultaneously, plants and equipment's as required as per the progress of the work shall be brought at site in advance as directed by the Engineer-in-Charge.

- 4. We confirm to deploy resources as per the above-mentioned minimum requirement and also confirm to deploy plants &equipments over and above the minimum numbers indicated above, if the work requires so.
- 5. Hiring of Cranes shall be as per approved by Engineer-in-Charge. Third party certification of cranes, competency certification of the operators etc. would be required before grant of approval.

Date:	Signature with Stamp/Se	al

9.17.Form 17: Obligation/ Compliance to be ensured by Contractor

SI. No.	Items	Compliance of the Compliance o	
		Yes	No
1	License for employing contract labour		
2	Compliance of minimum wages Act by payment of wage on 7th of every month through Bank or in the presence of nominated representative of employer (NMRC Supervisor/manager)		
3 (a)	Compliance of provision of ESI & EPF Act		
3 (b)	Ensure treatment in ESI hospital in case of accident/injuries suffered in performance of work and compensation under ESI Act.		
4	Send Accident report to Regional Labour Commissioner (RLC) & ESI authorities.		
5	Observance of working hours, weekly rest and overtime payments as per minimum wages Act-1948.		

Note: - A Non- filling or "No" by contractor will lead to non-eligibility for contractor in further tendering process.

S.N	Description	Reference	Requirement
		Clause	
i .	Latest "date for commencement"	Clause 8.1	Date given in NOA or Employer's Notice to
'	of the Works	of the GCC	Proceed
		0. 0.5	(i) 0.015% of contract price per day of delay in completion of whole work.
ii	Liquidated Damages	Clause 8.5 of the GCC	(ii)Total maximum limit of LD including sums
		of the GCC	payable by the employer to designated
			contractors is 15% as mentioned in GCC.
iii	Insurance for workers/ employees	Clause 15.4 of the GCC	All of the contractor's employees shall have to be covered under ESI and ECA as per Special conditions of contract.
iv	Insurance cover for Contractor's All Risk and other requirements as specified in the GCC	Clause 15 of the GCC	100% of the Total Contract Price.
V	Amount of Third Party Insurance	Clause 15.3 of the GCC	INR 0.75 Million for any one incident, with no. of incidents unlimited.
vi	Period in which all insurances have to be effected	Clause 15.5 of the GCC	Within 1 week from the "date of commencement"

9.18.Form18: Proforma for Clarifications / Amendments on the RFP

SI. No.	Document	Clause No. and Existing Provision	Suggested Text for the Amendment	

Αι	ithe	orize	ed :	siq	nato	rv
				3		

Name:

Date:

Name of the Bidder with seal

9.19.Form19: Bid Offer/ BOQ (Format)

То

GM (Technical)
Noida Metro Rail Corporation (NMRC) Limited
Block-III, 3rd Floor, Ganga Shopping Complex, Sector-29,
Noida -201301
District Gautam Budh Nagar, Uttar Pradesh

THIS FORM IS NOT TO BE FILLED. THE BIDDERS ARE REQUIRED TO FILL THE FINANCIAL PROPOSAL IN XLS FORMAT AFTER DOWNLOADING THE FORM FROM THE E-PROCUREMENT WEBSITE FOR THIS TENDER DOCUMENT

Sub: Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line.

Dear Sir,

I/we have read and examined the RFP document, general terms and conditions for the work.

I/we hereby quote the following Total price for services in rupees for providing Development and Maintenance of Horticultural Work from Knowledge park II station to Depot station, Depot and Staff Quarters of Aqua Line for a period of 3 years, payable by NMRC.

Percentage BOQ

Tender Inviting Authority- Noida Metro Rail Corporation (NMRC) Ltd.

Name of Work- RFP - E Tender for RFP for Development and Maintenance of Horticultural Work from KP 2 station to Depot station, Depot and Staff Quarter of Aqua Line

Contract No: NMRC/Hort.-02/47/2018

Bidder Name:-

Price Schedule

(This BOQ Template must not be modified/replaced by the Bidder and same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the bidder name and values only)

	<u>1</u> 1				
S.NO	DESCRIPTION OF ITEM	QUANTITY FOR 3 YEAR (C)	UNIT	RATE (Rs.) (A)	AMOUNT (Rs.) D=(A X C)
	Schedule - I DSR iter	ns			
1	DSR items 2016 Schedule (A)(except earth work)	LS	LS	As per DSR 2016	100000
	Total Amount Schedule A				100000
	Schedule-B (Horticulture D	SR-2016)			
2	Supplying and stacking sludge at site including royalty and carriage upto 5 km lead complete (Sludge measured in stacks will reduced by 8% for payment).	230.00	Cum	235.55	54176.5
3	Rough dressing the trenched ground including breaking clods.	18,200.00	Sqm	0.90	16380
4	Fine dressing the ground.	18,200.00	Sqm	2.15	39130
5	Spreading of sludge, dump manure or/and good earth in required thickness (Cost of sludge, dump manure or/and good earth to be paid separately)	230.00	Cum	30.95	7118.5
6	Providing & laying Selection no. 1 grass turf with earth 50mm to 60mm thickness on existing ground prepared with proper	18,200.00	Sqm	77.00	1401400

	level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same, as per direction of officer in charge.				
7	Preparation of beds for hedging and shruberry by excavating a depth of 60 cm deep and treanching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth and one part of sludge or Manure) flooding with water and finally fine dressing, leveling etc.(Cost of Manure or sludge or extra earth to be paid for separately)	1,610.00	Cum	130.35	209863.5
8	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1(2 parts of stacked volume of earth reduction by 20%: one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, dressing, including removal of rubbish and surplus earth, if any with all leads and lifts (Cost of manure, sludge or extra earth to be paid for separately)				
9	Holes 90cm dia and 90cm deep	1,144	Each	101.40	116001.6
10	Holes 60 cm dia, and 60 cm deep	200	Each	31.15	6230
11	Holes 45cm dia and 45cm deep	14,557	Each	13.40	195063.8
12	Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserviceable material's as per direction of officer in charge (excluding cost of plants & water)				0
13	Tree Plants	1,144	Each	4.25	4862
14	Shrubs Plants	14,557	Each	2.15	31297.55
15	Hedge Plants	29,904	Each	1.40	41865.6
16	Complete maintenance of the entire garden features having as per yard stick in the garden area i.e. lawn , trees , shrubs,				

	hedge, flower beds, foliages, creepers, etc. including hoeing, wedding, prunning, replacement of plants, gap filling, watering, mowing of lawn, grass cutting by lawn mower and brush cutter, removal of garden waste, applying of insecticide, pesticide, & fertilizers (whenever required)				
17	Prestigious works in sqm) (8000*12*3)*0.50	18,18,994.40	per sqm per month	2.85	5184134.04
18	Trees for 250 no/(up to 4 & up to 3 year Slow & Fast growing Per tree group) (1927*12*3)*0.50	25,488	Per tree per month	44.45	1132941.6
19	Topairy cutting/shapping of plant removing of cut materials, cleaning, hoeing of plants complete design hoeing of trees (Topairy) watering manure etc. (excluding the cost of material which shall be supplied by the department) and as per direction of officer in charge. 2.38.2 Height of Topairy above 120 cm. (309*12*3)*.50	5,292	Per tree per month	62.05	328368.6
20	Cutting of designer hedge/edge removing of cut materials, cleaning, hoeing of hedge/edge bed watering manure and applying insecticides and fungicides etc.(excluding the cost of material which shall be supplied by the Per Sqm department) and as per direction of officer in charge. Hedges in Sqm(1690*12*3)*.50	62,100.00	per sqm per month	26.45	1642545
21	Complete maintenance of shrubs & shady plants (Out side garden features), jobs like making of basin at regular interval i/c watering, weeding, pruning & application of fertilizer etc, (excluding the cost of material which shall be supplied by the department) and as per direction of officer in charge.	3,37,806.00	Per shrub per month	9.25	3124705.5

	(8780*12*3)*.50				
22	Ficus Retusa Topairy well developed with fresh & healthy 5 to 6 big ball specified size and shape 180 to 210 cm ht in 40 cm Cement pot	238	Each	2000.00	475200
23	Cassia siamea of plants height 150-165 cm. in big poly bags of plants size 25 cm	312	Each	60.00	18720
24	Chukrassia tabularis of plants height 150-165 cm. In big poly bags plants size 25 cm.	312	Each	60.00	18720
25	Delonix regia (Gulmohar) of plants height 150-165 cm. in big poly bags of plants size 25 cm	200	Each	60.00	12000
26	Flowering and Shady Trees				
27	Mimusops elengi (Maulsri) of plants height 180-195 cm., well developed with thick stem in big in big size HDPE bag	12	Each	120.00	1440
28	Plumeria alba dwarf of plants height 90-105 cm. with 3-4 branches and thick stem in big size HDPE bags	29	Each	700.00	20160
29	Terminalia arjuna of plants height 150-165 cm in big poly bags of plants size 25 cm.	12	Each	60.00	720
30	Washingtonia filifea palm stem ht. 120-135 cm with 8-10 healthy leaves lush green leaves well developed in big size HDPE Bags	11	Each	650.00	7280
31	Flowering Shrubs				
32	Supply and stacking of plant Jatropha multifida (red colour) of height 60-75 cm. multibranched in p.bag of size 25 cm	40	Each	40.00	1600
33	Supply and stacking of plant Calliandra hybrida of height 105-120 cm., well branched, bushy in big size HDPE bag	114	Each	80.00	9120
34	Supply and stacking of plant Nerium oleander (kaner) dwarf of height 30-40 cm. in earthen pot of size 20 cm	1,394	Each	40.000	55760
35	Supply and stacking of plant Nerium oleander variegated of height 45-60 cm. in earthen pots of size 20 cm	5,096	Each	40.00	203840
36	Hedges/Ground Covers		Each		
37	Clerodendron inerme plant having 25 cm to 32 cm, multi	16,224	Each	20.00	324480

	branched in 20 cm size of Earthern Pot/ Plastic Pot.				
38	Wadelia trilobata plant,full of leaves in 15 cm size of Polybags.	13,680	Each	15.00	205200
39	Foliage and Shed Loving Plants				
40	Providing of Draceana Song of India varigated plant, having ht.30 cm to 45 cm, well developed, fresh and healthy foliage with bright leaves in 20 cm size of Earthen pot /plastic pot	5,080	Each	40.00	203200
41	Providing of Dracaena rosea plant, having ht. 30 cm & above with 8 to 10 leaves, well developed, fresh and healthy in 20 cm size of Earthen pot / Plastic pot.	1,506	Each	40.00	60240
42	Providing of Livistona palm plant, having ht. 30 cm to 45 cm, well developed with 5 to 6 leaves, fresh and healthy foliage in 25 cm size of Earthen pot / Plastic pot	2,180	Each	80.00	174400
43	Providing of Raphis palm plant, having ht. 45 cm to 60 cm with 5 to 7 suckers, well developed, full of fresh and healthy leaves in 25 cm size of Earthen pot / Plastic pot.	781	Each	180.00	140616
44	Providing of Ceporthia Palm plant, having ht. 90cm to 1.20 m. with 6-8 suckers, well developed, fresh and healthy lush green leaves from bottom to top in 20 cm size of Earthen pot / Plastic pot.	10	Each	350.00	3360
45	Providing and fixing of Tuflex Garden fencing Hexagonal net/or equivalent of green colour having contents (Weight grams/sqm. 510 (+/- 8%)) in width of 60 cm. with bamboo of 90 cm. length. The bamboo should be painted with green colour paint of approved brand and manufacture (two or more coats) and fixed 30 cm. below ground level and 60 cm. above ground level at a distance of 1.50 mtrs. The net and bamboo should be binded with 2 mm. G.I. Wire at three places properly as per direction of Engineer-in-charge.	994	sqm	187.75	186698.6
46	Supplying and stacking of good earth at site including royalty and carriage upto 5 km complete (earth measured in stacks will		cum	332.55	

	be reduced by 20% for payment).				
	upto 20 km @7.75Rs/km		cum	457.20	
	upto 25km @6.31/km	73	cum	488.75	35659.2
	Total Amount Schedule B				15694497.59
	Total Amount Schedule B				15694497.59
	Schedule-C NDSR ITE	MS			
	PART 1- INSTALLATION & COMISSIONING	OF CREEPER P	LANTS		
47	Supply & Stacking wall decayed cow dunk mannure (F.Y.M) at site including royalty and carriage with all leads and lifts mannure measure in stacks will be reduced by 8% of payment. Cost of initials watering for planted plants	6.08 1520	cum Nos.	320	1945.60 1520.00
49	Plantation of Quis Qualis indica well developed in poly bags (other variety may be Rhyneospurmum jasminnoid, clerodendron splendence, antigonon leptopus, bigonia venusta, B.twediana, Philodendron petros, Tecoma Grandiflora, Adenoclyma, Vernonia, Equestifolia, EChitis corypholliates, Ficus Repens, Jacquminitia, Ipomea spp etc	760	Nos.	90	68400.00
	Part 2 Installation and Commissioning	of Vertical Gard	den		
50	Providing, fixing and erecting cuboidal/cylindrical type profile on piers/columns at different locations of metro viaduct area for developing vertical garden on the same. The erection profile shall be based on DEXTAR MODEL (details of which are provided in tender documents). Pre & post site inspection by experts and consultants of contractors (which shall include vertical garden horticulturists and irrigation). The rates shall include all cost of labour, material & transportation freight charges for logistics and infrastructure, plants and other installation related items. The item is based on the following specifications as mentioned below including six months maintenance period from commissioning of vertical garden wall. 1. Employing of design consultant: Complete designing & drawing submission by team of vertical	310	sqm	10140	3143400

	garden based on detail site survey on scientific & technical
	parameters. The design shall be approved by Engineer in Charge
	and then be used at site. The species of plants will also be
	approved.
	2. Base frame MS (Mild Steel) Frame of size 50mm x 80mm x 3mm
	pipe coated with anti-rust epoxy primer & paint and fixing will be as
	per approved design.
ĺ	3. DTMP Hybrid Cups (Debacle Thermoplastic Malleable Vertical
	Planter):
	DTMP wall-planters Holder of size 6" x 1'6" & hybrid cups of size 5"
	x 2.5" x 4" designed to retain the temperature range & keep the
	center of gravity of the growing planting within the planter, Interior
	lining of foam to keeps the percolation holes unclogged. Coated
	with anti-rust paint.
	4. DTMP Drain Tray:
	To hold water percolating from the wall planters and then this
	water is to be directed to a drain point or into a water - holding
	reservoir for reuse.
	5. TFG NET (Tennace Fabric Green Net):TFG Net to cover the Green
	wall from back, so that panels do not come with direct contact with
	the structure behind.
	6. Outdoor plants variety:
	μ
	a. Six month old rooted, antifungal and anti-bacterial Outdoor
	Plants (Mix of Seasonal & All Season Plants) Plants are selected on
	the basis of temperature incidence of light and relative humidity on
	site, extra plants are budgeted for damage on the way and in the
	post-installation period and as per the direction of Engineer in
	Charge.
	b. Substrate: Cocopit, coco chips, mix of npk, specially treated with
	17 minerals, thermocol balls for aeration.
	c. Plant variety: Golden Money plant, Green Money plant,
	Scindapsus Money plant, Marble Money Plant, Philodendron cylon,
	Philodendron Zanadu, Asperagus Merri, Asperagus Springirri,

	Chlorophytum Varigated, Chlorophytum Comosum, Ophiphogon Varigated, Ophiphogon Green, Dianella, Cryptanthus Red, Cryptanthus Chocklate, Cryptanthus Pink, Syngonium No. 1, Schefflera Hicour, Schefflera Green, Schefflera Varigated, aralia Golden Mini, Aralia Green, Aralia White, Roheo Varigated, Roheo Green, Roheo Golden, Song of India, Cryptanthus Red, Cryptanthus Chocklate, Cryptanthus Pink, Begonia, Pepromia Green, Perpromia Varigated, Chrysothemis Pulchella, Maranta, Stromanthea.				
	PART 3 MAINTENANCE OF VERTIC	AL GARDEN	T		
51	Maintenance of installed vertical garden on columns/piers by team of experts. All the installed plants shall be given regular care and maintained including feeding, manuring & nurturing. Plants will be replaced on seasonal basis and for damages as & when required. Any available varieties from the above list of plants apart from the variety installed at site will only be planted after the approval of Engineer in Charge. (I) The rates shall include all labour, material & transportation etc and for other maintenance related items like wall garden structures & irrigation system. (ii) The safety, unity of wall garden & equipments will be the responsibility of the contractor. (iii) The water tanker with spray jet/shower arrangement for regular watering will be arranged by contractor within maintenance cost. (iv) water conducive for these plants will be arranged by the agency. (v) The maintenance period will start after six months from the date of completion of vertical garden.	SQM PER YEAR	SQM PER YEAR	5022	4670460
Total Amount Schedule C					7885725.60
	Total OF Schedule (A+B+C)				23680223.19

	_	Quote	d amount
S. No	Quoted Rate in %(Percentage)	In Figure	In Words
	In Words		
1	In Figure		
2	Rebate in %(Percentage)If Any In Words		
	In Figure		

9.20. Form20: Bid Details

The following list is intended to help the tenderers in submitting offer which are complete. An incomplete offer is liable to be rejected. Tenderers are advised to go through the list carefully and take necessary action.

S.No.	Particulars	Attached	Page no.
		Yes / No / Not	•
		Applicable	
1	Bid Processing Fees		
2	Earnest Money Deposit		
3	9.1.Form1: Letter of Proposal Submission		
4	9.2. Form 2: Firm Details		
5	9.3.Form3:Capability Statement		
6	9.4.Form4: Work Experience		
7	9.5.Form 5: Financial Capability Details		
8	9.6.Form 6: Memorandum		
9	9.7.Form 7: Undertaking		
10	9.8.Form 8: Power of Attorney		
11			
	0.0 Form 0: Statement of I		
12	9.9.Form 9: Statement of Legal Capacity		
12	9.10.Form10: Power of Attorney for Lead Member of Consortium		
13			
13	9.11.Form 11: Consortium Agreement / Memorandum of Understanding		
14	9.12.Form 12: Personnel Details		
15	9.13.Form 13: Saleable Form for Tender		
15	Document		
16	9.14.Form 14: Declaration of Refund of		
	Earnest Money		
17	9.15.Form 15: Deployment of Personnel		
18	9.16.Form 16: Resources proposed for the		
	plant & equipment		
19	9.17.Form 17:Obligation/compliance to be		
	ensured by contractor.		
20	Form 18: Performa for Clarifications /		
	Amendments on the RFP		
21	Statutory proof of existence as the legal entity		
22	PAN certificate as per legal entity		
23	Form 5: Financial Capability Details		
	A copy of the Audited balance sheets and		
	Profit and Loss Statements for the last 3		
	(three) financial years		

S.No.	Particulars	Attached	Page no.
		Yes / No / Not	(Mandatory)
		Applicable	
24	Self attested copy of ITR		
25	Copy of GST registration certificate, EPF, ESI		
26	Any other document asked by the Purchaser		
	if submitted, specify the documents		
	Or		
	Any other document which the Tenderer		
	considers relevant		



(A joint venture of Govt. of India and Govt. of U.P.)

GENERAL CONDITIONS OF CONTRACT (July 2018)

NOIDA METRO RAIL CORPORATION LTD.

Block – III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida – 201 301, District Gautam Budh Nagar, Uttar Pradesh, India

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1. Definitions and interpretations

1.1. Definitions

In the contract (as defined below) the words and expressions defined below shall have the meanings assigned to them, except where the context requires otherwise. Words indicating persons or parties include corporations and other legal entities except where the context requires otherwise.

1.1.1. Documents

- 1.1.1.1. **"Appendix to Form of Tender"** means the completed pages in title Appendix, which are appended to and form part of the Tender.
- 1.1.1.2. **"Bill of Quantity"** means a document containing various items of payment and contains schedule of Payment also.
- 1.1.1.3. "Construction and/or Manufacture Documents" means all drawings, calculations, computer software (programs), samples, patterns, models, operation and maintenance manuals, and other manuals and information of a similar nature, to be submitted by the Contractor.
- 1.1.1.4. "Contract" means the Contract Agreement, the Notice of Award, the letter of tender, General Conditions of Contract, Special Conditions of Contract, the Employer's Requirements, the Tender, the Notice Inviting Tender, Instructions to Tenderers, the Contractor's Proposal, the Schedules, and such further documents which are listed in the Notice of Award or Contract Agreement (if completed).
- 1.1.1.5. "Contract Agreement" means the contract agreement referred to in Sub-Clause 1.4. It shall also include all subsequent modifications/ amendments to the Contract as a result of the communications or negotiation proceedings between the parties.
- 1.1.1.6. "Contractor's Proposal" means the proposal submitted by the Contractor with the Tender, as modified and accepted by the Employer and included in the Contract. Such documents may include the Contractor's preliminary design.
- 1.1.1.7. "Contractor's Document" means the calculations, computer programme and other software, drawings, manuals and other documents of a technical nature (if any) supplied by the Contractor under the Contract.
- 1.1.1.8. "Design Data" means all specifications, plans, drawings, details, graphs, sketches, models, levels, setting-out dimensions, calculations duly checked by the Contractor and other documents relating to the design of the Works prepared or to be prepared by or on behalf of the Contractor.

- 1.1.1.9. **"Drawings"** means the Employer's Drawings and the Drawings submitted by the Contractor and any modification of such drawings as any, from time to time, be furnished or for which the Engineer has issued a Notice of No Objection.
- 1.1.1.10. "Employer's Requirements" means the description of the scope, standard, design criteria, specifications, drawings, programme of work, indigenisation programme (where applicable) as included in the Contract, and any alterations and modifications thereto in accordance with the Contract.
- 1.1.1.11. "Interim Payment Schedule" means the schedule included for each Cost Centre in the Pricing Document and accepted by the Employer to be used for interim payments in relation to achievement of milestones under that Cost Centre, as the same may be revised from time to time in accordance with Clause 11.
- 1.1.1.12. "Notice of Award" means the written notice issued by NMRC to the Selected Bidder(s) intimating the acceptance of Selected Bidder's Proposal for the award of Contract
- 1.1.1.13. "Notice to Proceed" means the notice issued by the Employer to the Contractor communicating the date on which the Works are to be commenced.
- 1.1.1.14. "Letter of Tender" means the document entitled letter of tender, which was completed by the Contractor and includes the signed offer to the Employer for the Works.
- 1.1.1.15. **"Safety, Health and Environmental (SHE) Manual"** means the Employer's manual containing the requirements and conditions to be met during the execution of the Works by the Contractor.
- 1.1.1.16. **"Schedules"** means the information and data submitted with the Tender, as included in the Contract.
- 1.1.1.17. "Tender" means the Contractor's priced offer to the Employer for the designing where ever applicable, execution, manufacture, and completion of the whole of Works, testing and commissioning (including Integrated Testing and Commissioning where ever applicable) and remedying of any defects therein, as accepted by the Letter of Acceptance.
- 1.1.1.18. "Schedule of Milestones" means the schedule included in each Cost Centre in the Pricing Document, describing the Milestones and stipulating dates by which the Milestones are to be achieved under that Cost Centre in order to maintain interim payments by the Employer to the Contractor in accordance with the Interim Payment Schedule for that Cost Centre, as the same may be revised from time to time in accordance with the Contract.

- 1.1.1.19. **"Schedule of Payment**" means the schedule included in the Bill of Quantity for payment in various stages on part of the works.
- 1.1.1.20. "Special Conditions of Contract" means any special conditions of contract issued by the Employer prior to submission of the Tender or negotiated and agreed in writing by the Employer and the Contractor prior to and conditional upon acceptance of the Tender.
- 1.1.1.21. "Works Programme" means the programme showing the sequence, method and timing of investigations, design, issue of No Objection Notices, execution, manufacture, delivery to site, erection, installation, testing, commissioning of the Works (including Integrated Testing and Commissioning), indigenisation (where applicable) and related activities in the form and content prescribed by the Employer's Requirements, or any amended or varied version thereof, as submitted by the Contractor and for which the Engineer has issued a Notice of No Objection.

1.1.2. Persons

- 1.1.2.1. "Party" means the Employer or the Contractor as the context requires
- "Tenderer or Bidder" means the person submitting a bid/Tender.
- 1.1.2.3. "Contractor" means the person whose Tender has been accepted by the Employer and the legal successors in title to such person, but not (except with the consent of the Employer) any assignee of such person.
- 1.1.2.4. "Contractor's Representative" shall mean a person named by the Contractor in the Contract or appointed from time to time by the Contractor under **Sub-clause 4.3** to act on behalf of Contractor.
- 1.1.2.5. "Designated Contractors" means any of the following whose activities or the works they are engaged to carry out, affect or are affected by the Works, in any way or at any time:
 - a. Contractors, design consultants and utility authorities engaged on the Project from time to time by the Employer;
 - b. Sub-contractors of any tier of the contractors above; provided that the definition shall exclude the Contractor and his subcontractors of any tier in relation to the Works.
- 1.1.2.6. "Other Contractor" means a person employed by or having Contract directly or indirectly with the Employer otherwise than through the Contractor.

- 1.1.2.7. **"Designer"** means the Contractor, or part of the group forming the contractor, person, firm or company or group of companies, or any replacement, carrying out the Design of Works or part thereof.
- 1.1.2.8. **"Employer"** means NOIDA METRO RAIL CORPORATION LIMITED (NMRC), its legal successors and assignees.
- 1.1.2.9. **"Engineer"** means any person nominated or appointed from time to time by the Employer to act as the Engineer for the purposes of the Contract and notified as such in writing to the Contractor.
- 1.1.2.10. **"Engineer's Representative"** means any Assistant of the Engineer appointed from time to time by the Engineer under **Sub-clause 3.3**.
- "Sub-contractor" means any person named in the Contract as a sub-contractor, manufacturer or supplier for a part of the Works or any person to whom a part of the Works has been sub-contracted with the consent of the Employer and the legal successors in title to such person, but not any assignee of such person.

1.1.3. Dates, Times and Periods

- 1.1.3.1. "Commencement Date" means the date on which the Contractor shall commence the Works on the written instructions of the Employer contained in the Notice to Proceed.
- "Contract Period" means the period from the Commencement Date to the end of Defects Liability Period including Integrated Testing and Commissioning and as certified by the Engineer under Clause 7.11 (or as extended under Sub-Clause 10.3).
- 1.1.3.3. **"Day"** means a calendar day, **"Week"** means 7 calendar days, and "Month" means a calendar month and **"Year"** means 365 days.
- 1.1.3.4. **"Effective Date"** means the date on which the Contract comes into force and effect
- 1.1.3.5. "Gazetted Holiday" means every holiday which is observed by Noida Metro Rail Corporation Limited as a gazetted holiday as well as a weekly holiday.
- 1.1.3.6. "General Holiday" means Sunday.
- **"Key Date"** means a date identified as such in the Contract.
- 1.1.3.8. "Milestone" means the completion of a part of the Works or the occurrence of an event identified as such in the Schedule of Milestones.

- 1.1.3.9. **"Milestone Date"** means the date prescribed in the Schedule of Milestone by which a Milestone is to be achieved if Interim Payments for the Cost Centre in which the Milestone is included are not to be suspended.
- 1.1.3.10. **"Stage"** means level of progress of the works identified as such and more particularly described in the Employer's Requirements for which a Key Date for the achievement thereof is stipulated in the Contract.
- 1.1.3.11. **"Time for Completion"** means the time for completing the Works or a section or a part thereof (as the case may be), and passing the Tests on Completion, including Integrated Testing and Commissioning, as stated in the contract, calculated from the Commencement Date.

1.1.4. Tests and Completion

- 1.1.4.1. **"Factory Tests"** means the tests required to be carried out in the factory premises on components, equipment, subsystem, system, etc. during and/or after manufacture in the factory.
- "Integrated Testing" in the contracts where applicable means the programme of tests performed by the Contractor at the direction of the Engineer following satisfactory completion of Contractor's tests on his equipment, sub-systems or system to verify and confirm the compatibility and compliant performance of his equipment/ sub-system/ system with the equipment/ sub-system/ system provided by others.
- 1.1.4.3. "Milestone Certificate" means the certificate to be issued by the Engineer in relation to the achievement or otherwise of Milestones.
- 1.1.4.4. "Performance Certificate" means the certificate issued by the Engineer under Sub-Clause 10.9.
- 1.1.4.5. "Taking Over Certificate" means a certificate issued under Clause 9.1.
- "Tests on Completion" means the tests specified in the Contract and designated as such, including Integrated Testing where applicable and any other such tests as may be agreed by the Engineer and the Contractor, or instructed as a Variation, which are to be carried out before the Works, or any Section are taken over by the Employer.

1.1.5. Money and Payments

- "Contract Price" means the sum stated in the Notice of Award as payable to the Contractor, subject to such additions thereto or deductions therefrom as may be made under the provisions of the Contract.
- 1.1.5.2. **"Cost"** means all expenditure properly incurred (or to be incurred) by the Contractor, whether on or off the Site.

1.1.6. Other Definitions

1.1.5.3.

1.1.5.4.	"Final Payment Certificate" means the payment certificate issued by the Engineer under Sub-Clause 11.9.
1.1.5.5.	"Final Statement" means the agreed statement defined in Sub-Clause 11.10.
1.1.5.6.	"Foreign Currency" means a freely convertible international trading currency in which part of the Contract Price is payable, but not the Local Currency.
1.1.5.7.	"Interim Payment Certificate" means any payment certificate issued by the Engineer under Sub-Clause 11.5, other than the Final Payment Certificate.
1.1.5.8.	"Local Currency" means Indian Rupees.
1.1.6.1.	"Approval or Approved" means Approval in writing including subsequent written confirmation of previous verbal approval.
1.1.6.2.	"Contractor's Equipment" means all machinery, apparatus, appliances, other things of whatsoever nature required for purpose of the Contract, including without limitation, Contractor's Plant and Equipment, or Materials to or from the Site, but does not include Plant, or Materials intended to form or forming part of the Permanent Works.
1.1.6.3.	"Cost Centre" means a group of activities and/ or items of work identified as such in the Pricing Document.
1.1.6.4.	"Materials" means things of all kinds (other than Plant) to be provided and incorporated in the Permanent Works by the Contractor, including the supply-only items (if any), which are to be supplied by the Contractor as specified in the Contract.
1.1.6.5.	"Plant" means the machinery, equipment, and apparatus and the likes, intended to form or forming part of the Permanent Works, including the supply-only items (if any), which are to be supplied by the Contractor as specified in the Contract.
1.1.6.6.	"Section" means a part of the Works specifically designated in the Appendix to Form of Tender as a Section (if any).

"Cost Centre Amount" means the amount apportioned to a Cost

Centre as set out in the Pricing Document, as the same may be revised from time to time in accordance with the Contract.

- "Site" means the places provided by the Employer where the Works are to be executed and to which Plant, Rolling Stock and Materials are to be delivered, and any other place as may be specifically designated in the Contract as forming part of the Site. Site includes Depot, where Rolling Stock will be delivered, tested and commissioned as provided in the Contract.
- 1.1.6.8. **"Scheduled Bank"** means a bank included in the second schedule to the Reserve Bank of India Act, 1934, or modifications thereto.
- 1.1.6.9. "Specification" means the Specification referred to in the contract and any modification thereof or addition thereto, as may from time to time be furnished or approved in writing by the Engineer.
- 1.1.6.10. "Test" means such Tests as are prescribed in the Specifications or by the Engineer or Engineer's Representative, whether performed by the Contractor or by the Engineer or his Representative or any agency acting under the direction of the Engineer.
- 1.1.6.11. **"Variation"** means any alteration and/ or modification to the Employer's Requirements, which is instructed by the Engineer or approved as a variation by the Engineer, in accordance with Clause 12.
- 1.1.6.12. "Works" means the work, both permanent and temporary, or services to be carried out, designed, manufactured, fabricated, delivered to Site, erected, installed, completed, tested, commissioned, (including Integrated Testing and Commissioning) and remedying of any defects, and/ or supplied in accordance with the Contract and include Plant, Rolling Stock and Materials and their accessories.
- 1.1.6.13. "Permanent Works" means the permanent works to be designed and executed in accordance with the Contract.
- 1.1.6.14. "Temporary Works" means all temporary works of every kind (other than Contractor's Equipment) required for the execution and completion of the Works, and the remedying of any defects.
- "Project" means Noida Greater Noida Metro Corridor project

1.2. Interpretation

In the Contract except where the context requires otherwise

- 1.2.1.1. a. words indicating one gender include all genders;
 - b. words indicating the singular also include the plural and words indicating the plural also include the singular and
 - c. "written" or "in writing" means hand-written, type written, printed or electronically made and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these condition.

Terms and expressions not herein defined" shall have the meanings assigned to them in the "Indian General Clauses Act, 1897" or the Indian Contract Act or the Indian Sale of Goods Act or any other applicable Indian Law, as the case may be.

1.3. Law and Language

The contract shall be governed by the Acts and Laws of India, the rules, regulations and bye-laws of the concerned public bodies and authorities. Language of the Contract shall be English.

1.4. Contract Agreement

The Employer and the Contractor shall execute a Contract Agreement, with such modifications as may be necessary to record the Contract. The costs of stamp duties and similar charges imposed by law shall be borne by the Contractor.

1.5. Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the documents, the Engineer shall issue any necessary clarification or instruction to the Contractor, and the priority of the documents shall be as follows:

- a. The Contract Agreement
- b. The Notice of Award
- c. Pre and Post bid proceeds
- d. Form of Tender
- e. BOQ/Payment schedule
- f. NIT
- g. ITT
- h. The Outline Design Specifications (Design Criteria) and Outline Construction Specifications; or any other specification
- i. Drawings
- j. The Employer's Requirements
- k. The Special Conditions of Contract;
- I. The General Conditions of Contract;
- m. The Contractor's Proposal; and
- n. Any other document forming part of the Contract.

1.6. Care of Supply of Construction and/or Manufacture Documents

The Construction and/or Manufacture Documents shall be in the custody and care of the Contractor during the Contract. Unless otherwise stated in the Employer's Requirements, the Contractor shall provide three copies for the use of the Engineer and assistants (as referred to in Sub-Clause 5.3).

The Contractor shall keep on Site one complete set of the documents forming the Contract, the Construction and/or Manufacture Documents, Variations, other communications given or issued from time to time and the documents/samples mentioned in Sub-Clause 5.3. The Employer, the Engineer and their assistants (as referred to in Sub-

Clause 3.3) shall have the right to access these documents all reasonable times.

On discovery of any technical error or defect in a document intended to be used for the purpose of Contract, the Contractor shall promptly give notice to the Engineer of such error or defect.

1.7. Communications

Communications between parties, unless otherwise specified shall be effective only when made in writing. A notice will be effective only when delivered.

1.8. Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor 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 Contractor's Documents, including making and using modifications of them. This licence shall:

- a. apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works,
- entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and
- c. In the case of Contractor'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 Contractor.

1.9. Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Employer's Requirements and other documents made by (or on behalf of) the Employer. The Contractor 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 Contractor, except as necessary for the purposes of the Contract.

1.10. Compliance with Statutes, Regulations and Laws

The Contractor shall familiarise themselves and conform in all aspects with:

- a. the provision of any enactment in India as applicable from time to time
- b. the regulations or bye-laws of any local body and utilities.
- c. The Contractor shall be bound to give all notices required by statute, regulations or by-laws, as aforesaid and to pay all fees and bills payable in respect thereof. The Contractor will

arrange necessary clearances and approvals before the Work is taken up.

Ignorance of Rules, Regulations and Bylaws shall not constitute a basis for any claim at any stage of work

The Contractor shall indemnify the Employer against all penalties and liabilities of every kind of breach of any such enactment, laws, regulations, bye-laws or rules.

1.11. Joint and Several Liability

If the Contractor is (under applicable Laws) a joint venture, consortium, or other incorporated grouping of two or more Persons:

- a. these Persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;
- these Persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and
- c. the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

2. The Employer

2.1. General Obligations

The Employer shall provide the Site/area of works and shall pay the Contractor in accordance with the Contract.

2.2. Access to and Possession of the Site

The Employer shall grant the Contractor right of access to, and or possession of, the Site progressively for the completion of Works. Such right and possession may not be exclusive to the Contractor. The Contractor will draw/modify the schedule for completion of Works according to progressive possession/right of such sites.

If the Contractor suffers delay from failure on the part of the Employer to grant right of access to, or possession of the Site, the Contractor shall give notice to the Engineer in a period of 28 days of such occurrence. After receipt of such notice the Engineer shall proceed to determine any extension of time to which the Contractor is entitled and shall notify the Contractor accordingly.

For any such delay in handing over of site, Contractors will be entitled to only reasonable extension of time and no monetary claims whatsoever shall be paid or entertained on this account.

2.3. Permits, Licences or Approvals

It shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contract. However, the Employer may (where he is in a position to do so) provide reasonable assistance to Contractor at the request and cost of the Contractor in getting Permits, License or Approvals required during the Contract.

The rendering of such assistance by the Employer shall not be interpreted as a pretext by the Contractor as condoning of any delay or non-performance of any of the Contractors obligations. The following-up of all such applications shall be the responsibility of the Contractor.

2.4. Assignment by Employer

The Employer shall be fully entitled without the consent of the Contractor, to assign the benefit of the part thereof and any interest therein or there under to any third party.

3. The Engineer

3.1. Appointment of Engineer

The Employer shall notify the Contractor in writing of the appointment and identity of the Engineer and of any replacement from time to time.

3.2. Duties and Authorities of Engineer

The Engineer shall carry out the duties specified in the Contract. The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority specified in, or necessarily to be implied from the Contract. If the Engineer is required to obtain the specific approval of the Employer before exercising such authority, such requirements shall be as stated in Special Conditions of Contract. Any requisite approval shall be deemed to have been given by the Employer for any such authority exercised by the Engineer.

The Engineer shall have no authority to relieve the Contractor of any of his duties, obligations, or responsibilities under the Contract. Any proposal, inspection, examination, testing, consent, approval or similar act by the Engineer (including absence of disapproval) shall not relieve the Contractor from any responsibility, including responsibility for his errors, omissions, discrepancies, and non-compliance with Sub-Clause 5.4.

The Engineer shall copy to the Employer all communications given or received by him in accordance with the Contract.

3.3. Engineer's

Authority to

Delegate

The Engineer, may from time to time assign and delegate authority to Engineer's representatives/assistants and may also revoke such assignments and delegations. The delegation or revocation shall be in writing and shall be applicable only after same has been notified in writing to the Contractor.

Each Assistant to whom duties have been assigned or authority has been delegated, shall be authorized to issue instructions to the Contractor to the extent defined by the delegation. Any determination, approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test or similar act by an assistance shall have the same effect as though the act had been an act of the Engineer. However:

- Any failure to disapprove any Plant, Goods, Material, design and workmanship shall not prejudice the right of the Engineer to reject such Plant, Goods, Material, design and workmanship;
- b. if the Contractor questions any determination or instruction of an assistant of the Engineer, the Contractor may refer the matter to the Engineer within three days of such decision having been given, who shall confirm, reverse or vary such determination or instruction.

3.4. Engineer's Instructions

The Contractor shall comply with instructions given by the Engineer in accordance with the Contract.

The Contractor shall give reasonable notice to the Engineer of any instruction, which he considers necessary for the execution of the Works, to enable the Engineer to issue the instruction so that progress of the Works is not delayed. The Engineer shall not, however, be bound to issue any instruction which, in his opinion, is unnecessary.

No act or omission by the Engineer or the assistants to the Engineer in the performance of any of the Engineer's duties or the exercise of any of the Engineer's powers under the Contract shall, in any way, operate to relieve the Contractor of any of the duties, responsibilities, obligations or liabilities imposed upon the Contractor by any of the provisions of the Contract.

3.5. Engineer to Attempt Agreement

When the Engineer is required to determine value, cost or extension of time, he shall consult with the Contractor and the Employer in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall determine the matter fairly, reasonably and in accordance with the Contract, with the approval of Employer.

4. The Contractor

4.1. General Obligations

The Works as completed by the Contractor shall be wholly in accordance with the Contract and fit for the purposes for which they are intended, as defined in the Contract. The Works shall include any work which is necessary to satisfy the Employer's Requirements, the Contractor's Proposal and Schedules, or is implied by the Contract, or arises from any obligation of the Contractor, and all works not mentioned in the Contract but which may be inferred to be necessary for stability, or completion, or the safe, reliable and efficient operation of the Works.

The Contractor shall design, if in the scope of work, manufacture, execute, install, complete, test (including Integrated Testing in case of rolling stock and signaling contracts) and commission, the Works, including providing Construction and/or Manufacture Documents, within the Time for Completion and shall remedy any defects within the Contract Period. The Contractor shall provide all superintendence, labour, Plant, Materials, Contractor's Equipment, Temporary Works and all other things, whether of a temporary or permanent nature, required in and for such design, works and remedying of defects.

Before commencing design, if in the scope of the contract, the Contractor shall satisfy himself regarding the Employer's Requirements (including design criteria and calculations, if any) and the items of reference mentioned in Sub-Clause 4.8.

The Contractor shall give notice to the Engineer of any error, fault or other defect in the Employer's Requirements or such items of reference. After receipt of such notice, the Engineer shall determine whether Clause 12 shall be applied and shall notify the Contractor accordingly.

The Contractor shall take full responsibility for the adequacy, stability and safety of all Site operations, of all methods of construction, manufacture, and of all the Works, irrespective of any approval or consent by the Engineer.

The Contractor shall be deemed to have satisfied himself before submitting his tender as to the correctness and sufficiency of his Tender to cover all his risks, liabilities and obligations set out in or implied by the Contract and all matters and things necessary for the proper design, manufacture, execution, installation, completion, testing, Integrated Testing whichever is in the scope of the contract, commissioning of the Works and remedying of the Defects.

The Contractor acknowledges responsibility for ascertaining and securing at his own cost:

- a. conditions bearing upon the proper transportation, disposal, handling and storage of materials (including but not limited to hazardous toxic substances and excavated materials);
- b. availability of electricity, water and gas;
- c. availability of skilled manpower;
- d. the character of equipment and facilities needed preliminary to and during the manufacture, installation, execution, testing, Integrated Testing, and commissioning of the Works and remedying of any defects;

- e. the protection of the environment and adjacent structures which will be necessary preliminary to and during the manufacture, installation, execution, testing, Integrated Testing, and commissioning of the Works and remedying of any defects;
- f. the location of and the authorisation required for and the means of diversion of any services and facilities required for the purposes of the Works.

The Contractor shall whenever required by the Engineer, submit details of the arrangement and methods which the Contractor proposed to adopt for the execution of the Works. No alteration to these arrangements or methods shall be made without the approval of the Engineer.

4.2. Performance security

4.2.1. Amount

Within 30 days of receipt of the Notice of Award, the successful Tenderer shall furnish Performance Security in the form of a bank guarantee from a branch in India of a scheduled foreign bank or from a scheduled commercial bank in India acceptable to the Employer for an amount of ten per cent of the Contract value in types and proportions of currencies in which the Contract Price is payable The approved form provided in the "Instructions to Tenderers documents or any other form approved by the Employer shall be used for Bank Guarantee. The Bank Guarantee shall be valid up to 6 months beyond the Defect Liability Period. In case the contract value exceeds beyond 25% of the original contract value, the contractor shall have to submit additional performance security.

4.2.2. Forfeiture

Failure of the successful Tenderer to furnish the required Performance Security shall be a ground for the annulment of the award of Contract and forfeiture of the tender security.

4.2.3. Release

The whole 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 Contractor.

- i. On completion of the entire work, one half of the Performance Security shall be refunded to the Contractor, on issue of Taking over Certificate by the Engineer, in accordance with Sub-Clause 9.1 and 9.2 of these conditions. This shall not relieve the Contractor from his obligations and liabilities, to make good that may be detected during the Defects Liability Period.
- ii. The balance amount shall become due and shall be paid to the on Contractor on signing of the Performance Certificate after the expiry of the final Defects Liability Period as per Clause 10.9 of these conditions.

4.2.4. Guarantees and Warranties

Within 30 days of the date of Notice of Award of the Tender, the Contractor shall submit to the Employer:

- a. An Undertaking in the approved format from a parent company, the identity of which shall have been submitted in writing to the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection.
- b. A written Guarantee in the approved format from a parent company, the identity of which shall have been submitted in writing to the Employer prior to acceptance of the Tender and against which the Employer shall have raised no objection.
- c. A warrantee in the approved format from the Contractor.

In the event that the Contractor shall comprise two or more members, corporations acting in partnership, joint venture, consortium or otherwise each such member or corporation shall submit a parent company Undertaking and Guarantee.

Notwithstanding any other provision of the Contract:

- a. submission by the Contractor of the requisite Performance security, parent company Undertakings and written Guarantees shall be condition precedent to the Contractor's entitlement to any payment, under the Contract; and
- b. failure by the Contractor to provide a Performance security or parent company Undertakings or parent company Guarantees shall entitle the Employer either to suspend the Works or to terminate the Contract forthwith by notice in writing to that effect, notwithstanding that the Contractor may have been permitted to proceed with the Works, and the Contractor shall not be entitled to any compensation whatsoever as a consequence of such suspension or termination.

4.3. Representation on Works

Unless the Contractor's Representative is named in the Contract, the Contractor shall, within 14 days of Notice to Proceed, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint. The Contractor shall not revoke the appointment of the Contractor's Representative without the prior consent of the Engineer. The Contractor's Representative so nominated shall have full authority to act on behalf of the Contractor. The Contractor's Representative shall give his whole time to directing the preparation of the Construction and/or Manufacture Documents and the execution of the Works. The Contractor's Representative shall receive (on behalf of the Contractor) all notices, instructions, consents, no objection certificate approvals, certificates, determinations and other communications under the Contract. Whenever the Contractor's Representative is to be absent from the Site, a suitable replacement person shall be appointed, with prior consent of Engineer

Failure on part of the Contractor to comply with these provisions shall constitute a breach of Contract leading to action under Sub-Clause 13.2

The Contractor's Representative may delegate any of his powers, functions and authorities to any competent person, and may at any time revoke any such delegation. Any such delegation or revocation shall be in writing and shall not take effect until the Engineer has given prior consent thereto. The Contractor's Representative and such persons shall be fluent in the language of day to day communication and the Contractor shall be bound by and fully liable for the acts or omissions of the Contractor's Representatives or any of his employees and/or delegates, agents or nominees.

4.4. Facilities for and co-ordination with Others.

The Contractor shall not impede and shall afford all necessary facilities, access and/or services to the Employer, Engineer, Designated Contractors, utility undertakings, other relevant authorities and other contractors (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:

- a. The Contractor 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).
 - complies with any direction which the Engineer may give for the integration of the design of the Works 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;
 - iii. participate in Integrated Testing and Commissioning of the system with Designated Contractors and demonstrate to the satisfaction of the Engineer that the Works have been designed and constructed in a manner compatible with the works of Designated Contractors.

b. The Contractor shall undertake design co-ordination with other contractors who are carrying out works forming part of the Project as described in the Employer's Requirements. At the end of each such co-ordination period, the Contractor and the other contractor 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. A copy of this joint written statement shall be provided to the Engineer 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 Engineer, the Engineer shall be entitled to suspend any review or further review of the Contractor's or the other contractor's design submissions. Such suspension shall not be grounds for the Contractor to claim nor shall be entitled to receive an extension of time or additional payments.

The Contractor shall provide within the Site, staging, storage and unloading areas for the use of Designated Contractors, if any, who are undertaking track work, fare collection system, supply, testing and commissioning of Rolling Stock, escalators, lifts, signaling and telecommunications and traction power installation works, etc. Separate locations shall be provided for each such contractor. The exact size and location of these staging, storage and unloading areas, and the commencement date shall be coordinated and agreed during the design interface period with each Designated Contractor.

c. Any other contract which depends for its execution on the Contract or upon which the Contract is dependent for its own execution shall be identified by the Engineer as a "Designated Contract". The Contractor shall provide attendance on Designated Contractors in accordance with the Employer's Requirements and as instructed by the Engineer. The identity of the contractor for a Designated Contract may not be known before the execution of the Contract but this shall not be a ground for the Contractor to object to the subsequent appointment of a Designated Contractor.

The Contractor shall in accordance with the requirements of the Engineer co-ordinate his own Works with that of Designated Contractors through Co-ordinated Installation Programme (CIP) stated in the Employer's Requirements, or as the Engineer may require, and shall afford the Designated Contractors all reasonable opportunities for carrying out their works.

d. The Contractor shall afford all reasonable opportunities, for carrying out their work, to other contractors employed by the Employer and their workmen respectively and the workmen of the Employer who may be engaged on or near the Site of any work, ancillary to the Works, but, not included in the Contract and shall not cause them inconvenience.

- e. If the Contractor shall suffer delay by reason of failure by any Designated Contractor to meet the specified installation interfacing and co-ordination, completion dates, which delay shall be caused otherwise than by fault of the Contractor, or, if compliance with sub-clause (f) herein shall involve the Contractor in delay beyond that which could be reasonably foreseen by an experienced contractor at the time of tender, then the Engineer shall take such delay into account in determining any extension of time to which the Contractor is entitled under the Contract.
- f. It shall be the responsibility of the Contractor to ensure that the full extent of the Works under the Contract and the works to be carried out by Designated Contractors within the Works or, in, on, under, through and over the Site are co-ordinated and integrated in their design, manufacture, installation and construction. Such responsibility shall neither be mitigated nor in any other way affected by virtue of similar responsibilities being placed on other contractors.

The Contractor shall be deemed to have made adequate allowance in the Contract Price and in the Works Programme in respect of these obligations.

If any act or omission of the Contractor whether directly or indirectly results in the delay in the execution of the works of a Designated Contractor, the Contractor, in addition to his liability in respect of liquidated damages if they become due, shall pay to the Employer, or the Engineer may deduct from Interim Payment Certificates such amount as the Engineer shall have certified in respect of additional payments or costs to the Designated Contractor in respect of such delay.

4.5. Sub-contractors

- The Contractor shall not sub-contract the whole of the Works.
- 4.5.2. Unless otherwise stated in the Special Conditions of Contract:
 - a. the Contractor shall not be required to obtain consent for purchases of Materials which are in accordance with the makes specified in the Contract or provisions of labour or for the subcontracts for which the Sub-contractor is named in the Contract;
 - b. the prior consent of the Engineer shall be obtained for other proposed Sub-contractors;
 - c. not less than 28 days before the intended date of each Subcontractor commencing work, the Contractor shall notify the Engineer of such intention; and the Contractor shall give fair and reasonable opportunity for contractors in India to be appointed as Sub-contractors.

- 4.5.3. The Contractor shall be responsible for observance by all Subcontractors of all the provisions of the Contract. The Contractor shall be responsible for the acts or defaults of any Sub-contractor, his representatives or employees, as fully as if they were the acts or defaults of the Contractor, his representatives or employees and nothing contained in Sub-clause (a) of clause 4.5 shall constitute a waiver of the Contractor's obligations under this contract. The Contractor shall provide to the Engineer of all the Sub Contracts including terms, conditions and pricing. The Contractor shall endeavor to resolve all matters and payments amicable and speedily with the sub-contractors.
- 4.5.4. The contractor shall ensure that their sub-contractors, material/equipment suppliers, consultants and other agencies deployed by them in connection with execution of the contract do not make any claim or raise any dispute before NMRC. For this, necessary provision is to be made in the agreement between contractor and their subcontractors/consultants/other agencies. Similarly, the agreement should also incorporate the provision of dispute resolution. An undertaking in the following format shall be submitted by contractor in respect of each such agency: -

"Name	of
work	
In connection with above work, M/s	
has/is engaging M/s,	as sub-contractor (or
consultant or material/equipment supplier or serv	ice provider). For this,
the terms and conditions of agreement include ne	ecessary provisions for
resolution of dispute if any arising between contrac	tor and sub-contractor.

It is confirmed by the sub-contractor that any claim/dispute arising out of the above work shall be resolved in terms of agreement and shall not be raised before NMRC and also shall not make any claim against NMRC before any forum/court.

Signature of Contractor

4.6. Assignment of Contractor's and Sub-contractor's Obligations

The Contractor shall not assign a right or benefit under the Contract without first obtaining Employer's prior written consent, otherwise than by:

- a. a charge in favour of the Contractor's bankers of any money due or to become due under the Contract, or
- assignment to the Contractor's insurers (in cases where the insurers have discharged the Contractor's loss or liability) of the Contractor's right to obtain relief against any other party liable.

If a Subcontractor's obligations extend beyond the expiry date of Defects Liability Period then the Contractor shall assign the benefits of such obligations to the Employer. In the event that a sub-contractor of any tier provides to the Contractor or any other sub-contractor a warranty in respect of Plant, Materials or services supplied in connection with the Works, or undertakes a continuing obligation of any nature whatsoever in relation to such Plant, Materials or services (including without limitation an obligation to maintain stocks of spare parts) extending for a period exceeding that of the Defects Liability Period or where there is more than one Defects Liability Period exceeding that of the latest Defects Liability Period, and if the Engineer so directs in writing within 21 days of the expiry of the Defects Liability Period or the latest Defects Liability Period (as the case may be), the Contractor shall immediately assign or obtain the assignment of the benefit of such warranty or obligation to the Employer or at the direction of the Employer, to any third party referred to in Sub-Clause 2.4.

4.7. Compensation for Breach

Any breach of **Sub-clauses 4.5 to 4.6** shall entitle the Employer to rescind the contract under **Clause 13.2** of these conditions and also render the Contractor liable for loss or damage arising due to such cancellation.

4.8. Setting Out

4.8.1. Accurate Setting Out

The Contractor shall be responsible for

- a. the accurate setting out of the Works in relation to the original points, lines and levels of reference given by the Engineer in writing
- b. the correctness of position, levels, dimensions and alignments of all parts of the Works
- c. the provisions of all necessary instruments, equipment, apparatus and labour in connection with the foregoing responsibilities
- d. Carefully protecting and preserving all bench marks, sight rails, pegs and other things used in setting out the Works

The checking of any setting-out or of any line or level by the Engineer shall not in any way relieve the Contractor of his responsibility for the accuracy or correctness thereof and the Contractor shall carefully protect and preserve all bench-marks, sight-rails, pegs and other things used in setting out the Works.

4.8.2. Errors in Setting out

4.9. Site Data

If at any time during the execution of the Work, an error appears in the positions, levels, dimensions or alignment of any part of the Works, the Contractor on being required to do so by the Engineer shall, at Contractor's cost, rectify such error to the satisfaction of the Engineer.

The Employer shall have made available to the Contractor with the Tender documents such relevant data in Employer's possession on hydrological and sub-surface conditions. The accuracy or reliability of the data/studies/reports and of any other information supplied at any time by the Employer or Engineer is not warranted with respect to the viability of his design and execution of Works and the Contractor shall be responsible for interpreting all such data. The Contractor shall conduct further investigations considered necessary by him at his own cost and any error, discrepancies if found in Employer's data at any stage will not constitute ground for any claim for extra time and costs.

The Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works.

The Contractor shall also be deemed to have inspected and examined the Site, its surroundings, the above data and other available information with respect to the viability of his design and execution of Works and to have satisfied himself before submitting the Tender, as to all the relevant matters including without limitation:

- a. the form and nature of the Site, including the sub-surface conditions;
- b. the hydrological and climatic conditions;
- the extent and nature of the work, Plant, and Materials necessary for the execution and completion of the Works and the remedying of any defects;
- d. the applicable laws, procedures and labour practices
- e. The Contractor's requirement for access, accommodation, facilities, personnel, power, transport and other services.
- f. the risk of injury or damage to property adjacent to the Site and to the occupiers of such property or any other risk.

The Contractor shall be deemed to have satisfied himself as to the correctness and sufficiency of the Contract Price. Unless otherwise stated in the Contract, the Contract Price shall cover all his obligations under the Contract and all things necessary for the proper design, execution and completion of the Works, testing and commissioning (including Integrated Testing and Commissioning) and remedying of any

4.11. Access Route

Amount

Sufficiency of

defects.

accepted Contract

4.10.

The Contractor shall be deemed to have satisfied himself as to the suitability and availability of the access routes he chooses to use. The Contractor shall (as between the parties) be responsible for the maintenance of access routes. The Contractor shall provide at his cost signs or directions, which he may consider necessary or as instructed by Engineer for the guidance of his staff, labour and others. The Contractor shall obtain any permission concessions and related easement right that

may be required from the relevant authorities for the use of such routes, signs and directions.

The Employer will not be responsible for any claims which may arise from the use or otherwise of any access route. The Employer does not guarantee the suitability or availability of any particular access route and will not entertain any claim for any non-suitability or non-availability for continuous use during construction of any such route.

4.12. Rights of way and Facilities

The Employer will acquire and provide land for Permanent Works and right of way (within NMRC's land) for access thereto over routes established by the Contractor. The Contractor shall bear all cost and charges for special or temporary rights of way which he may require including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facility outside the Site which he may require for the purpose of the Works the Employer reserves the right to make use of these service roads/rights of way for itself or for other Contractors working in the area, as and when necessary without any payment to the Contractor.

4.13. Programmes

The Contractor shall submit a detailed programme to the Engineer after receipt of the Notice of Award not later than 28 days from the date of receipt of Notice of Award. The Contractor shall also submit a revised programme whenever the Engineer finds that the previous programme is inconsistent with actual progress or with the Contractor's obligations.

Each programme shall include the following:

- a. the order in which the Contractor proposes to carry out the Works (including each stage of design, procurement, manufacture, delivery to Site, construction, erection, testing and commissioning),
- b. all major events and activities in the production of Construction or Manufacture Documents; and
- c. the sequence of all tests specified in the Contract including Integrated Testing and Commissioning.

Unless otherwise stated in the Contract, the programmes shall be developed using precedence networking techniques, showing early start, late start, early finish and late finish dates.

No significant alteration to the programmes, or to such arrangements and methods, shall be made without obtaining consent of the Engineer. If the progress of the Works does not conform to the programmes, the Engineer may instruct the Contractor to revise the programmes, showing the modifications necessary to achieve completion within the Time for Completion.

Consent by the Engineer to Programmes shall not relieve the Contractor of any of his responsibilities or obligations under the Contract. If the Programmes indicate that a Key Date has not, or will not be met, it shall not, by itself entitle the Contractor to an extension of time in relation to such Key Date.

4.14. Progress Reports

The Contractor shall submit to the Engineer by the end of each calendar month his Monthly Progress Report which shall, amongst other things, highlight actual or potential departures from the Works Programmes and/or the Design Submission Programme and state the measures which the Contractor proposes to take in order to make good or reduce any delay.

If requested by the Engineer, the Contractor shall submit to the Engineer, at weekly intervals, a written report as to the progress of off-Site manufacture of Plant, Rolling Stock and Materials.

The Contractor shall also submit to the Engineer such other reports as may reasonably be required by him or any relevant authority or public body.

4.15. Contractor's Equipment

- 4.15.1. All Contractor's Equipment and Temporary Works provided by the Contractor shall, when brought on to the site, be deemed to be exclusively intended for execution of the Works and not be removed without the consent in writing of the Engineer. Such consent shall not be unreasonably withheld or delayed.
- 4.15.2. Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and his unused materials.
- 4.15.3. The Employer shall not, at any time, be liable for the loss or damage to any of the Constructional Plant, Temporary Works or materials save as mentioned in **Clauses 14.1**
- 4.15.4. In respect of any Constructional Plant which the Contractor shall have imported for the purpose of the Works, the Employer may assist the Contractor, where required, in procuring any necessary Government consent for re-export of the same after the completion of the Works.
- 4.15.5. The Employer may assist (but is not obligated to) the Contractor, where required, in obtaining clearance through the Customs of Constructional Plant, materials and other things required for the Works.

4.16. Safety of Works

The Contractor shall throughout the execution of the Works including the carrying out of any testing, commissioning (including Integrated Testing and Commissioning), or remedying of any defect:

- take full responsibility for the adequacy, stability, safety and security of the Works, Plant, Rolling Stock, Contractor's Equipment, Temporary Works, operations on Site and methods of manufacture, installation, construction and transportation;
- b. have full regard for the safety of all persons on or in the vicinity of the Site (including without limitation persons to whom access to the Site has been allowed by the Contractor), comply with all relevant safety regulations, including provision of safety gear, and insofar as the Contractor is in occupation or otherwise is using areas of the Site, keep the Site and the Works (so far as the same are not completed and occupied by the Employer) in an orderly state appropriate to the avoidance of injury to all persons and shall keep the Employer indemnified against all injuries to such persons.

c. provide and maintain all lights, guards, fences and warning signs and watchmen when and where necessary or required by the Engineer or by laws or by any relevant authority for the protection of the Works and for the safety and convenience of the public and all persons on or in the vicinity of the Site; and

where any work would otherwise be carried out in darkness, ensure that all parts of the Site where work is being carried out are so lighted as to ensure the safety of all persons on or in the vicinity of the Site and of such work.

Contractor is required to take note of all the necessary provisions in Employer's Safety, Health and Environment Manual (SHE Manual) and the Contractor's price shall be inclusive of all the necessary costs to meet the prescribed safety standards. In the case, the Contractor fails in the above, the Employer may provide the necessary arrangements and recover the costs from the Contractor.

4.17. Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to avoid injury, damage and nuisance to people and property resulting from pollution, noise and other results of his operations. The Contractor shall ensure that air emissions, surface discharges and effluent from the Site during the Contract Period shall not exceed the values indicated in the Employer's Requirements and shall not exceed the values prescribed by law. The Contractor shall conform to the Employer's Requirements and shall indemnify the Employer against any liability or damages or claims arising out of his operations. The Contractor shall be responsible and liable for any stoppage, closure or suspension of the works due to any contravention of statutory requirements relating to the protection of the environment and shall indemnify and keep indemnified the Employer in this regard.

The Contractor's Site Environmental Plan shall be developed from his Employer's Safety. Health and Environmental Manual (SHE Manual), as per the Employer's Requirements and Special Conditions of Contract. Nothing extra shall be payable to the Contractor on this account and his Tender price shall be inclusive of expenditure required to be incurred for working as per SHE Manual.

4.18. Electricity Water and Gas

The Contractor shall be responsible for making his own arrangements at his own cost to obtain supply of water, electricity or gas for the Works. The Employer where feasible may at its discretion assist the Contractor in this respect.

4.19. Tools, Plants And Equipment Supplied By The Employer

Except for any specific item mentioned in the Special Conditions of Contract or in Employer's Requirements, the Contractor shall provide all tools, plants and equipment for the Works. In respect of such exceptional tools, plants or equipment committed to be provided by the Employer under terms and conditions specified in the Special Conditions of Contract, the Contractor shall take all reasonable care and shall be responsible for all damages or loss caused by him, his representatives, sub-contractors or his workmen or others while they are in his charge.

On completion of the Works, the Contractor shall hand over the unused balance of the tools, plants and equipment to the Employer in good order

and repair, fair wear and tear expected, and shall be responsible for any failure to account for the same or any damage done thereto.

The decision of the Engineer as to the amount recoverable from the Contractor on this account shall be final and binding.

4.20. Employer's Materials & Excavated Materials

- i. Except for items mentioned in the Special Conditions of Contract, the Contractor shall provide all materials for the Works. Material if any, to be provided by Employer will be done only in a phased manner as per pre-approved program, against a Bank Guarantee for the value of the Material and at terms and conditions for issue, upkeep, usage, return and recovery of such Materials as specified in Special Conditions of Contract.
- ii. Unless otherwise specified, the Contractor shall not sell or remove, except for the purpose of this Contract, sand, stone, clay, ballast, earth, rock or other materials obtained from the work Site and these shall be the property of the Employer and will be disposed off only in the manner instructed by him.

4.21. Sheds, Stores, Yards

It shall be the responsibility of the Contractor to provide at his own expense the required sheds, store houses, and yards for both Permanent and Temporary Works and provide free access to the Engineer and the Engineer's Representative who will have right of inspection including that of instructing the Contractor to remove a particular material from the stores and not to use the same on the Works.

4.22. Temporary Works

All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor at his cost and subject to the consent of the Engineer shall be removed by Contractor at his own expense when they are no longer required and in such manner as the Engineer shall direct. In case the Contractor fails to remove the temporary works on completion the Engineer is authorized to get the same removed and recover the cost there of from the Contractor.

4.23. Unforeseeable Physical Conditions

In this Clause "physical conditions" means natural physical conditions, which the Contractor encounters at Site while executing the Works excluding climatic conditions.

If, during the execution of the Works, the Contractor shall encounter physical conditions, which, in his opinion, could not have been reasonably foreseen by an experienced Contractor, the Contractor shall forthwith give written notice thereof to the Engineer and if, in the opinion of the Engineer, such conditions could not have been reasonably foreseen by an experienced Contractor, then the Engineer shall certify and the Employer shall pay reasonable additional cost to which the Contractor shall have been put by reason of such conditions in the following cases:

a. for complying with any instruction which the Engineer may issue to the Contractor in connection therewith, and

b. for any proper and reasonable measures approved by the Engineer which the Contractor may take in the absence of specific instructions from the Engineer, as a result of such conditions or obstructions being encountered.

The decision of the Engineer as to the additional cost shall be final and binding.

4.24. Access for Engineer

The Contractor shall allow the Engineer or the Engineer's Representative or any other person authorised by him, at all times access to the Site, and to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured, fabricated and/or assembled for the Works. The Contractor shall ensure that sub contracts if any shall contain provisions entitling the Engineer or any person authorised by him to have such access.

4.25. Access Road and Way Leaves

Providing access roads/ way leaves to the site will be Contractor's responsibility.

4.26. Contractor to keep Site Clear

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

On completion of the works, the Contractor shall clear away and remove from site all Constructional Plant, surplus material and Temporary Works. He should leave the whole of the site and Works in a clean, tidy and workman like condition to the satisfaction of the Engineer.

On completion of Work the Contractor shall also clear away the labour camps, hutments and other related installations and restore the land to its original condition to the satisfaction of the Engineer within 45 days of the physical completion of Work. The cost on account of delay in return of land and reinstatement of original condition within the stipulated time as determined by Engineer will be recovered from the Contractor's dues.

No final payment in settlement of the accounts for Works shall be made or held to be due to the Contractor, till, in addition to any other condition necessary for such final payment, site clearance and clearances of labour camps etc. shall have been effected by him. Such clearance may be made by the Engineer through any other agency at the expense of the Contractor in the event of the Contractor's failure to comply with this provision within 7 days after receiving notice to that effect from the Engineer. All expenses on such removal / clearance shall be debitable to the Contractor as loans due from the Contractor to the Employer, and the Employer shall be competent to recover the same from Contractor's on-account or final bills, or from Performance Security amount or from any other amount payable to the Contractor in any other Contract.

4.27. Security of the Site

The Contractor shall be wholly responsible for security of site and Works. Unless otherwise stated in Special Conditions of Contract

- a. the Contractor shall be responsible for keeping unauthorised persons off the Site; and
- Authorized persons shall be limited to the Employees of the Contractor, Subcontractor or persons authorized by the Engineer.

4.28. Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional area which may be provided to the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep his personnel and equipment within the Site and such additional areas, and to keep and prohibit them from encroaching on adjacent land.

4.29. Discoveries

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest, in addition to oil and other minerals discovered on the Site shall be the absolute property of the Government of India and the Contractor shall take all the necessary precautions to prevent its workmen or its sub-contractors' workmen or any other person from removing or damaging any such article or thing and shall immediately upon discovery thereof, acquaint the Engineer of such discovery and carry out the instructions of the Engineer

4.30. Publicity

The Contractor 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 Site, the Works, 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, Contractor's Works Areas, or off-Site place of manufacture, or storage except with the permission, in writing, of the Employer. The Contractor shall ensure that his sub-contractors 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 Contractor from complying with any statutory provision in regard to the taking and publication of photographs.

4.31. Disclosure Of Relationship

If the Contractor or any partner of the Contractor or Director of the Contractor's company is closely related to any of the Officers of the Employer or the Engineer, or alternatively, if any close relative of an officer of the Employer or the Engineer has financial interest / stake in the Contractor's firm, the same shall be disclosed by the Contractor 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 Contractor. The Contractor shall note that he is prohibited from developing such interest during the Contract period.

4.32. Use Of Explosives

Explosives if required on the Work shall be used by Contractor only with prior Approval of the Engineer and in the manner and to the extent permitted by him. The Contractor shall be responsible for safe upkeep of such explosives in a special magazine as per the law on explosives as well as for taking all the precautions in the usage of the explosives with proper license and at Contractor's cost, sole risk and responsibility. The Contractor shall hold the Employer harmless and indemnify for the above.

4.33. Corrupt or fraudulent practices

4.33.1. Definition

The Employer requires that the Bidders/Contractors, their designated contractors and/or their agents observe the highest standards of ethics during Tendering and execution of this Contract. In pursuance with this policy, the Employer:

- a. defines, for the purpose of these provisions, the terms set forth below as follows:
 - "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to Employer, Engineer or any of their employees, influence in the procurement process or in Contract execution; and
 - ii. "fraudulent practice" means a concealment or misrepresentation of facts in order to influence a procurement process or the execution of a 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 noncompetitive levels and to deprive the Employer of the benefits of free and open competition.
 - iii. Breach of any of the contract condition during execution.
- Will reject the Tender for the Work or rescind the Contract if the Employer determines that the Bidder/Contractor has engaged in corrupt or fraudulent practices.
- c. Will declare a Contractor ineligible, either indefinitely or for a stated period of time, to be awarded a Contract/s if he at any time determines that the Contractor has engaged in corrupt or fraudulent practices in competing for, or in executing the Contract.
- d. The successful Bidders/Contractors shall apprise through Chief Vigilance Officer, NMRC of any fraud/suspected fraud as soon as it comes to their notice.

4.33.2. Compensation to Contractor on rescission of Contract

In the event of rescission of Contract under **Sub-clause 4.33.1**, the Contractor shall not be entitled to any compensation whatsoever, except for the work done up to the date of rescission.

5. Design

The clauses under the head 'Design' are applicable only in 'Design & Build' contracts and in case of 'Part Design & Build' contracts, these are applicable only to part of the contract in which the design is the responsibility of the contractor.

5.1. General Obligations

The Contractor shall design and provide all necessary specifications for the Works in accordance with the site plans and Employer's requirements. Any design detail, plan, drawing, specifications, notes, annotations, and information required shall be provided in such sufficient format, details, extent, size and scale and within such time as may be required to ensure effective execution of Works and/or as otherwise required by the Engineer.

The Contractor holds himself, and his designers as having the experience and capability necessary for the design. The Contractor undertakes that the designers shall be available to attend discussions with the Engineer at all reasonable times during the Contract Period.

The designer shall be the same entity as proposed by the Contractor at the time of pre-qualification, unless otherwise approved by the Employer. The Contractor shall furnish Designer's Warranty in the format approved by the Employer.

5.2. Contractor's warranty of design

- The Contractor shall be fully responsible, for the suitability, adequacy, integrity, durability and practicality of the Contractor's proposal.
- b. The Contractor warrants that the Contractor's Proposals meet the Employer's Requirements and is fit for the purpose thereof. Where there is any inadequacy, insufficiency, impracticality or unsuitability in or of the Employer's Requirements or any part thereof, the Contractor's Proposal shall take into account, address or rectify such inadequacy, insufficiency, impracticality or unsuitability at Contractor's own cost.
- c. The Contractor warrants that the Works have been or will be designed, manufactured, installed and otherwise constructed and to the highest standards available using proven up-to-date good practice
- d. The Contractor warrants that the Works will, when completed, comply with enactments and regulations relevant to the Works
- e. The Contractor warrants that the design of the Works and the manufacture of plant have taken or will have taken full account of the effects of the intended manufacturing and installation methods, Temporary Works and Contractor's Equipment
- f. The Contractor shall also provide a guarantee from the Designer for the design for suitability, adequacy, practicality of design for Employer's Requirements
- g. The Contractor shall indemnify the Employer against any damage, expense, liability, loss or claim, which the Employer might incur, sustain or be subject to arising from any breach of the Contractor's design responsibility and/or warranty set out in this Clause.

- h. The Contractor further specifies and is deemed to have checked and accepted full responsibility 'for the Contractor' s Proposal and warrants absolutely that the same meets the Employer's Requirements:
 - i. Notwithstanding that such design may be or have been prepared, developed or issued by the Employer, any of Contractor's consultants, his sub-contractors and/or his qualified personnel/persons or cause to be prepared, developed or issued by others.
 - Notwithstanding any warranties, guaranties and/or indemnities that may be or may have been submitted by any other person.
 - iii. Notwithstanding that the same have been accepted by the Engineer

The Contractor shall be fully responsible for the Plants, Materials, goods, workmanship, preparing, developing and coordinating all design Works to enable that part of the Works to be constructed and/or to be fully operational in accordance with the Contract's requirements.

Apart from the Contractor, the above warranty shall also be applicable for his designer. This warranty shall be a part of his sub contract with the designer and should be made available at the time of signing of the Agreement.

No claim for additional payment or extension of time shall be entertained and/or the Contractor shall not be relieved from any obligation/liability under the Contract, for any delay, suspension, impediment to or adverse effect upon the progress of the Works due to any mistake, inaccuracy, discrepancy or omission in or between the Contractor's, the Definitive Design and the final design, or any failure by the Contractor to prepare any Design Data or submit the same to the Engineer in due time and the Contractor shall promptly make good any such defect at his own cost.

5.3. Construction and/or Manufacture Documents

The Manufacture Documents shall comprise the technical documents specified in the Employer's Requirements, documents required to satisfy all regulatory approvals, documents described in Sub Clause 5.6 (As Built Document), and Sub Clause 5.7 (Operations and Maintenance Manuals). The Contractor shall prepare all Manufacture Documents in sufficient detail and shall also prepare any other document necessary to instruct the Contractor's personnel. The Engineer shall have the right to inspect the preparation of all these documents wherever they are being prepared.

Each of the Construction and/or Manufacture Documents shall, when considered ready for use, be submitted to the Engineer for preconstruction or pre-manufacture review. Unless otherwise stated in Employer's Requirements, each review by the Engineer shall not exceed 21 days, calculated from the date on which the Engineer receives the Manufacture Document.

The Engineer may during the review period, give notice to the Contractor that a Manufacture Document fails (to the extent stated) to comply with the Employer's Requirements, it shall be rectified, resubmitted and reviewed (and if specified, approved) in accordance with this Sub-Clause, at the Contractor's cost.

For each part of the Works, and except to the extent that the prior consent of the Engineer shall have been obtained:

- In the case of a Construction and/or Manufacture Document which has (as specified) been submitted for the Engineer's approval
 - The Engineer shall give notice to the Contractor that the Construction and/or Manufacture Document is provided with no objection, with or without comments, or that it fails (to the extent stated) to comply with the Contract
 - ii. Execution of such part of the Works shall not commence until the Engineer has provided with no objection the Construction and/or Manufacture Document: and
 - iii. The Engineer shall be deemed to have provided with no objection the Construction and/or Manufacture Document upon the expiry of the review periods for all the Construction and/or Manufacture Documents which are relevant to the design and execution of such parts, unless the Engineer has previously notified otherwise in accordance with sub-paragraph (i)
- Construction and/or manufacture of such part of the Works shall not commence prior to the expiry of the review of the Construction and/or Manufacture Documents which are relevant to its design and execution;
- c. Construction and/or manufacture shall be in accordance with such reviewed (and if specified, approved) Construction and/or Manufacture Documents; and
- d. If the Contractor wishes to modify any design or document which has previously been submitted for such pre-construction and/or pre- manufacture review, the Contractor shall immediately notify the Engineer, and based on Engineer's approval shall subsequently submit revised documents to the Engineer in accordance with the above procedure.

If the Engineer instructs that further Construction and/or Manufacture Documents are necessary for carrying out the Works, the Contractor shall promptly and at Contractor's cost prepare such documents,

Errors omissions, ambiguities, inconsistencies, inadequacies and other defects if found at any stage in construction or any operations manufacture documents, then shall be rectified by the Contractor at his own cost and any approval or consent or review (under this sub-clause or otherwise) by the Employer/Engineer of the Manufacture and Construction Documents under this Sub-clause shall not relieve the Contractor from any obligations or responsibility under the Contract.

5.4. Technical
Standards and
Regulations

The design, the Construction and/or Manufacture Documents, the execution and the completed Works (including remedying of defects therein) shall comply with the specifications, technical standards, building construction, safety and environmental regulations and other standards specified in the Employer's Requirements applicable to the Works or defined by the applicable laws and regulations

5.5. Samples

The Contractor shall submit at his own cost the following samples and relevant information to the Engineer for pre-construction and/or pre-manufacture review in accordance with the procedure for Construction and/or Manufacture Documents described in Sub-Clause 5.3:

- a. manufacturer's standard samples of Materials,
- b. samples (if any) specified in the Employer's Requirements.

Each sample shall be labelled as to origin and intended use in the Works.

5.6. As-Built Drawings and Documents

This clause is applicable for 'Build' part of contract also. The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the Works, showing the exact "as-built" locations, sizes and details of the Works as executed, with cross references to relevant specifications and data sheets. These records shall be kept on the Site and shall be used exclusively for the purposes of this Sub-Clause. Six copies shall be submitted to the Engineer prior to the commencement of the Tests on Completion.

In addition, the Contractor shall prepare and submit to the Engineer "asbuilt drawings" of the Works, showing all Works as executed. The drawings shall be prepared as the Works proceed and shall be submitted to the Engineer for his inspection. The Contractor shall obtain the consent of the Engineer as to their size, the referencing system, and other pertinent details.

Prior to the issue of any Taking Over Certificate, the Contractor shall submit to the Engineer one microfiche copy, one full-size original copy and six printed copies of the relevant "as-built drawings", and any further Construction and/or Manufacture Documents specified in the Employer's Requirements. The Works shall not be considered to be completed for the purposes of Taking Over under Sub-Clause 9.1 until such documents have been submitted to the Engineer.

5.7. Operation and Maintenance Manuals

Prior to commencement of the Tests on Completion, the Contractor shall prepare, and submit to the Engineer, Operation and Maintenance Manuals in accordance with the Employer's Requirements and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair the Works. The Works shall not be considered to be completed for the purposes of Taking Over under Sub-Clause 9.1 until such Operation and Maintenance Manuals have been submitted to the Engineer and received his consent.

5.8. Intellectual Property Rights and Royalties

The Contractor shall indemnify the Employer and the Engineer from and against all claims and proceedings on account of infringement (or alleged infringement) of any patent rights, registered designs, copyright, design, trademark, trade name, know-how or other intellectual property rights in respect of the Works, Contractor's Equipment, machines, work method, or Plant, or Materials, or anything whatsoever required for the Works and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall pay all traffic surcharges and other royalties, licence fees, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials, machine, process, systems, work methods, or Contractor's Equipment required for the Works. The Contractor shall, in the event of infringement of Intellectual Property Rights, rectify, modify or replace at his own cost the Works, Plant or materials or anything whatsoever required for the Works so that infringement no more exist or in the alternative shall procure necessary rights/license so that there is no infringement of Intellectual Property Rights.

The Contractor shall be promptly notified of any claim under this Sub-Clause made against the Employer. The Contractor shall, at his cost, conduct negotiations for the settlement of such claim, and any litigation or arbitration that may arise from it. The Employer or the Engineer shall not make any admission which might be prejudicial to the Contractor, unless the Contractor has failed to take over the conduct of the negotiations, litigation or arbitration within a reasonable time after having been so requested. In the event of Contractor failing to act at Engineer's notice, the Employer shall be at full liberty to deduct any such amount of pending claim from any amount due to the Contractor under this Contract or any other Contract.

Insofar as the patent, copyright or other intellectual property rights in any Plant, Design Data, plans, calculations, drawings, documents, Materials, know-how and information relating to the Works shall be vested in the Contractor, the Contractor shall grant to the Employer, his successors and assignees a royalty-free, non-exclusive and irrevocable licence (carrying the right to grant sub-licences) to use and reproduce any of the works, designs or inventions incorporated and referred to in such Plant, documents or Materials and any such know-how and information for all purposes relating to the Works (including without limitation the design, manufacture, installation, reconstruction, Testing, commissioning, completion, reinstatement, extension, repair and operation of the Works).

If any patent, registered design or software is developed by the Contractor specifically for the Works, the title thereto shall vest in the Employer and the Contractor shall grant to the Employer a non-exclusive irrevocable and royalty-free licence (carrying the right to grant sublicense) to use, repair, copy, modify, enhance, adapt and translate in any form such Software for his own use.

If the Contractor uses proprietary software for the purpose of storing or utilising records the Contractor shall obtain at his own expense the grant of a licence or sub-licence to use such software in favour of the Employer and shall pay such licence fee or other payment as the grantor of such licence may require provided that the use of such software under the

licence may be restricted to use relating to the design, construction, reconstruction, manufacture, completion, reinstatement, extension, repair and operation of the Works or any part thereof.

The Contractor's permission referred to above shall be given, inter alia, to enable the Employer to disclose (under conditions of confidentiality satisfactory to the Contractor) programmes and documentation for a third party to undertake the performance of services for the Employer in respect of such programmes and documentation.

If any software is developed under the Contract or used by the Contractor for the purposes of storing or utilising records over which the Contractor or a third party holds title or other rights, the Contractor shall permit or obtain for the Employer (as the case may require) the right to use and apply that Software free of additional charge (together with any modifications, improvements and developments thereof) for the purpose of the design, manufacture, installation, reconstruction, testing, commissioning, completion, reinstatement, extension, repair, modification or operation of the Works, or any part thereof, or for the purpose of any Dispute.

The Employer reserves the right to use other Software on or in connection with the Works.

6. Staff and Labour

- 6.1. Engagement of Staff and Labour
- 6.2. Rates of Wages and Conditions of Labour

6.3. Persons in the service/ retired of Employer/ Engineer The Contractor shall make his own arrangements for the engagement of staff and labour at his own cost.

Full compliance of statutory requirements apart, the Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or the industry where the work is carried out.

The Contractor shall make himself aware of all labour regulations and their impact on the cost and build up the same in the Contract Price. During the Contract Period no extra amount in this regard shall be payable to the Contractor, for whatsoever reason including any revision of rates payable to the labour due to revision of rates payable in Minimum Wages Act.

Labour provided by the Contractor, either directly or through subcontractors, for the exclusive use of the Employer or the Engineer, shall, for the purpose of this Sub-Clause, be deemed to be employed by the Contractor.

In the event of default being made in the payment of any money in respect of wages of any person employed by the Contractor or any of its sub-contractors of any tier in and for carrying out of this Contract and if a claim therefor is filed in the office of the Labour Authorities and proof thereof is furnished to the satisfaction of the Labour Authorities, the Employer may, failing payment of the said money by the Contractor, make payment of such claim on behalf of the Contractor to the said Labour Authorities and any sums so paid shall be recoverable by the Employer from the Contractor.

- a. The Contractor shall not recruit or attempt to recruit, staff and labour from amongst the Employer and the Engineer's personnel.
- b. The Contractor either at the tendering stage or during construction stage will not employ any retired employee of Employer or Engineer of the Employer in any capacity unless such employee has completed at least two years post retirement period or has obtained the no-objection certificate from Employer for being employed with the Contractor. It will be responsibility of the Contractor to collect the Employer's no objection certification from such retired employee and submit the same back to the Employer.

In case of non-compliance of above, in addition to any or several of the courses, referred in **Sub-clauses 13.2** being adopted by the Employer the Contractor on Termination of the Contract for the aforesaid reasons will have no claim whatsoever against the Employer except for actual value of the Work executed till the time of Termination.

6.4. Labour Laws

- a. In dealing with labour and employees, the Contractor and his Sub-Contractors (including piece rate and petty Contractors) shall comply fully with all laws and statutory regulations pertaining to engagement, payment and upkeep of the labour in India.
- b. The Contractor shall have a Labour Welfare Organisation which shall be responsible for labour welfare and compliance with prevalent labour laws, statutes and guidelines. In this context the Contractor is also required to familiarize himself with NMRC's Labour Welfare Fund Rules as specified in Special Conditions of Contract or elsewhere in the contract and comply with the same.
- c. The Contractor shall prepare and submit compliance reports of adherence to labour laws as and when desired by the Engineer.
- d. The Contractor will ensure to open bank accounts for each worker employed by him and his subcontractors and all the payments to workers will be released through bank accounts.
- e. The violation of Labour Laws viz. Contract Labour (Regulation and Abolition) Act, 1970 & Central Rules, 1971 made there under or other applicable Labour Laws under the jurisdiction shall attract following penalties in addition to the penalties imposed by Statutory Authorities in terms of applicable Act/ Rules:

a)	Delay in payment of dues to any workmen	:	INR 100 per day per workman
b)	Non-compliance of any other provision of labour laws, pointed out by Employer/Engineer or their representative	:	INR 500 for each non compliance informed in writing under the contract

The decision of Engineer with regard to the merits of imposition of penalty, determination of non-compliance and amount of penalty shall be final and binding on Contractor. The 'Contract' under this sub-clause shall include any workmen employed by contractor working within premises of Work at Employer's establishment whether directly or through Sub-Contractor etc.

f. The contractor shall ensure the registration of all his eligible workers (inclusive of sub-contractors and petty contractors) with BOCW Board.

The Contractor, if required, shall carry out work during night hours or in shifts, unless specifically provided otherwise in the Contract. No increase in rates or extra payments shall be admissible for night work.

The Contractor shall provide adequate lighting and safety arrangements.

6.5. Working Hours

6.6. Facilities for Staff and Labour

The Contractor shall provide and maintain at his own expense, all necessary accommodation and welfare facilities as per prevailing labour & welfare laws for his (and his Sub- contractor's) staff and labour. This includes good practices like provision of temporary crèche (Bal Mandir) where 50 or more women are employed at a time. All accommodation shall be maintained in a clean and sanitary condition, by the Contractor at his cost.

6.7. Health and Safety

Precaution shall be taken by the Contractor to ensure the health and safety of his staff and labour. The Contractor shall, in collaboration with and to the requirements of the local health authorities, ensure that medical staff, first aid facilities, sick bay and ambulance service are available at the accommodation and on the Site at all times, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as per the Engineer's requirement and will ensure complete compliance with relevant clauses of Employer's Health, Safety and Environment Manual (SHE Manual).

The Contractor's Site Safety Plan shall be developed from his Outline Safety Plan as per Employer's Requirements and SHE Manual of the Employer.

The Contractor shall appoint a member of his staff at the Site to be responsible for maintaining the safety, and protection against accidents, of personnel on the Site. This person shall be qualified for his work and shall have the authority to issue instructions and take protective measures to prevent accidents.

6.8. Contractor's Superintendence

The Contractor shall provide all necessary superintendence during the design and execution of the Works, and as long thereafter as the Engineer may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract. Such superintendence shall be provided by sufficient persons having adequate knowledge of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents) for the satisfactory and safe execution of the Works

6.9. Provision Of Efficient And Competent Staff

The Contractor shall employ (or cause to be employed) only persons who are careful and appropriately qualified, skilled and experienced in their respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative, who in the opinion of the Engineer:

- a. persists in any misconduct,
- b. is incompetent or negligent in the performance of his duties,
- c. fails to conform with any provisions of the Contract, or persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

6.10. Preservation of Peace and orderly conduct

- 6.10.1. The Contractor shall be responsible for preservation of peace and orderly conduct at the site and its neighbourhood by Contractor's employees, Representatives, petty contractors, Sub Contractors etc. In case, deployment of a Special Police Force, becomes necessary at or near Site, during the tenure of Works, the expenses for the same shall be borne by the Contractor.
- 6.10.2. The Contractor shall at all times take all reasonable precautions which will include that no labour or employee is permitted to work at site in an intoxicated state or under influence of drugs, to prevent any unlawful, riotous or disorderly conduct by or amongst his staff and labour, and to preserve peace and protection of persons and property in the neighbourhood of the Works against such conduct.

6.11. Labour to be Contractor's Employee

If, the Contractor directly or through petty contractors or Sub-Contractors supplies any labour to be used wholly or partly under the direct orders and control of the Engineer or the Employer, whether in connection with any work being executed by the Contractor or otherwise for the purposes of the Employer, such labour shall, for the purpose of this clause, be deemed to be persons employed by the Contractor.

6.12. Report Of Accidents To Labour

The Contractor shall be responsible for safety of all employees, employed by him on Works, directly or through petty contractors or Sub-Contractors, and shall report accidents to any of them, however, and wherever occurring on Works, to the Engineer or the Engineer's Representative, and shall make every arrangement to render all possible assistance and to provide prompt and proper medical attention. The compensation for affected Workers or their relatives shall be paid by the Contractor in such cases with utmost expeditious in accordance with the Workmen's Compensation Act.

6.13. Claim` on account of violation of Labour laws

The Contractor shall be solely accountable for violation of any labour law by it, its petty contractors or Sub Contractors and will pay any such claim/damage to the authorities forthwith on demand. If any moneys shall, as a result of any instructions, directions or decisions from the Authorities or claim or application made under any of the labour laws or regulations, be directed to be paid by the Employer, such moneys shall be deemed to be moneys payable to the Employer by the Contractor and he will pay the same to the Employer forthwith on demand, without demur and without asking for any reasons/explanations from the Employer. On failure of the Contractor to repay the Employer any moneys paid or to be paid by it as aforesaid within seven days after the same shall have been demanded, the Employer shall be entitled to recover the amount from any moneys due or accruing to the Contractor under this or any other Contract with the Employer.

7. Quality Control

7.1. Manner of Execution

All Plant, goods, and Materials to be supplied shall be manufactured, and all work to be done shall be executed, in the manner set out in the Contract. Where the manner of manufacture and execution is not set out in the Contract, the work shall be executed in a proper, workmanlike and careful manner, with properly equipped facilities and non-hazardous Materials, and in accordance with modern recognized good practice.

7.2. Source of material

Sources of Materials being supplied shall be intimated to the Engineer and are subject to his approval. Materials that are not specified in the Contract document shall conform to the relevant Indian Standards or in their absence conform to any International Standard approved by the Engineer.

Save as otherwise expressly provided in the contract, samples shall be supplied by the Contractor at his own cost.

7.3. Delivery to Site

The Contractor shall be responsible for procurement, transport, receiving, unloading and safe keeping of all Plant, Rolling Stock, Construction Materials, Contractor's Equipment and other things required for the completion of the Works.

7.4. Inspection

The Employer and the Engineer shall at all reasonable times

- a. have full access to all parts of the Site and to all places from which natural materials are being obtained, and
- b. during production, manufacture, fabrication and construction (at the site and elsewhere) be entitled to inspect, examine, measure and test the materials and workmanship, and to check the progress of manufacture, of all Plant, goods, construction and Materials to be supplied under the Contract.

The Contractor shall give the Engineer full opportunity to carry out these activities including providing access, facilities, permissions and safety equipment. No such activity/inspection shall relieve the Contractor from any obligation or responsibility.

7.5. Testing

This sub clause shall apply to all tests specified in the Contract, other than the Tests after Completion.

The Contractor shall provide all documents and other information necessary for all types of testing and such assistance, labour, materials, electricity, fuel, stores, apparatus and instruments as are necessary to carry out such tests efficiently.

The Contractor shall agree, with the Engineer, the time and place for the testing of any Plant, goods, Materials and other parts of the Works as specified in the Contract. The employer/Engineer may instruct the contractor for any additional test, at employer's cost.

The Engineer shall give the Contractor not less than 24 hours' notice of his intention to attend the tests.

If the Engineer does not attend at the time and place agreed, or if the Contractor and the Engineer agree that the Engineer shall not attend, the Contractor may proceed with the tests, unless the Engineer instructs the Contractor otherwise. Such tests shall be deemed to have been made in the Engineer's presence.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. If the Engineer has not attended the tests, he shall accept the readings as accurate. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect.

The expense of conducting such Tests shall be borne by the Contractor. No such testing shall relieve the Contractor from any obligation or responsibility.

- i. If, as a result of inspection, examination or testing, any Plant, goods, Material, design or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the same and by giving notice to the Contractor with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item after rectification complies with the Contract.
- ii. If the Engineer requires such Plant, **goods**, Material, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If such rejection and retesting cause the Employer to incur additional costs, such costs shall be recoverable from the Contractor by the Employer and may be deducted by the Employer from any **sum** due, or to become due, to the Contractor.
- iii. Notwithstanding any previous Test or certification, the Engineer shall have the authority to instruct the Contractor:
 - a. To remove from the Site and replace any plant or Materials which is not in accordance with the Contract.
 - b. To remove and re-execute any other work which is not in accordance with the Contract.
 - c. Execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.
- iv. In case of default on the part of the Contractor in carrying out such order, the Employer shall be entitled to employ and pay other parties, to carry out the same, and all expenses consequent thereof or incidental thereto, shall be recoverable from the Contractor or may be deducted by the Employer from any sum which may be due to the Contractor..

7.6. Rejection

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7.7. Liability after Inspection and Testing

The Contractor shall not be released from any liability or obligation under the Contract by reason of any such inspection or testing or witnessing of testing, or by the submission of reports of inspection or testing to the Engineer.

7.8. Ownership of Plant and Materials

Each item of Plant, goods, and Material shall become the property of the Employer, when it is delivered to Site or payment thereof, either in part or full, has been made. The Contractor shall however continue to bear the risk in respect of such items which continue to remain in his custody.

7.9. Cost of Employer's Attendance Including Travel

The Employer shall bear the costs of attendance including travel by the Employer or his Representative for the purposes of Sub-Clauses 7.4 and 7.5 above. The cost of attendance including travel by the Employer, Engineer or his Representative for the purpose of Sub-clause 7.6 shall be borne by the Contractor.

7.10. Covering up of Works

Examination of work 7.10.1. before covering up

No work or part of work shall be covered up or put out of view, without the prior approval of the Engineer or the Engineer's Representative.

Cost of uncovering the 7.10.2. work already covered up

The Contractor shall uncover any part or parts of the Works, or make openings in or through the same, as the Engineer may from time to time direct, and shall reinstate and make good such part or parts, to the satisfaction of the Engineer. If any such part or parts have been covered up, or put out of view after compliance with the requirement of **Sub-clause 7.11.4** and the Works are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating and making good the same, shall be borne by the Employer, but if the Works are found to be defective, costs shall be borne by the Contractor.

In case after completion of a part of the Work, the part of Work is not fully consistent with the Employer's Requirements and there is no way to change the same, in that case, the same (provided it has no implication on safety and operation) shall be accepted only at a Contractor's deemed variation at lower negotiated price.

The decision of the Engineer in this regard shall be final and binding on the Contractor.

7.11. Tests after Completion

Contractor's Obligations

7.11.1.

The Contractor shall carry out the Tests on Completion at his own cost in accordance with the Contract after providing the documents in accordance with Sub-Clauses **5.4 and 5.5**. The Contractor shall give, to the Engineer, 21 days' notice of the date after which the Contractor will be ready to carry out the Tests on Completion. Unless otherwise agreed, such Tests shall be carried out within 14 days after this date, on such day or days as the Engineer shall instruct.

Unless otherwise stated in Special Conditions of Contract, the Tests on Completion shall be carried out in the following sequence

- a. pre-commissioning test, which shall include appropriate instructions and ("dry" or "cold") functional tests to demonstrate that each item of the Plant, goods and Work can safely undertake the next stage
- Commissioning Test shall include the specified operational tests to demonstrate Works or Sections can operated safely and as specified under all available operating condition
- trial operation which shall demonstrate that the Works or Section perform reliably and in accordance with the Contract

The Contractor at his cost shall arrange all tools, equipment, gadgets, facilities or as deemed necessary by the Engineer for such tests, in considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed the Tests on Completion described in subparagraphs (a), (b) or (c), the Contractor shall provide the Engineer and the Employer with a certified report of the results of all such Tests.

Delayed Tests

7.11.2. If the Engineer opines that Tests on Completion are being unduly delayed by the Contractor, the Engineer may by notice require the Contractor to carry out such Tests within 21 days after the receipt of the notice. The Contractor shall carry out such Tests on such day or days as the Contractor may fix and of which he shall give notice to the Engineer.

If the Contractor fails to carry out the Tests on Completion within 21 days, the Engineer may proceed with such Tests at the risk and cost of the Contractor. The Tests on Completion then shall be deemed to have been carried out in the presence of the Contractor and the results of such Tests shall be accepted as accurate.

Retesting

7.11.3. If t

If the Works, or a part thereof, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.6 "Rejection" shall apply, and the Engineer or the employer may require such failed Tests, and the Tests on Completion on any related work, to be repeated under the same terms and conditions.

Failure to Pass Tests on 7.11.4. Completion

If the Works, or a part thereof, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 7.11.4, the Engineer shall be entitled to:

- a. order further repetition of Tests on Completion under Sub-Clause 7.11.4;
- reject the Works, or a part thereof, or a Section (as the case may be), in which event the Employer shall have the same remedies against the Contractor as are provided under Clause 13; or
- c. issue a Taking Over Certificate, if the Employer so requires. The Contract Price shall then be reduced by such amount as determined by the Engineer and as shall be appropriate to cover the reduced value to the Employer as a result of this failure. The Contractor shall then proceed in accordance with his other obligations under the Contract.

7.12. Integrated testing and system commissioning

Integrated Testing

7.12.1.

Tests on Completion shall also include Integrated Testing where applicable as per the contract conditions. The Contractor shall, following satisfactory completion of tests on his works, equipment, sub-systems or system, perform, at the direction of the Engineer, programme of tests to verify and confirm the compatibility and complete performance of his works, equipment, sub-systems or system with the works, equipment, sub-systems or system provided by others.

Compilation of Test Results

7.12.2.

The results of the Integrated Testing and Commissioning shall be compiled and evaluated by the Engineer and the Contractor.

Retesting

7.12.3.

If the Works, or a part thereof, or a Section, fail to pass the Integrated Testing and Commissioning, the Engineer shall require such failed Tests, to be repeated under the same terms and conditions. If such failure and retesting result from a default of the Contractor and cause the Employer to incur additional costs, the same shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due, or to become due, to the Contractor.

Failure to Pass Test

7.12.4.

If the Works, or a part thereof, or a Section, fail to pass Integrated Testing and Commissioning and the Contractor in consequence proposes to make any adjustment or modification to the Works or a part thereof, or a section, the Engineer may, with the approval of the Employer, instruct the Contractor 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 / Engineer may deem to be reasonable.

Statutory Requirements

7.12.5.

The Contractor along with others shall carry out all statutory tests and trials, under the supervision of the Engineer, necessary for obtaining sanction of the competent authority for opening the system for public carriage of passengers.

8. Time Management

8.1. Commencement of Works

The Contractor shall commence the Works on the date specified in the Notice of Award or if no date is specified in the Notice of Award, on the date specified in an instruction in writing to that effect from the Engineer (Notice to Proceed). Thereafter the Contractor shall proceed with due diligence, without delay, and in accordance with the programme or any revised or modified programme of the Works. Time will be the essence of Contract and time for Completion shall run from the date the Contractor is to commence the Works under this Clause.

The Contractor shall not commence the construction, manufacture or installation of the Works or of any part of the Works unless and until the Engineer has endorsed the relevant Working Drawings in accordance with the Employer's Requirements.

8.2. Time for Completion

Time is the essence of Contract and will remain so at all times during the pendency of the Contract including the extended period of Contract. The Contractor shall ensure defect free completion and have passed the tests on the completion, including integrated testing where ever in the scope of work and commissioning of the whole of the Works and/or parts thereof before the same is taken over by the Employer.

8.3. Delay

In case of delay on the part of the Contractor, the Contractor shall be liable to pay liquidated damages and any other compensation for the damages suffered by the Employer as per clause 8.5. This is without prejudice to the right of the Employer to rescind the Contract.

Failure or delay by the Employer or the Engineer, to hand over to the Contractor the Site necessary for execution of Works, or any part of the Works, or to give necessary notice to commence the Works, or to provide necessary Drawings or instructions or clarifications or to supply any material, plant or machinery, which under the Contract, is the responsibility of the Employer, shall in no way affect or vitiate the Contract or alter the character thereof; or entitle the Contractor to damages or compensation thereof but in any such case, the Engineer shall extend the time period for the completion of the Contract, as in his opinion is / are reasonable.

8.4. Extension of Time for Completion

Extension of Time

- 8.4.1. The Contractor may apply for an extension of the Time for Completion if the Work is or will be delayed either before or after the Time for Completion by any of the following causes:
 - a. "Force Majeure" referred to in Clause 16

- b. The Contractor's work held up for not being given possession of or access to the Site in accordance with the Contract
- c. Instruction of the Engineer to suspend the Works and the Contractor not being in default as to reasons of suspension.
- d. Acts or omissions of other Designated Contractors in executing work not forming part of this Contract and on whose performance, the performance of the Contractor necessarily depends.
- e. Any act of prevention or Breach of Contract by the Employer and not mentioned in this Clause
- f. Any order of Court restraining the performance of the Contract in full or in any part thereof
- g. Any other event or occurrence which, according to the Employer is not due to the Contractor's failure or fault and is beyond his control without Employer being responsible for the same.
- h. An Employer's Variation

However, the Contractor shall not be entitled to any extension of time where the instructions or acts of the Employer or the Engineer are necessitated by or intended to cure any default of or breach of Contract by the Contractor or where any delay is due to

- a. the failure of sub-contractor, to commence or to carry out work in due time,
- b. non-availability, or shortage of Contractor's equipment, labour, utility services, Plant and Materials,
- c. inclement weather conditions, and
- d. the Contractor not fulfilling his obligations under Sub-Clause 4.4.

If the Contractor considers himself to be entitled to an extension of time for Completion, he shall give notice to the Engineer of such intention as soon as possible and in any event within 28 days of the start of the event giving rise to the delay and full and final supporting details of his application within 21 days of the last day of delay, together with any notice required by the Contract and relevant to such Clause.

The Engineer shall proceed in accordance with Sub-Clause 3.5 to agree or determine either prospectively or retrospectively such extension of the Time for Completion as may be due. The Engineer shall notify the Contractor accordingly. The extension of time including that of key date shall not entitle the contractor to retain the advance which shall be governed by Clause 11.2.

Extension of time for 8.4.2. completion for other reasons

The Contractor shall not be entitled to an extension of time by reason of any delay to any activity in the carrying out of the Works unless in the opinion of the Engineer such delay results in or may be expected to result in a delay to completion of the Works, or achievement of any Stage by the relevant Key Date. Whether or not the Contractor fails to achieve any Milestone by reason of any delay shall not by itself be material to the Contractor's entitlement to an extension of time.

Any extension to a Key Date shall not by itself entitle the Contractor to an extension to any other Key Date.

Extension of time for 8.4.3. delays due to Contractor

If the delay in the completion of the whole Works or a portion of the Works, for which an earlier completion period is stipulated, is due to the Contractor's failure or fault, and the Engineer is of the view that the remaining Works or the portions of Works can be completed by the Contractor in a reasonable and acceptable short time, then, the Engineer may allow the Contractor extension or further extension of time at its discretion with or without liquidated damages, for completion, as he may decide.

8.5. Liquidated Damages for Delay

Time is the essence of the Contract. Appendix to the Form of Tender shall include in respect of the Works and in respect of any Stage, a percentage of the total contract value which will be recoverable from the Contractor as liquidated damages for delay in completion of the Works or in achievement of a stage by a particular Key Date. The total amount of liquidated damages in respect of the Works in all stages shall, however, not exceed the limit of liquidated damages stated in the Appendix to the Form of Tender. The aforesaid liquidated damages do not, however, include the sums payable by the Employer to Designated Contractors on account of delay caused by the Contractor to Designated Contractors which sums shall be recoverable from the Contractor in addition to any liquidated damages payable under this clause, the total ceiling limit of which is 15% of the contract value including liquidated damages levied under the provision of Appendix to the Form of Tender.

The liquidated damages are recovered by the Employer from the Contractor for delay and not as penalty.

The Employer may, without prejudice to any other method of recovery, deduct the amount of such damages from any **sum** due, or to become due, to the Contractor. In the event of an extension of time being granted under Sub- Clause 8.3, the amount due under this Sub-Clause shall be recalculated accordingly, and any over-payment refunded. The payment or deduction of such damages shall not relieve the Contractor from his obligations to complete the Works, or from any other of his duties, obligations or responsibilities under the Contract.

The Contractor shall use and continue to use his best endeavours to avoid or reduce further delay to the Works, or any relevant Stages.

At any time after the Employer has become entitled to liquidated damages, the Engineer may give notice to the Contractor under

Sub- Clause 13.1, requiring the Contractor to complete the Works within a specified reasonable time. Such action shall not prejudice the Employer's entitlements to recovery of liquidated damages, under this Sub-Clause and to terminate under Sub- Clause 13.2.

The decision of the Engineer as to the compensation payable by the Contractor under this Clause shall be final and binding.

8.6. Rate of Progress

If for any reason which does not entitle the Contractor to an extension of time, the rate of progress of the Works is at any time, in the opinion of the Engineer, too slow to ensure timely completion of the Works or achievement of any Stage by the relevant Key Date the Engineer may so notify the Contractor in writing. The Contractor shall thereupon take such steps as are necessary, or in default of taking such steps, shall take such steps as the Engineer may reasonably instruct in writing, to expedite progress so as to complete the Works or any Section in time or achieve any Stage by the relevant Key Date. The Contractor shall not be entitled to any additional payment for taking such steps.

If any steps taken by the Contractor in meeting his obligations under this Sub- Clause cause the Employer to incur additional costs, such costs shall be recoverable from the Contractor by the Employer and shall be deducted by the Employer from any **sum** due, or to become due, to the Contractor.

If, in the opinion of the Engineer, the steps taken by the contractor to expedite the progress are not adequate, the Engineer may take a recourse as per Clause 13.2.4 of this GCC.

8.7. Suspension of Work

The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. During suspension, the Contractor shall protect, store and secure such part or whole of the Works against any deterioration, loss or damage.

8.8. Consequences of Suspension

The Contractor shall not be entitled to extra cost (if any), incurred by him, during the period of suspension of Work., if such suspension is

- a. provided for in the Contract, or
- necessary for proper execution of Woks or by reasons of weather condition or by some default on the part of the Contractor, or
- c. necessary for the safety of Works or any part thereof or
- d. necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site or

to ensure safety and to avoid disruption of traffic and utilities, as also to permit fast repairs and restoration of any damaged utilities. If suspension is ordered by the Engineer for reasons other than those mentioned in **sub-clause 8.8** then the Contractor's entitlement are in the table below

Suspension Period	Extension of Time	Compensation for the suspension period	Remarks
Upto 14 days	NO	NO	Engineer may, at his sole discretion, give extension of time in exceptional circumstances
15 – 30 days	YES	NO	Extension of time as considered proper by the Engineer
Above 30 days	YES	As per Daily rate of wages for idle labour/employees 70% of the rate for hire charges for idle plant and machinery (excluding cost of fuel and lubricants) 15% above all these items to cover overhead costs	Compensation as assessed by the Engineer on submission of documentary proof by the Contractor to Engineer's satisfaction
Above 90 days If Contractor asks for fore closure	NO	As per Clause 13.3.4	Contractor may ask for closure of the Contract, or deletion from the Contract of that part of Works which has been suspended

8.9. Resumption of Work

After receipt of permission or of an instruction to proceed, the Contractor shall, after notice to the Engineer, and together with the Engineer, examine the Works, Plant, Rolling Stock and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works, Plant, Rolling Stock and Materials, which has occurred during the suspension.

9. Employer's Taking Over

9.1. Taking Over Certificate

The Works shall be taken over by the Employer when they have been completed in accordance with the Contract, have passed the Tests on Completion, including Integrated Testing and Commissioning where ever applicable as per the contract, and a Taking Over Certificate for the Works shall be issued. If the Works are divided into Sections, the Contractor shall be entitled to apply for a Taking Over Certificate for each Section.

The Contractor may apply by notice to the Engineer for a Taking-Over-Certificate not earlier than 14 days before the works or section (as the case may be) will, in the Contractor's opinion, be complete and ready for taking over. The Engineer shall, within 28 days after the receipt of the Contractor's application shall conduct a complete joint survey of the works including carrying out any tests prescribed in the contract and prepare a list of defects and outstanding works and:

- a. issue the Taking Over Certificate to the Contractor, stating the date on which the Works or Section were completed, including the Tests on Completion and Integrated Testing and Commissioning where ever applicable as per the contract in accordance with the Contract if defects and/or outstanding works are minor that does not affect the use and safety of the Works or Section for their intended purposes The list of such works along with the target date of completion for each work shall be enclosed with the taking over certificate and completion of all these works /rectification of defects within the stipulated time shall be the responsibility of the contractor and any failure in it may be considered a reason by the Engineer to cancel the taking over certificate issued earlier; or
- b. reject the application, giving his reasons and specifying the work required to be done by the Contractor to enable the Taking Over Certificate to be issued. The Contractor shall then complete such work before issuing a further notice under this Sub-Clause.

9.2. Taking over of Parts of the Works

The Engineer may, at the sole discretion of the Employer issue a Taking Over Certificate for any part of the Permanent Works by following the procedure stipulated in Clause 9.1 above if:

- a. the Employer uses that part of the Works for revenue service before the Taking Over Certificate is issued for the entire work.
- b. the balance part is not completed not due to default of the contractor and contractual date of completion for the completed part is over.

10. Defects Liability

10.1. Completion of Outstanding Work and Remedying Defects

In order that the Construction and/or Manufacture Documents and the Works shall be in the condition required by the Contract (fair wear and tear excepted) at, or as soon as practicable after the expiry of the Contract Period, the Contractor shall execute all such work of amendment, reconstruction, and remedying defects or damage, as may be instructed in writing by the Employer or the Engineer during the Defect Liability Period.

"Defects Liability Period" shall mean the defects liability period

stated in the Special Conditions of Contract calculated from the

date of taking over of the Works. Provided that, if any part of the

Works or sub-systems or component of that part has been replaced, renewed or repaired except minor repair, the "Defects Liability Period" in respect of that part or sub-system or components of that part shall start from the date such replacement, renewal or repair has been completed to the

10.2. Cost of Remedying Defects

All work referred to in Sub-Clause 10.1shall be executed by the Contractor at his own cost, if the necessity for such work is due to:

a. the design of the Works;

satisfaction of the Engineer.

- Plant, Rolling Stock, Materials or workmanship not being in accordance with the Contract; or
- c. failure by the Contractor to comply with any of his other obligations. If in the opinion of the Engineer, such necessity is due to any other cause, he shall determine an adjustment to the Contract Price, with the approval of the Employer, and shall notify the Contractor accordingly. In this event, Sub-Clause 12.3 shall apply to such work.

10.3. Extension of Contract Period

The Contract Period shall be extended by a period, after the Works are taken over, during which the Works or any Section or item of Plant, Rolling Stock, cannot be used, for the purposes for which they are intended, by reason of a defect or damage.

When delivery of Plant, Rolling Stock, and/or Materials, or erection of Plant, or installation of Materials, has been suspended under Sub-Clause 8.7, the Contractor's obligations under this Sub-Clause shall not apply to any defects or damage occurring more than three years after the Plant, Rolling Stock and/or Materials would otherwise have been delivered, erected and taken over.

10.4. Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within such time as the Employer / Engineer may deem to be reasonable, the Employer or the Engineer may fix a date on or by which to remedy the defect or damage and give the Contractor reasonable notice of such date. If the Contractor fails to remedy the defect or damage by such date and the necessity for such work is due to a cause stated in Sub-Clause 10.2(a), (b) or (c), the Employer may (at his sole discretion):

- a. carry out the work himself or by others, in a reasonable manner and at the Contractor's risk and cost, but the Contractor shall have no responsibility for such work: the costs incurred by the Employer in remedying the defect or damage shall be recoverable from the Contractor by the Employer
- b. require the Engineer to determine and certify a reasonable reduction in the Contract Price; or
- c. if the defect or damage is such that the Employer has been deprived of substantially the whole of the benefit of the Works or parts of the Works, terminate the Contract in respect of such parts of the Works as cannot be put to the intended use, the Employer shall then be entitled to recover all sums paid for such parts of the Works together with the cost of dismantling the same, clearing the Site and returning Plant, Rolling Stock and Materials to the Contractor, and Sub-Clause 13 shall not apply.

10.5. Removal of Defective Work

If the defect or damage is such that it cannot be remedied expeditiously on the Site and if the Employer gives consent, the Contractor may, remove from the Site for the purposes of repair any part of the Works, which is defective or damaged. This consent may require the Contractor to increase the amount of Performance Security by the full replacement cost of these items or to provide other appropriate security acceptable to the Employer.

10.6. Further Tests

If the remedying of any defect or damage is such that it may affect the performance of the Works, the Engineer may require that Tests on Completion, including Integrated Testing, be repeated to the extent necessary. The requirement shall be made by notice within 28 days after the defect or damage is remedied. Such Tests shall be carried out in accordance with Clause 7.11

10.7. Right of Access

Until the Performance Certificate has been issued, the Contractor shall have the right of access to all parts of the Works and to records of the working and performance of the Works, except as may be inconsistent with any reasonable security restrictions by the organisation responsible for operating the Works.

10.8. Contractor to Search

The Contractor shall, if required by the Engineer, search for the cause of any defect, under the direction of the Engineer. Unless the defect is one for which the Contractor is liable, the Cost of such search shall be added to the Contract Price.

10.9. Performance Certificate

The Contract shall not be considered to be completed until the Performance Certificate has been signed by the Engineer and delivered to the Contractor at the end of 'Defect Liability Period, stating the date on which the Contractor completed his obligations related to completion of works and rectification of defects during Defect Liability Period. to the Engineer's satisfaction. Only the Performance Certificate shall be deemed to constitute approval of the Works.

10.10. Unfulfilled Obligations

After the Performance Certificate has been issued, the Contractor and the Employer shall remain liable for the fulfillment of any obligation, which remains unperformed at that lime. For the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force.

10.11. Emergency defect rectification

If any defect or damage is one requiring immediate attention from safety, environmental or operational viewpoint, the Engineer has the authority to proceed with rectification in any manner suitable and deduct such sums from the Contract Price.

11. Contract Price and Payment

11.1. The Contract Price

Inclusions / Exclusions 11.1.1.

- Unless otherwise stated in the Special Conditions of Contract the Contract Price, subject any to any adjustment thereto in accordance with the Contract shall be all inclusive (including all taxes, duties, royalties etc.)
- ii. Nothing extra shall be payable over the quoted rates, notwithstanding any provision to the contrary in any law for the time being in force, save and except what is specifically provided in General or Special Conditions of Contract.
- iii. The reimbursement (as per this Sub-clause) of whatsoever nature shall be provided only for Permanent Works. No reimbursement (as per this Sub-clause) shall be provided for Temporary Works and fuel.

Maintaining Records and 11.1.2. Availing Exemptions

- i. In the event of exemption of custom duties, excise duties, GST (CGST/SGST/IGST etc.) or any other cess/levy being granted by the Government in respect of the Works, the benefit of the same shall be passed on to Employer. The Contractor shall therefore maintain meticulous records of all the taxes and duties paid and provide the same as and when required by the Employer, so that the Employer is able to avail the reimbursement for which NMRC may issue a procedure order separately. Alternatively, the Employer may direct the Contractor to get the reimbursements based on exemption certificates / government's order and it shall be obligatory on part of the Contractor to get the reimbursements from the statutory authorities and pass on the benefit to NMRC.
- ii. In case of Contractor's failure in availing the exemptions as stipulated above, the recovery of equivalent amount will be made from Contractor's dues.

Adjust in Contract Price

11.1.3. Adjustment in contract price on account of inflation shall be done only if a "Price Variation Formula" is given in the special conditions of contract otherwise it will be a fixed price contract.

Change in Taxes/Duty 11.1.4.

The Contract Price shall not be adjusted to take into account any increase or decrease in cost resulting from any change in taxes, duties, levies from the last date of submission of the Tender to the completion date including the date of the extended period of Contract unless a contrary provision exists in Special Conditions of Contract.

11.2.1.

11.2. Advances

Mobilisation Advance

Mobilisation advance shall be generally 5% of original contract value payable in two equal instalments or as mentioned in the Special Conditions of Contract. The first instalment shall be paid after mobilisation has started and next instalment shall be paid after satisfactory utilization of earlier instalment.

Mobilisation advance shall be paid interest free against acceptable Bank Guarantee from a scheduled commercial bank in India. The value of Bank Guarantee taken towards security of "Mobilization Advance" shall be 110% of the advance taken by the Contractor. The Contractor, once the 50% of mobilisation advance has been recovered, shall have a one-time option to reduce the Bank Guarantee for the mobilisation advance by the amount recovered

Advance against Plant 11.2.2. and Machinery

Plant and machinery advance shall generally be 5% of original contract value or as specified in Special Conditions of Contract.

This advance is payable against plant, equipment and machinery, provided the same have reached the site or in the case of new items meant specifically for the work firm purchase order has been placed and the invoices received. The advance will be given only if the plant/machinery has been purchased for this contract and not for those which are already in the books of the contractor. The plant and machinery shall be valued by the Engineer as follows:

- a. New Items: 80% of purchase price
- b. Second hand items in working order: 80% of the depreciated value as assessed by Engineer
- c. Items valued at less than Rs.5,00,000 per unit: Not to be considered

The total advance for Plant and Machinery shall be limited to 5%. This advance shall be paid interest free against acceptable Bank Guarantee from a scheduled commercial bank in India. The value of Bank Guarantee taken towards security of "Plant and Machinery advance" shall be 110% of the advance taken by the Contractor. The Contractor, once the 50% of the Plant and Machinery advance has been recovered, shall have a one-time option to reduce the Bank Guarantee for the Plant and Machinery advance by the amount recovered.

Written Request for 11.2.3. Advances

Advances as admissible, shall be payable only on Contractor's written request to the Employer.

Recovery of Advances 1

11.2.4.

- a. The recovery of Advances shall commence when 20% of the original contract value of the work has been paid and it will be completed by the time 85% of the Original Contract Value has been paid or the original completion date whichever is earlier. As far as possible the recovery of advances shall be limited to 30% of an account bill.
- b. No advance shall be given after 40% of the original contract amount has been paid.
- c. The contractor shall always have the option to have the recoveries commenced and / or completed earlier, and / or to have recoveries affected in installments of higher amounts and also repay part or whole of the advance by direct payment rather than through On-account Bills.
- d. In case the Contract is terminated due to default of the contractor or rescinded/foreclosed due to any other reason, the contractor shall return the unrecovered amount of all advances within 15 days of issue of notice of termination/ rescission/ foreclosure of the contract and if the Contractor fails to do so due to any reason whatsoever, then interest at an interest rate equal to State Bank of India's Marginal Cost of fund based Lending Rate (MCLR) applicable for the tenure of 01 year prevailing on the date of issue of notice of termination/ rescission/ foreclosure plus 3% Penal Interest per annum shall be charged on the unrecovered amount of such advances from 16th day onwards compounded quarterly till the same is returned by the contractor.

Interest in Case of Delay 11.2.5. in Repayment of Advances

Should there be delay in the progress and completion of work, as a result of which it is not possible to recover the advance and interest thereon, before the date of completion stipulated in the Contract, then the interest to be charged from the Contractor on the remaining portion of the advance beyond the original completion date specified in the Contract, shall be the State Bank of India Marginal Cost of fund based Lending Rate (MCLR) applicable for the tenure of 01 year prevailing on the original completion date specified in the Contract plus 3% Penal Interest per annum.

Advances to be Used only 11.2.6. for This Work.

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

Employer retains the right for any other remedy prescribed for breach of Contract in this regard.

The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilization advance.

11.3. Provisional Payment Against Material at Site

Provisional Payment 11.3.1. Against Material at Site

A provisional payment on account of main contraction materials required for the Permanent Works, shall be paid on request of the Contractor after these materials are brought to Site, against an Indemnity Bond in a form acceptable to Employer is duly executed. The payment shall be limited to 80% of the actual value or assessed value of these materials and the total of such provisional payment on account of construction materials at a time shall be limited to three percent of original contract value or likely average consumption of such materials for three months, whichever is less and at any time the total outstanding provisional payment against material at site shall not exceed four percent of the original control value. The valuation of the average consumption of such main construction materials shall be approved by the Engineer, whose decision shall be final. Materials which are of perishable nature should be adequately insured.

Written Request for 11.3.2. Advances/Provisional Payment against material at site Advances and provisional payments as admissible, shall be payable only on Contractor's written request to the Employer/Engineer.

Recovery of 11.3.3. Advances/Provisional Payment

- a. The recovery of Advances shall commence when 20% of the original Contract Value of the work has been paid and it will be completed by the time of original Date of Completion. As far as possible the recovery of advances shall be limited to 30% of an account bill.
- b. No advance shall be given after 40% of the original contract amount has been paid. However, provisional payment against material at site will continue to be paid as stipulated in Clause 11.3. till end of the contract period.
- c. In case of provisional payment against Materials, the amount consumed every month shall be recovered from the next months on account bill and completing the recovery in 3 monthly instalments. In case recovery could not be made due to any reason, interest will be charged as per Clause 11.2.5.

11.4. Application for Interim Payment Certificates

11.4.1. In case of 'Lump Sum' contract with cost centre and Milestone payment, the fixed Lump Sum Price shall be apportioned by the Contractor amongst the various Cost Centres. The amount thus apportioned under each Cost Centre will be further apportioned amongst various Milestones with the approval of the Employer. The Contractor shall be entitled to submit to the Engineer requests for interim payments only upon the achievement of one or more of the Milestones described in the Cost Centre.

At the beginning of each month, the Engineer shall issue to the Contractor certificate in respect of each Milestone due to be achieved in the preceding month stating:

- a. the date on which the Milestone was achieved; or
- b. the non-achievement of the Milestone.

The Contractor shall submit a statement in three copies to the Engineer at the beginning of each month, in a form approved by the Engineer, showing the amounts to which the Contractor is entitled, together with supporting documents, including Milestone Certificates. 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:

- a. the amount due in respect of Milestones certified achieved by the Engineer under each Cost Centre;
- any amounts to be added and deducted for the advance payments and recovery thereof;
- c. any other additions or deductions is due and approved by the Engineer in accordance with the Contract; and
 - the deduction of the amounts certified in all previous Interim Payment Certificates.

The Contractor shall not submit more than one request for interim payment per month.

If any Milestone is not achieved by the end of the month in which it is scheduled to be achieved, the Engineer shall suspend the payment relating to the Cost Centre in which the Milestone is included.

Payments suspended under this Clause shall be resumed by being included in the next application for interim payment made after the Milestone is achieved.

11.4.2. In case of 'Lump Sum' or Item rate' contracts with payment schedule, the contractor shall be entitled to be paid from time to time, normally once in a calendar month, by way of 'on account' bill as per the payment schedule indicated in Bill of Quantity (BOQ) or as finally approved by the Engineer.

11.5. Issue of Interim Payment Certificates

No amount will be certified or paid until the Employer has received, and approved, the Performance security and the parent Company Undertakings and Guarantees in accordance with Sub-Clause 4.2. Thereafter, the Engineer shall, within 21 days of receiving a statement and supporting documents, deliver to the

Employer, with a copy to the Contractor, an Interim Payment Certificate showing the amount which the Engineer considers to be due; if no payment is considered to be due, the Engineer shall promptly notify the Contractor accordingly.

Where only a part of the payment applied for is disputed, payment certificate shall be issued for the undisputed amount.

The Engineer shall have the power to omit from any of the contractor's requests for payment the value of any work executed or Materials supplied or services rendered, with which he may for the time being be dissatisfied and for that purpose and for any other reason which to him may seem proper, may delete, correct or modify the sum(s) previously certified by him as being due to the Contractor.

11.6. Payment-Interim and Final

Unless otherwise stated in Special Conditions of Contract,

- a. After preliminary scrutiny and certification by the Engineer, payment of 80% of the certified interim amount shall be made by the Employer within 07 days. The amount certified shall account for all deductions, including statutory deductions, recoveries for advances and any amounts due from the Contractor. The balance 20% shall be paid within 28 days, from the date of the preliminary certification of the bill by the Engineer.
- b. Next 80% interim payment shall be made only after 100% payment of preceding interim payment certified has been completed.
- c. Any such payment made to contractor by Employer, not constitute any acceptance measurements or bill of quantities by the Employer and the classification entered in the measurement books or bills. The employer shall have right to recover any excess payment made in either 80% interim payment of bill or earlier bill from balance 20% bill or subsequent bill respectively. However, if such excess payment exceeds the balance 20% bill or subsequent bill respectively, the contractor shall on demand from the Engineer or Employer immediately refund the extra amount to the employer within 7 days, failing which the contractor shall have to pay interest at the rate equal to State Bank of India's Marginal Cost of fund based Lending Rate (MLCR) applicable for the tenure of 01 year prevailing on date plus 3% Penal interest per annum with monthly rest till the said extra amount is paid back by the Contractor.
- d. The Employer shall pay the amount certified in the Final Payment Certificate within 56 days from the date of issue of the Certificate.

Payments shall be made into a bank account, nominated by the Contractor in Indian rupees in a bank in India unless otherwise permitted in Special Conditions of Contract. If payments are to be made in more than one currency, separate bank accounts

may be nominated by the Contractor for each currency, and payments shall be made by the Employer accordingly.

11.7. Statement at Completion

Not later than 60 days after the issue of the Taking Over Certificate for the whole of Works, the Contractor shall submit, to the Engineer, three copies of a statement at completion with supporting documents, showing in detail, in the form approved by the Engineer under Sub-Clause 11.4.:

- a. the final value of all work done in accordance with the Contract, up to the date stated in such Taking Over Certificate.
- b. any further sums which the Contractor considers to be due, and
- c. an estimate of amounts which the Contractor considers will become due to him under the Contract.

The estimated amounts shall be shown separately in such statement at completion. The Engineer shall certify payment under Sub-Clause 11.5

11.8. Application for Final Payment Certificate

Not later than 56 days after the issue of the Performance Certificate, the Contractor shall submit to the Engineer three copies of a draft final statement with supporting documents showing in detail, in a form approved by the Engineer:

- a. the value of all work done in accordance with the Contract, and
- b. any further sums which the Contractor considers to be due to him under the Contract or otherwise.

If the Engineer disagrees with or cannot verify any part of the draft final statement, the Contractor shall submit such further information as the Engineer may reasonably require and shall make changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the Final Statement as agreed.

If, following discussions between the Engineer and the Contractor and any changes to the draft final statement which may be agreed between them, it becomes evident that a dispute exists, the Employer shall pay those parts of the draft final statement as certified by the Engineer as not being in dispute. The remainder of the dispute may then be resolved under Clause 17, in which case the Contractor shall then prepare and submit to the Engineer a Final Statement in accordance with the outcome of the dispute.

11.9. Discharge

When submitting the final statement, the Contractor shall submit a written discharge which confirms that the total of the Final Statement represents full and final settlement of all monies due to the Contractor under the Contract. Such discharge may state that it shall become effective only after payment due under the Final Payment Certificate has been made and the Performance security referred to in Sub-Clause 4.2 has been returned to the Contractor.

11.10. Issue of Final Payment Certificate

The Engineer shall issue to the Employer, with a copy to the Contractor, the Final Payment Certificate within 28 days after receiving the Final Statement and written discharge in accordance with Sub-Clause 11.7 and 11.8, stating:

- a. the amount which is finally due, and
- 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 Contractor or from the Contractor to the Employer, as the case may be

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clauses 11.8 and 11.9, the Engineer shall request the Contractor to do so. If the Contractor fails to make such an application within a period of 28 days, the Engineer shall issue the Final Payment Certificate for such amount as he considers to be due.

11.11. Cessation of Employer's Liability

In respect of any matter or thing arising out of (or in connection with) the contract or execution of the Works before the issue of the Taking Over Certificate for the whole of the Works, the Employer shall not be liable to the Contractor unless the Contractor shall have included a claim for it in his Statement at Completion described in Sub-Clause 11.7. For any such matter or thing arising after the issue of the Taking Over Certificate for the whole of the Works, the Employer shall not be liable to the Contractor unless the Contractor shall have included a claim for it in his Final Statement.

11.12. Calculation of Payments in Foreign Currency

All payments made by the Employer pursuant to the terms of the Contract shall be in the currency or currencies specified in the Contract. Wherever any sum in a foreign currency has to be converted into Indian Rupees for any purpose, the exchange rate to be employed for such conversion shall be the selling rate of exchange at the close of business of the State Bank of India 28 days before the latest date of submission of Tenders.

11.13. Round off

In every payment to the Contractor, sums of less than fifty paise shall be omitted and sums of fifty paise and more up to one rupee shall be reckoned as one rupee.

11.14. Payment By Cheque and E-Payment

All payments to the Contractor will be made by cheque or "E-Payment" as desired by the Employer.

11.15. Tax Deduction at Source

Tax deductions will be made at source as per statutory requirement from every payment made to the Contractor at rates notified from time to time.

11.16. Production of Vouchers

- i. The Contractor shall, whenever required by the Engineer, produce or cause to be produced for examination by the Engineer, 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 Contractor are in accordance with the Specifications laid down in the Contract. The Engineer's decision on the question of relevancy of any documents, information or returns shall be final and binding on the parties.
- ii. If any part or item of the work is allowed to be carried out by a sub-Contractor, assignee or any subsidiary or allied firm, the Engineer shall have power to secure the books of such sub-Contractor, assignee or any subsidiary or allied firm through the Contractor and shall have power to examine and inspect the same. The above obligations are without prejudice to the obligations of the Contractor under any statute, rules or orders
- i. The Employer shall have lien over all or any moneys that may become due and payable to the Contractor under the Contract, and / or over the deposit of Performance Security or other amount or amounts made under the Contract and which may become payable to the Contractor.
- ii. And further, unless the Contractor pays and clears immediately on demand any claim of the Employer, the Employer shall at all times be entitled to deduct the amount of the said claim from the moneys, securities and / or deposits which may have become or will become payable to the Contractor under these presents, or under any other Contract or transaction whatsoever between the Employer and the Contractor even if the matter stands referred to Arbitration. The Contractor 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 Contractor

11.17. Withholding And Lien For Sums Claimed

11.18. Signature On Receipts For Payments

Every receipt of payment to Contractor 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 Contractor's partners in case the Contractor is a partnership firm, during the currency of the Contract, it is hereby expressly agreed that every receipt by any one of surviving Contractor'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 Contractor'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 Contractor's partners,

or of the legal heirs / representatives of any deceased Contractor / partner interest.

11.19. Post Payment Audit

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 Contractor 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 Contractor, under the Contract. If any under-payment is discovered, the same shall be paid by the Employer to the Contractor. Such payments or recoveries, however, shall not carry any interest.

11.20. Recovery of money due to the Employer

All damages (including, without limitation, liquidated damages), costs, charges, expenses, debts, or sums for which the Contractor is liable to the Employer under any provision of the Contract may be deducted by the Employer from monies due to the Contractor under the Contract including, without limitation, and the Employer shall have the power to recover any balance not so deducted from monies due to the Contractor under any other contract between the Employer and the Contractor.

When the Contractor has assigned to a third party the right to receive monies due, or, to become due, under the Contract to the Contractor or charged such monies in favour 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 Contractor is liable to the Employer from monies due to the Contractor under the Contract shall be limited to the right expressed above.

12. Variations

12.1. Right to Vary

All Variations shall be recorded in a written instruction from the Engineer either as a Contractor's Variation or as an Employer's Variation and shall not be implemented by the Contractor without such an instruction in writing from the Engineer. No Variation shall in any way vitiate or invalidate the Contract. The Contractor shall not make any alteration and/or modification of the Works, unless and until the Engineer instructs or gives consent to a Variation. If the Construction and/or Manufacture Documents or Works are not in accordance with the Contract, the rectification shall not constitute a Variation.

12.2. Contractor's Variations

Value Engineering or Innovation

Value Engineering 12.2.1. Proposals

The Contractor may submit to the Employer, in writing at its own cost, value engineering proposals for modifying the Employer's Requirements, provision of additional land, access or feasibility over and above that is provided in the Contract for the purpose of saving in time, construction or manufacture costs. The value engineering proposal shall not impair the essential character, functions or characteristics or the Work, including service life, economy of operation, ease of maintenance, desired appearance, or design and safety standards.

The Contractor shall provide his value engineering proposal in a time limit prescribed by the Engineer. The Engineer's decision in this regard shall be communicated to the Contractor within a reasonable period of time. If by any reason the time limit specified by the Engineer is exceeded, the proposal may not be considered.

The decision of the Engineer in this regard shall be final and binding.

Value Engineering 12.2.2. Proposals – Contents

If the Employer requires or accepts it, and if the Contractor wants to proceed with the proposal, the Contractor must provide (at no cost to the Employer) a detailed report prepared by a consultant acceptable to the Employer and which shall include:

- a. general description of the original Contract requirements for the Works and the proposed changes
- b. detail of all the proposed modifications to the drawings and specifications
- detail of all Work and goods affected by the value engineering proposal
- d. detailed estimate of the construction cost based on the original Contract requirements and based on the proposed changes
- e. any resultant time extensions or reductions for the Contract
- statement to the extent of minimum saving expected. The Contractor's cost of preparing value engineering proposal

shall be excluded in determining the estimated net savings in construction costs.

Value Engineering 12.2.3.
Proposals- Employer
Review

The Employer may in his sole discretion, accept or reject the value engineering proposal or any part thereof and determine the estimated net saving in the construction cost. The Employer shall not be liable for delays or damages to the Contractor due to any failure of the Employer to accept or act upon any value engineering proposal submitted pursuant to this Clause. If the submitted value engineering proposal is similar to a change / variation already under consideration by the Employer, the Employer may make such changes without respect to the value engineering proposal.

Once, the Employer or the Engineer rejects the value engineering during proposition due to any reason, it shall not be pursued by Contractor in any other form.

Amendments- Employer 12.2.4. Issuance

If the value engineering proposal is acceptable to the Employer in whole or in parts, it will accept by execution of an amendment. Such amendment shall identify all the changes in the specifications, Contract Period etc, shall specify net savings on construction costs and shall provide that the Contractor be paid 30% of saved net savings amount based on the difference between the amount contained in the Contract and the estimated net savings both as determined by the Employer.

Contractor's Acceptance 12.2.5. and Payment

The Contractor shall either accept or reject any proposed amendment executed by the Engineer pursuant to this section within 5 working days of its receipt date from the Employer. If the Contractor does not reject the same in the period stipulated above, the amendments shall be deemed to be accepted by the Contractor and shall become a variation to the Contract. The Contractor's acceptance shall be unconditional and compensation of 30% of the value shall constitute the full compensation. The Contractor will be paid this 30% or less but not more at the time of final payment on Engineer's certification that the net savings as intended by value engineering have been achieved.

12.3. Employer's Variations

If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall submit at his own cost within 14 days or such period as the Engineer may allow of the receipt of such request of the Engineer

- a. a description of the proposed design and/or work to be performed and a programme for its execution,
- b. the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 4. 13, and
- the Contractor's proposal for adjustment to the Contract Price, Time for Completion and/or modifications to the Contract.

12.4. Variation Procedure

The Engineer shall, as soon as practicable after receipt of proposals under sub-clauses 12.2 and / or 12.3, respond with approval, rejection or comments.

If the Engineer instructs or approves a Variation, he shall proceed in accordance with Sub-Clause 3.5 to agree or determine adjustments to the Contract Price, Time for Completion and Schedule of Payments.

After receipt of proposal, it will be the prerogative of the Employer, whether to Instruct and proceed ahead with the variation or drop the proposal in part or full. In that case, no cost of preparing and submitting the proposal will be payable to Contractor. In case, the design part of variation has been completed on submission of same to the Engineer, the Employer decides to abandon the variation, only cost for design to the extent of work done will be paid to the Contractor.

12.5. Variation in the Bill of Quantities

- i. i) The quantities of items shown in the Bill of Quantities are approximate, and liable to vary during the actual execution of the work. Some items/group of items may have to be altered, added or omitted. The Contractor shall be bound to carry out and complete the stipulated work as instructed by the Engineer, irrespective of the magnitude of variations including additions, alterations or omissions in the Bill of Quantities, individual items or group of items, specified in the Bill of Quantities.
- ii. Such variations shall be paid as follows:
 - a. At the accepted rates of the Contract for Positive variation in quantities to the extent of 25%, except in the case of foundation works. Unless otherwise specifically for in the Bill of Quantities or elsewhere in the Contract, the variation of 25% shall be applicable to a group of items mentioned therein and not to individual items. In case of variation in quantities on minus side, contract rates will be payable for executed quantities.
 - In case of foundation work, no variation limit applies and Contractor shall carry out the Work, at rates stipulated in the Contract irrespective of any variation.
 - c. In case of earth work, the aforesaid variation limit of 25% shall apply to the gross quantity of earth work and variation in the quantity of individual classifications of soil will not be subject to this limit where any variation can take place.
 - d. For items against which the quantity given in the Bills of Quantities is "if or as required", there shall be no increase/decrease of rates whatever be the quantity finally executed.
 - e. Variation in the quantity of items individually costing upto 1% of the total contract value, shall be payable at the rates stated in the Contract. Notwithstanding the magnitude of variation upto 2% of the original Contract Value for each item.

- f. In case the variation in individual items or the group of items as stipulated above, is more than 25% on plus side, the rate for the varied quantity beyond 25% shall be negotiated between the Engineer and the Contractor and mutually agreed rates arrived at before actual execution of the extra quantity.
- g. In case Engineer introduces an item for which the Contract does not contain any rates or prices applicable to the varied Works, the rate of such items shall be derived, wherever possible, from rate for similar items available in the Bill of Quantities of the accepted Tender. In case this is not possible, the rate may be decided on the following basis:
 - Cost of Materials at current market price, as actually utilised in the final finished Permanent Works, including a reasonable percentage for wastage and transportation.
 - ii. Cost of enabling works if any (unless provided for separately) worked out on the above basis but with less stringent quality. Specifications minus salvage value of serviceable material released after completion of work and cost of material released as scrap.
- iii. Cost of labour actually used at the site of work at rates under Payment of Minimum Wages Act for the area of work for each category of worker, further enhanced by a percentage of 10% of the aforesaid rates to account for labour not directly utilised at Site and other ancillary and incidental expenses on labour.
- iv. Hire charges for Plant * Machinery, scaffolding, shuttering, forms, etc., required to be used at the site of the work. The tools used by the various trades shall not be counted as Plant & Machinery for this purpose.
- v. An amount of 20% of items (i), (ii), (iii) and (iv) above to allow for Contractor's overheads, profits and corporate taxes. This percentage shall also apply to estimated cost of Materials supplied free to the Contractor.
- vi. In all cases where extra items of work are involved, for which there are no rates in the accepted Bill of Quantities the Contractor shall give a notice to the Engineer, of at least 7 days before the need for their execution arises.

12.6. Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, and an adjustment is agreed or fixed as stated above, the amount payable in each of the applicable currencies shall be specified when the adjustment is agreed or fixed. In specifying the amount in each currency, the Contractor and the Engineer (or, failing agreement, the Engineer) shall take account of the actual or expected currency proportions of the Cost of the varied work, without being bound by the proportions of various currencies specified for payment of the Contract Price.

13. Termination of the Contract

13.1. Notice to Contractor

If the Contractor fails to carry out any of his obligations, or if the Contractor is not executing the Works in accordance with the Contract, the Engineer may give notice to the Contractor requiring him to make good such failure and remedy the same within such time as the Employer / Engineer may deem to be reasonable.

13.2. Termination Of Contract Due To Contractor's Default

Conditions Leading To 13.2.1. Termination Of Contract

The Employer shall be entitled to terminate the Contract if the Contractor or any one of its constituents,

- a. fails to comply with a notice under Sub clause 13.1
- b. abandons or repudiates the Contract
- c. without reasonable excuse acceptable to the Engineer fails to commence the Works in accordance with the Contract
- d. sub contracts the whole of the Works or assigns the Contract without approval of the Employer
- e. becomes bankrupt or insolvent or goes into liquidation except voluntary liquidation for the purpose of amalgamation or reconstruction
- f. persistently disregards instructions of the Engineer or contravenes any provisions of the Contract, or
- g. fails to adhere to the agreed programme of work by margin of 10% of the stipulated period or 21 days, whichever is earlier, or fails to complete the Works or parts of the Works within the stipulated or extended period of completion, or is unlikely to complete the whole Work or part thereof within time because of poor record of progress; or
- h. fails to remove materials from the Site, or pull down and replace work, after receiving notice from the Engineer to the effect that the said materials or Works have been condemned or rejected, or
- fails to take steps to employ competent and/or additional staff and labour, or
- j. fails to afford the Engineer or his representative proper facilities for inspecting the Works or any part thereof, or
- k. indulges in corrupt or fraudulent practices as explained in Clause 4.33

- 13.2.2. In any one of these events or circumstances, the Employer may upon giving 14 days notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in case of subparagraph (e) or (k), the Employer may by notice of 7 days terminate the Contract immediately.
- 13.2.3. For the purpose of sub para (c) above, this clause, reasonable excuse shall be one, which in the opinion of the Engineer has resulted from Circumstance which
 - a. is beyond the employer's or contractor's control and
 - made the failure unavoidable and it is evidenced by the Contractor to the satisfaction of the Engineer that the failure was remedied without unreasonable delay once that obstacle was out of the way.
- 13.2.4. In case of sub para(g), the Engineer at its sole discretion may terminate only part of the contract also by taking out some part of the total scope of work and may complete or arrange for any other entity through the process of open/limited/single tender or by calling quotations, to do so at the risk and cost of the contractor.
- 13.2.5. The Employer's decision to terminate the Contract shall not prejudice any other rights of the Employer under the Contract.
- 13.2.6. On termination of contract due to contractor's default the performance security shall be forfeited by encashing the bank guarantee and the balance work shall be got done independently without risk and cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or a partnership firm, then every member/partner of such JV or partnership firm shall be debarred from participating in the tender for the balance work either in his/her individual capacity or as a partner of any other JV/partnership firm.
- 13.2.7. The Engineer shall not make a claim under the Performance Security except for amounts to which the NMRC is entitled under the contract (Not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - Failure by the contractor to extend the validity of the Performance Security as described herein above, in which event the Engineer may claim the full amount of the Performance Security.
 - ii. Failure by the contractor to pay NMRC any amount due, either as agreed by the contractor or determined under any or the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer.
 - iii. The contractor being determined or rescinded under provision of the GCC the Performance Security shall be forfeited in full and shall be absolutely at the disposal of the NMRC.

Valuation at the date of 13.2.8. Termination

The Engineer shall, as soon as possible after termination under Sub-Clause 13.2.1, determine and advise the Contractor of the value of the Construction and/or Manufacture Documents, Plant, Rolling Stock, Materials, Contractor's Equipment and works and all sums then due to the Contractor as at the date of termination.

Payment after Termination 13.2.9.

After termination under Sub-Clause 13.2.1, the Employer shall not be liable to make any further payments to the Contractor until the costs of design, manufacture, execution, completion and remedying of any defects, damages for delay in completion (if any), and all other costs incurred by the Employer, have been established.

The Employer shall be entitled to recover from the Contractor the extra costs, if any, of completing the Works after allowing for any sum due to the Contractor under Sub-Clause 13.2.8. If there are no such extra costs, the Employer shall pay any balance to the Contractor.

Non-exercise of power not 13.2.10. to constitute waiver

Provided always that in case any of the powers conferred upon the Employer by Sub-clause 13.1 and Sub-clause 13.2.1 above, shall have become exercisable, and the same may not have been exercised, the non-exercise thereof shall not constitute waiver of any of the conditions thereof.

13.3. Default of Employer

Notice by Contractor

13.3.1. In the event of the Employer:

- a. failing to pay the Contractor, without reasonable cause, the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.5 within which payment has to be made, subject to any deduction that the Employer is entitled to make under the Contract, or
- b. becoming bankrupt or, being a company, going into liquidation, other than for the purpose of a scheme of reconstruction or amalgamation,

Then, the Contractor 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 Contractor to do so and in that case, the Contractor may terminate the Contract after issue of 14 days notice to the Employer with a copy to the Engineer. In this case, the Contractor shall be compensated as per Sub clause 13.3.4.

The Engineer's decision on the amount payable on this account shall be final and binding.

Contractor's Entitlement to 13.3.2. Suspend the Work

The Contractor may, if the Employer fails to pay the Contractor the amount due under any certificate of the Engineer within 56 days after the expiry of the time stated in Sub-Clause 11.6, within which payment is to be made, subject to any deduction that the Employer

is entitled to make under the Contract, after giving 28 days' prior notice to the Employer, with a copy to the Engineer, suspend work or reduce the rate of work.

If the Contractor suspends work or reduces the rate of work in accordance with the provisions of this Sub-Clause and thereby suffers delay or incurs costs the Engineer shall, after due consultation with the Employer and the Contractor, determine:

- a. any extension of time to which the Contractor is entitled under sub-clause-8.4, and
- the amount of such costs, which shall be added to the Contract Price, and shall notify the Contractor accordingly, with a copy to the Employer.

Cessation of Work by 13.3.3. Contractor

After termination under Sub-13.3.1, the Contractor shall:

- a. cease all further work, except for such work as may be necessary and instructed by the Engineer for the purpose of making safe or protecting those parts of the Works already executed, and any Work required to leave the Site in a clean and safe condition,
- b. hand over all Construction and/or Manufacture Documents,
 Plant, Rolling stock, and Materials for which the Contractor has received payment,
- c. hand over those parts of other Works executed by the Contractor up to the date of termination, and
- d. remove all Contractor's Equipment which is on the Site and repatriate all his staff and labour from the Site.

Any such termination shall be without prejudice to any other right of the Contractor under the Contract.

Payment on Termination

13.3.4.

After termination under Sub-Clause 13.3.1 the Employer shall return the Performance security, and shall pay the Contractor an amount calculated and certified in accordance with the following conditions:

- a. The value of approved materials actually brought to the site and reasonably required to execute the works during next three months, as per approved programme, and
- b. Value of work completed up to date by the contractor at rates specified in the Contract, after taking into account any deductions, retentions, set-off.
- c. In addition, a sum not exceeding 2% (two percent) of the value of the work remaining incomplete on the date of Termination notice taking effect.

The payment as above shall be full compensation for termination under this clause and the Contractor has no claim for damages or other entitlements whether under the contract or otherwise.

13.3.5. In case termination/foreclosure of the Contract under whatsoever circumstances, any remaining tools, plants, equipments and surplus materials of Employer with contractor will be returned to the

Employer in good condition at Employer's depot at Contractor's cost. In case of the failure of the contractor to do so, the Employer will be entitled to recover their cost from the contractor from the amount becoming due to the contractor or from any other money due in any other contracts. The decision of the Engineer of the amount to be recovered will be final decision and full credit at rates initially charged to the contractor shall be allowed for such materials. Similarly, the Employer shall be entitled to recover the cost of the unreturned material, plant equipment and tools from the contractor where such material have been supplied free of cost and plant, equipment and tools free of cost or on lease basis to the contractor as stipulated in the Conditions of Contract.

14. Risk and Responsibility

14.1. Indemnity

The Contractor shall indemnify and hold harmless the Employer, the Engineer, the Designated Contractors, representatives and employees from and against all actions, sits, proceedings, claims, damages, losses, expenses and demands of every nature and description, by reasons of any act or omissions of the Contractor, his representative or his employees in the execution of the Works, including professional services provided by the Contractor or in the guarding the same.

These indemnification obligations shall include but not be limited to claims, damages, losses, damage proceedings, charges and expenses which are attributable to:

- sickness, or disease, or death of, or injury to any person;
 and
- b. loss of, or damage to, or destruction of any property (other than the Works) including consequential loss of use; and
- c. loss, damage or costs arising from the carriage of Plant, Rolling Stock and Materials and/or ownership or chartering of marine vessels by the Contractor, or any sub-contractor of any tier.

The Contractor shall also indemnify and save harmless the Employer from and against all claims and proceedings on account of infringements of patents rights, design, trademark name etc as detailed out in clause 5.8.

All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to the Employer, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained. The decision of the Engineer as to compensation claimed shall be final and binding.

14.2. Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works, or any part thereof, including full responsibility for the care of any work being manufactured, or stored off-Site for inclusion in the Works, or in the course of transportation to the Site, and for the care of Contractor's Equipment, Temporary Works, Plant, Rolling Stock, and any other Material, whatsoever, on the Site or delivered to or placed on the Site in connection with, or for the purpose of the Works.

The Contractor shall take this responsibility from the Commencement Date until the date of issue of the Taking Over Certificate, when responsibility shall pass to the Employer. If the Engineer issues a Taking Over Certificate for any Section or part of the Works, the Contractor shall cease to be responsible for the care of that Section or part from the date of issue of such Taking Over Certificate when responsibility shall pass to the Employer.

The Contractor shall take responsibility for the care of any outstanding work which is required to be completed prior to the

expiry of the Contract Period, until the Engineer confirms in writing that such outstanding work has been completed.

If any loss or damage happens to the Works, any other property or person, arising from any cause other than the Employer's risks listed in Sub-Clause 14.3, during the period for which the Contractor is responsible, the Contractor shall rectify such loss or damage, at his cost, so that the Works conform with the Contract or at the option of the Employer, will pay or allow to the Employer the cost of rectifying such loss or damage. Notwithstanding such loss or damage, the Contractor shall proceed with the execution of works in all respects in accordance with the contract and the Engineer's instructions. The Contractor shall also be liable for any loss or damage to the Works caused by any operations carried out by the Contractor after the date of issue of the Taking Over Certificate.

14.3. Employer's Risks

The Employer's risks of loss or damage to physical property in India and of death and personal injury occurring in India in consequence of the performance of obligations under the Contract are:

- a. war, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- b. rebellion, revolution, insurrection, or military or usurped power, or civil war, within India,
- riot, commotion or disorder by persons unless solely restricted to or caused by employees of Contractor or of sub-contractors currently or formerly engaged in the Works,
- d. Ionising radiations, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component of such an assembly, except to the extent to which the Contractor may be responsible for the use of any radio-active material,
- e. pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds, and
- f. use or occupation by the Employer of any part of the Works, except as may be specified in the Contract.

If an Employer's risk results in loss or damage, the Contractor shall promptly notify the Engineer and shall rectify this loss or damage to

the extent required by the Engineer.

If the Contractor suffers delay and/or incurs cost from rectifying this loss or damage, the Contractor shall give notice to the Engineer and shall be entitled to claim:

- a. extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4, and
- b. amount of such cost, which shall be included in the Contract Price.

14.4. Consequences of Employer's

14.5. Contractor's Risks

The Contractor's risks are all risks other than the Employer's risks given in sub- clause14.3.

14.6. Limitation of Liability

Except as provided otherwise in these Conditions, neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. The total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price. Except that this Sub-Clause shall not limit the liability of the Contractor:

- a. under Sub-Clauses 4.18, 4.19, 5.7, 8.6, and Clauses 7.10 and **7.11**
- b. under any other provisions of the Contract which expressly impose a greater liability,
- c. in cases of fraud, wilful misconduct or illegal or unlawful acts, or
- d. in cases of acts or omissions of the Contractor which are contrary to the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances.

15. Insurance

15.1. Professional Indemnity Insurance

15.2. Insurance for Works and Contractor's Equipment

15.3. Insurance
against injury to
Persons and
Damage to Property

The Contractor shall affect and maintain professional indemnity insurance, preferably in the name of NMRC, for the amount in Indian Rupees stipulated in Appendix to the Form of Tender in respect of any design of the Works to be carried out by, or on behalf of the Contractor. This insurance, which shall ensure the Contractor's liability by reason of professional negligence and errors in the design of the works, shall be valid from the date of commencement of Works, until 5 years after the date of issue of Performance Certificate. Alternatively, the Contractor shall redeem the insurance before the expiry of the Yearly Insurance in such a way that the entire validity period is covered.

The Engineer will not issue Final Payment Certificate until the Contractor has produced evidence that coverage of the professional indemnity insurance has been provided for the aforesaid period.

The Contractor shall insure the Plant, Rolling stock, Materials and Works in the joint names of the Employer, the Contractor and Subcontractors (wherever applicable) against all loss or damage. This insurance shall cover loss or damage from any cause other than the Employer's risks listed in Sub-Clause 14.3 sub paragraphs (a), (b), (d) and (e). Such insurance shall be for a limit of not less than the full replacement cost (including profit) and shall also cover the costs of demolition and removal of debris. Such insurance shall be in such a manner that the Employer and the Contractor are covered from the commencement date until the date of issue of the Taking Over Certificate for the whole of Works. The Contractor shall extend such insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking Over Certificate, and for loss or damage occasioned by the Contractor or Sub-contractors in the course of any other operations (including Clauses 7.10, 7.11 and 10).

The Contractor shall insure the Contractor's Equipment against all risks in the joint names of the Employer, the Contractor and Subcontractors, (wherever applicable) against all loss or damage. This insurance shall cover loss or damage from any cause other than the Employer's risks listed in Sub-Clause 14.3 sub-paragraphs (a), (b), (d) and (e). Such insurance shall be for a limit of not less than the full replacement value (including delivery to Site). Such insurance shall be in such a manner that each item of equipment is insured while it is being transported to the Site and throughout the period it is on or near the Site.

The Contractor shall insure against liability to third parties in the joint names of the Employer, the Contractor and Sub-contractors, (wherever applicable) for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 15.2) or to any person (except persons insured under Sub-Clause 15.4), which may arise out of the performance of the Contract and occurring before the issue of the Performance

Certificate. Such insurance shall be at least for the amount specified in the Appendix to Form of Tender.

15.4. Insurance for Workers

The Contractor shall affect and maintain insurance against losses and claims arising from the death or injury to any person employed by the Contractor or any Sub-contractor (wherever applicable) in such a manner that the Employer and the Engineer are indemnified under the policy of insurance. For Sub-contractor's employees (wherever applicable), such insurance may be affected by the Sub-contractor, but the Contractor shall be responsible for compliance with this Clause.

15.5. General Requirements for Insurances

The Contractor shall, within the respective periods stated in the Appendix to Form of Tender (calculated from the Commencement Date), submit to the Employer:

- a. Evidence that the insurances described in this Clause have been affected, with an Indian Insurance Company, and
- b. Copies of the policies for the above said insurances.

When each premium has been paid, the contractor shall submit copy of receipts to the employer. The contractor shall also, when providing such evidence, policies and receipts to the employer, notify the engineer of so doing.

The contractor shall affect all insurances for which he is responsible with insurers and in terms approved by the employer. Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify such loss or damage. Payments received from insurers shall be used for the rectification of such loss or damage.

The contractor (and, if appropriate, the employer) shall comply with the conditions stipulated in each of the insurance policies. The contractor shall make no material alteration to the terms of any insurance without the prior approval of the employer. If an insurer makes (or purports to make) any such alteration, the contractor shall notify the employer immediately.

If the contractor fails to effect and keep in force any of the insurances required under the contract, or fails to provide satisfactory evidence, policies and receipts in accordance with this sub-clause, the employer may, without prejudice to any other right or remedy, effect insurance for the coverage relevant to such default, and pay the premiums due. In such cases the premium paid by the employer plus overheads (equal to 50% of the premium paid) shall be recoverable from the contractor by the employer and may be deducted by the employer from any monies due, or to become due, to the contractor or recover the same as debt due from the contractor. The contractor shall not dispute the amount of premium paid by the employer or the overhead charges thereon.

Nothing in this clause limits the obligations, liabilities or responsibilities of the contractor or the employer, under the other terms of the contract or otherwise. Any amount not insured or not recovered from the insurers shall be borne by the contractor.

General Conditions of Contract

The Contractor shall submit to the Engineer, the details of all claims made with the insurer and claims accepted by the insurer or any other details as required by the Engineer on monthly basis.

16. Force Majeure

16.1. Definition of Force Majeure

In this Clause, "force majeure " means an event beyond the control of the Employer and the Contractor, which makes it impossible or illegal for a party to perform, including but not limited to:

- a. act of God;
- war, hostilities (whether war be declared or not), invasion, act of foreign enemies, mobilization, requisition, or embargo;
- c. rebellion, revolution, insurrection, or military or usurped power, or civil war;
- d. contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly or nuclear component of such an assembly;
- e. riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Sub-contractors currently or formerly engaged on the Works.

If a party considers that it may be affected by Force Majeure, the party shall promptly notify the other party and Engineer of such Force Majeure within 21 days of such occurrence. If neither party issues any notice regarding the event within 21 days of its occurrence, the said event shall be deemed not to have occurred and the Contract shall continue to have effect as such.

16.2. Effect of Force Majeure Event

Neither the Employer nor the Contractor shall be considered in default or in contractual breach to the extent that performance of obligations is prevented by a Force Majeure event which arises after the date of Notice to Proceed Upon the occurrence of such Force Majeure, the affected party shall endeavour to continue to perform its obligations as far as reasonably practicable.

16.3. Contractor's Responsibility

If affected by such Force Majeure, the Contractor shall promptly notify the Engineer of any proposals for overcoming the consequences of the Force Majeure, including any reasonable alternative means for performance, but shall not carry out these proposals without the consent of the Engineer.

16.4. Employer's Responsibility

If affected by such Force Majeure, the Employer shall promptly notify the Engineer and the Contractor of any proposals for overcoming the consequences of the Force Majeure.

16.5. Payment to Contractor

If the Works shall suffer loss or damage due to such Force Majeure, the Contractor shall be entitled to have included, in an Interim Payment Certificate, the Cost of work executed in accordance with the Contract.

16.6. Resumption of Work

The obligations under the Contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist.

General Conditions of Contract

In case of doubt or dispute, whether a particular occurrence should be considered an "event" as defined under this clause, the decision of the Engineer shall be final and binding.

Works that have already been measured shall be paid for by the Employer even if the same is subsequently destroyed or damaged as a result of the event. The cost of rebuilding or replacing any work that has been measured shall be borne by the Employer.

16.7. Optional
Termination,
Payment and
Release

Irrespective of any extension of time, if a Force Majeure occurs and its effect continues for a period of 6 months, after notice has been given under Sub-Clause 16.1, either party may give to the other party a notice of termination of the Contract which shall take effect in 28 days after the notice is given. Unless at the end of 28 days period the effect of the Force Majeure has ceased, the Contract shall terminate upon that date. Otherwise, the Contract shall remain in effect.

The Contractor shall be paid fully for the work done under the Contract, but not for any defective work or work done which has been destroyed or damaged before its measurement. The Employer shall have the option to take over any Plant, Rolling Stock and Materials lying at site, at rates provided for in the Contract, failing that, as per rates, which are determined to be fair and reasonable by the Engineer.

16.8. Release from Performance Under the Law If under the law of the Contract the Employer and the Contractor are released from further performance, the sum payable by the Employer to the Contractor shall be the same as would have been payable under Sub-Clause 16.7 if the Contract had been terminated under that Sub-Clause.

17. Claims, Disputes, Conciliation And Arbitration

17.1. Procedure for Claims

If the Contractor intends to claim any additional payment under any clause of these Conditions or otherwise, the Contractor shall give notice to the Engineer as soon as possible and in any event within 28 days of the start of the event giving rise to the claim.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at any other location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer shall, on receipt of such notice, inspect such records and may instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all such records and shall (if instructed) submit copies to the Engineer.

Within 28 days of such notice, or such other time as may be agreed by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and 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
- The Contractor shall send further interim claims at monthly intervals giving the accumulated amount of the claim and any further particulars and such further particulars as the Engineer may reasonably require; and
- c. The Contractor shall send a final account within 28 days of the end of the effects resulting from the event

If the Contractor fails to comply with this Sub-Clause, he shall not be entitled to claim any additional payment.

17.2. Payment for Claims

The Contractor shall be entitled to have included in any Interim Payment Certificate such amount for any claim as the Engineer considers due, after taking approval from the Employer. If the particulars supplied are insufficient to substantiate the whole of the claim, the Contractor shall be entitled to payment for such part of the claim as has been substantiated.

17.3. No legal action till Dispute
Settlement
Procedure is exhausted

Any and all Disputes shall be settled in accordance with the provisions of Clause 17. No action at law concerning or arising out of any Dispute shall be commenced unless and until all applicable Dispute resolution procedures set out in Clause 17 shall have been finally exhausted in relation to that Dispute or any Dispute out of which that Dispute shall have arisen with which it may be or may have been connected.

17.4. Notice of Dispute

For the purpose of Sub-Clause 17.5, a Dispute shall be deemed to arise when one party serves on the other party a notice in writing (hereinafter called a "Notice of Dispute") stating the nature of the Dispute provided that no such notice shall be served later than 28 days after the date of issue of Performance Certificate by the Engineer.

17.5. Two Stages for Dispute Resolution

Conciliation

17.6.

Disputes shall be settled through two stages:

- a. Conciliation procedures as established by "The Arbitration and Conciliation Act-1996" (as amended from time to time) and in accordance with this Clause. In the event this procedure fails to resolve the Dispute then;
- b. Arbitration procedures undertaken as provided by "The Arbitration and Conciliation Act -1996" (as amended from time to time) and in accordance with this Clause.

Within 60 days of receipt of Notice of Dispute, either party shall refer the matter in dispute to conciliation.

Conciliation proceedings shall be initiated within 30 days of one party inviting the other in writing to Conciliation. Conciliation shall commence when the other party accepts in writing this invitation. If the invitation is not accepted then Conciliation shall not take place. If the party initiating conciliation does not receive a reply within 30 days from the date on which he sends the invitation he may elect to treat this as a rejection of the invitation to conciliate and inform the other party accordingly.

The Conciliation shall be undertaken by one Conciliator selected from a panel of Conciliators maintained by the Employer. The Conciliator shall assist the parties to reach an amicable settlement in an independent and impartial manner.

17.7. Conciliation Procedure

The Employer shall maintain a panel of Conciliators with requisite qualifications and professional experience who shall be from serving or retired engineers of Government Departments, or of Public Sector Undertakings. Out of this panel, a list of three Conciliators shall be sent to the Contractor who shall choose one of them to act as Conciliator and conduct conciliation proceedings in accordance with "The Arbitration and Conciliation Act, 1996", of India. The party serving notice of dispute on the other party shall also serve such notice on the Conciliator chosen as per this Clause. The Employer at the time of offering the panel of Conciliator(s) to be appointed as Conciliator shall also supply the information with regard to the qualifications of the said Conciliator nominated in the panel along with their professional experience, phone nos. and addresses to the contractor.

The Employer and the Contractor shall in good faith co-operate with the Conciliator and, in particular, shall endeavour to comply with requests by the Conciliator to submit written materials, provide evidence and attend meetings. Each party may, on his own initiative or at the invitation of the Conciliator, submit to the Conciliator suggestions for the settlement of the dispute.

When it appears to the Conciliator that there exist elements of a settlement which may be acceptable to the parties, he shall formulate the terms of a possible settlement and submit them to the parties for their observations. After receiving the observations of the parties, the Conciliator may reformulate the terms of a possible settlement in the light of such observations.

General Conditions of Contract

If the parties reach agreement on a settlement of the dispute, they may draw up and sign a written settlement agreement. If requested by the parties, the Conciliator may draw up, or assist the parties in drawing up, the settlement agreement.

When the parties sign the settlement agreement, it shall be final and binding on the parties and persons claiming under them respectively.

The Conciliator shall authenticate the settlement agreement and furnish a copy thereof to each of the parties

As far as possible, the conciliation proceedings should be completed within 60 days of the receipt of notice by the Conciliator.

The parties shall not initiate, during the conciliation proceedings, any arbitral or judicial proceedings in respect of a dispute that is the subject matter of the conciliation proceedings.

17.8. Termination of Conciliation Proceedings

The conciliation proceedings shall be terminated:

- a. by the signing of the settlement agreement by the parties on the date of agreement; or
- b. by written declaration of the conciliator, after consultation with the parties, to the effect further efforts at conciliation are no longer justified, on the date of declaration; or
- by a written declaration of the parties to the conciliator to the effect that the conciliation proceedings are terminated, on the date of declaration; or
- d. by a written declaration of a party to the other party and the conciliator, if appointed, to the effect that the conciliation proceedings are terminated, on the date of declaration.

Upon termination of the conciliation proceedings, the conciliator shall fix the costs of the conciliation and give written notice thereof to the parties. The costs shall be borne equally by the parties unless settlement agreement provides for a different apportionment. All other expenses incurred by a party shall be borne by that party.

17.9. Arbitration

If the efforts to resolve all or any of the disputes through conciliation fails, then such disputes or differences, whatsoever arising between the parties, arising out of touching or relating to construction/ manufacture, measuring operation or effect of the Contract or the breach thereof shall be referred to Arbitration in accordance with the following provisions:

- a. Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is up to Rs.50 lakh and to a panel of three Arbitrators if total value of claims is more than Rs.50 lakh.
- b. NMRC shall provide a panel of three Arbitrators for the claims up to Rs.50 Lakh and a panel of five Arbitrators for claims of more than Rs.50 Lakh which may also include NMRC officers. The Contractor shall have to choose the sole Arbitrator from the panel of three and / or one Arbitrator from the panel of five in case three Arbitrators are

to be appointed. NMRC shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third Arbitrator from the panel only as the presiding arbitrator. The Arbitrator(s) shall be appointed within a period of 30 days from date of receipt of written notice / demand of appointment of Arbitrator from either party. Neither party shall be limited in the proceedings before such arbitrator(s) to the evidence or arguments put before the Engineer for the purpose fo obtaining his decision. No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being call as a witness and giving evidence before the arbitrator(s) on any matter whatsoever, relevant to dispute or difference referred to the arbitrators. The arbitration proceedings shall be held in Noida only. The language of the proceedings, that of documents and communication shall be English.

- c. The Employer at the time of offering the panel of Arbitrator(s) to be appointed as Arbitrator shall also supply the Information with regard to the qualifications of the said Arbitrator nominated in the panel along with their professional experience, phone nos. and addresses to the Contractor.
- d. The Arbitration Proceedings shall be governed by Indian Arbitration and Conciliation Act 1996, as amended from time to time including provisions in force at the time the references made. During the pendency of arbitration proceedings, the Contractor shall continue to perform and make due payments to NMRC as per the Contract Agreement
- e. The award of the sole Arbitrator or the award by majority of three Arbitrators as the case may be shall be binding on all parties.

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 cost of arbitration shall be borne by the respective parties. The cost shall, inter alia, include the fees of the Arbitrator(s) as per rates fixed by the Employer from time to time.

With respect to any dispute arising out of or related to this Contract, the parties consent to the exclusive jurisdiction of, and venue in, the District Court located in Gautam Budh Nagar, Uttar Pradesh, India

The reference to Conciliation / Arbitration shall proceed not withstanding that the Works shall not then be or be alleged to be complete, provided always that the obligations of the Employer, Engineer and the Contractor shall not be altered by reasons of arbitration being conducted during the progress of the Works. Neither party shall be entitled to suspend the work or part of the work to which the dispute relates on account of arbitration and

- 17.10. Interest on Arbitration Award
- 17.11. Cost of Arbitration
- 17.12. Jurisdiction of Courts
- 17.13. Suspension of Work on Account of Arbitration

General Conditions of Contract

payments to the Contractor shall continue to be made in terms of the Contract.

18. Service of Notices

18.1. Notice to Contractor

- a. All notices to the Contractor, shall be served by post or telex or telefax or by hand to the Contractor or his authorized representatives. In case of notices delivered by post, they will be deemed to have been delivered after 7 days of dispatch.
- b. The Contractor shall, on award of the Contract, furnish to the Engineer, the name, designation, address and telephone, telex and telefax numbers and e-mail address of his representative referred to in **Clause 4.3.**

18.2. Notice to Employer and Engineer

All notices to the Employer or Engineer shall be served by post or telex or telefax, or by delivering by hand to the address nominated for the purpose.

18.3. Change of Address

Parties to the Contract may change the nominated address by Employer with a notice to all concerned.



NOIDA METRO RAIL CORPORATION LTD.

(A joint venture of Govt. of India and Govt. of U.P.)

CONDITIONS OF CONTRACT ON SAFETY, HEALTH AND ENVIRONMENT MANAGEMENT (July 2018)

NOIDA METRO RAIL CORPORATION LTD.

Block – III, 3rd Floor, Ganga Shopping Complex, Sector-29, Noida – 201 301, District Gautam Budh Nagar, Uttar Pradesh, India

Safety, Health and Environment Management Manual

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Part - I: Safety Health & Environment Management

1. General

1.1. Scope

This document defines the principal requirements of the Employer on Safety, Health & Environment associated with the contracts to be practiced in Housekeeping works of O&M wing.

1.2. Definition / languages

In this document:

- a. The use of 'shall' indicates a mandatory requirement.
- b. The use of 'should' indicates a guideline that is strongly recommended.
- c. The use of 'may' indicates a guideline that is to be considered.
- d. 'S & H' means Safety and Health.
- e. Employer means Noida Metro Rail Corporation Ltd., (NMRC).
- f. BOCWA means Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
- g. BOCWR means Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Central Rules, 1998
- h. DG means Director General of Ministry of Labour, Govt. of India
- i. CIIBC means Chief Inspector of Inspection of Building and Other construction

1.3. Application of this document

This document applies to all aspects of the contractor's scope of work, including all aspects conducted by sub-contractors and all other agencies. There shall be no activity associated to the contract, which is exempted from the purview of this document.

1.4. Purpose of this document

The objective of these guidelines is to ensure that adequate precautions are taken to avoid accidents, occupational illness and harmful effects on the environment during housekeeping work.

2. 'SHE' Targets and Goals

The SHE targets, goals and aim for the Works are to achieve:

- a. Zero total recordable injuries.
- b. Zero reportable environmental incidents
- c. All personnel inducted in accordance with the approved contractor SHE plan.
- d. Total compliance of conducting inspections and audits as per approved SHE plan
- e. 100% incident recording and reporting
- f. 100% adherence of usage of appropriate PPEs at work.
- g. Executing housekeeping work with least disturbance to the environment, adjoining road users and traffic

3. Compliance

3.1. NMRC's Safety and Health Policy and Management Systems

The Housekeeping works shall be undertaken in accordance with NMRC's Safety and Health Policy and Management Systems as amended from time to time provided in Safety and Health Manual.

3.2. Indian statutory requirements

Contractor shall develop thorough understanding about Building and Other construction Workers (Regulation of Employment and Conditions of Service) Act 1996, Central Rules 1998, Building and Other construction workers Welfare Cess Act, 1996 and Central Rules, 1998 and Uttar Pradesh Building Workers' Welfare Board Rules, not only to satisfy the Inspectors' perspective but the use of legislation as the strong tool for effective SHE management at work place work places. Contractor is strongly advised to practice the principle of voluntary compliance.

4. ID Card and first day at work; SHE orientation training

Identity card to each housekeeping staff shall be issued by the Chief Security Commissioner office of NMRC on payment of requisite fee for police verification and cost of card. The contractor should submit application for this in the prescribed format clearly providing basic details affixing photographs and finger prints of the concerned staff. In the absence of valid identity card, the housekeeping staff shall not be permitted to enter into the station premises.

The Contractor shall ensure that all personnel working at the housekeeping work places receive an induction Safety and Health training explaining the nature of the work, the hazards that may be encountered during the work place work and the particular hazards attached to their own function within the operation.

5. Safety and Health Training

Team leader, Manager and supervisors employed for cleaning and housekeeping works should be trained and certified by BICS (British Institute of Cleaning Science, Gurgaon) or Forbes Pro Academy of Eureka Forbes. They shall in turn train their other Housekeeping Personnel under them. Certificate of training of Team Leader, Manager and Supervisor should be produced before start of work.

On-the spot practical skill development training on height safety shall also be conducted to all foremen/ workmen who were associated to the concerned jobs.

6. Safety and Health Inspection

The contractor shall prepare required inspection checklist for all activity operations and equipment. Checklists will be prepared based on the Indian standards, rules and regulations and Employer's requirements.

All records will be properly kept and filed for record purpose.

7. Safety Communicati on

The contractor shall take every effort to communicate the Safety and Occupational health management measures through posters campaigns /billboards /banners /glow signs being displayed around the housekeeping work places as part of the effort to raise safety awareness amongst the work force. Posters should be in Hindi, English and other suitable language as deemed appropriate.

8. Accident reporting and investigation

8.1. Reporting to Employer

All accidents and dangerous occurrences shall immediately be informed verbally to the employer. Reports of all accidents (fatal / injury) and dangerous occurrences shall also be sent within 24 hours as per format provided.

No accident/ dangerous occurrence is exempted from reporting to the employer. Any wilful delay in verbal and written reporting to the Employer shall be penalised.

8.2. Reporting to Govt. organisations

In addition to the above verbal and written reporting to the Employer, a notice of any accident to a worker at the building or work place that causes loss of life; or disables a worker from working for a period of 48 hours or more immediately following the accident;

shall forthwith be sent by telephone, fax, email or similar other means including special messenger within 24 hours in case of fatal accidents and not later than 72 hours in case of other accidents to:

- a. Regional Labour Commissioner (central), wherein the contractor has registered the firm/work
- b. the board with which the worker involved was registered as a beneficiary;
- c. Director General and
- d. the next of kin or other relative of the worker involved in the accident:

8.3. Notice of Accident

Further, notice of accident shall be sent in respect of an accident which causes loss of life; or disables the injured worker from work for more 10 days to

- a. the officer-in-charge of the nearest police station;
- b. the District Magistrate or, if the District Magistrate by order so desires, to
- the Sub-Divisional Magistrate

8.4. Notice of death

Where any accident causing disablement that subsequently results in death, notice in writing of such death, shall be sent to the authorities mentioned above as soon as possible within 24 hrs and maximum 72 hours of such death.

8.5. Reporting of dangerous occurrences

All cases of dangerous occurrences shall be reported to the Inspector having jurisdiction, whether or not any disablement or death caused to the worker. The same shall also be immediately reported to the employer.

8.6. Accident investigation

Investigations should be conducted in an open and positive atmosphere that encourages the witnesses to talk freely. The primary objective is to ascertain the facts with a view to prevent future and possibly more serious occurrences.

8.7. Employers' independent

In case of fatal / dangerous occurrence the Employer shall also conduct independent investigation. Contractor and his staff shall extend

incident investigation

9.2.

necessary co-operation and testify about the accident.

9. Emergency preparedness plan

9.1. The Contractor shall prepare an Emergency Response Plan for all work places. Arrangements shall be made for emergency medical treatment and evacuation of the victim in the event of an accident or dangerous incident occurring, the chain of command and the responsible persons of the contractor with their telephone numbers and addresses for quick communication shall be adequately publicized and conspicuously

displayed in the workplace.

Contractors shall require to tie-up with the hospitals located in the neighbourhood for attending to the casualties promptly.

9.3. Contractor shall participate in on-work-place emergency mock drill for all his housekeeping staff along with Mock drill being conducted by NMRC.

Part - II: Safety

10. Housekeeping

- a. Contractor shall understand and accept that improper housekeeping is the primary hazard in any work place and ensure that a high degree of housekeeping is always maintained.
- b. General Housekeeping shall be carried out by the contractor and ensured at all times at Work place, Stores and Offices.
- c. All stairways, passageways and gangways shall be maintained without any blockages or obstructions. All emergency exits passageways, exits fire doors, break glass alarm points, firefighting equipment, first aid stations, and other emergency stations shall be kept clean, unobstructed and in good working order.
- d. Water logging on work places shall not be allowed.
- e. Proper and safe stacking of material needs to be ensured.
- f. All wooden scrap and other combustible packing materials shall be removed from work place to identified location(s).

Do's and Don'ts for Housekeeping Staff

Do's

- i. In case of fire / anything unusual on electric traction equipment or wires, inform the station controller/Manager.
- ii. Extinguish fire by special extinguishers (carbon tetrachloride or carbon dioxide type, if available.
- iii. Ensure no water jet to be directed at the fire under any circumstances.
- iv. Before taking up the work on a line running parallel to 25 KV AC lines, the line shall be earthed on both sides. Ensure that the distance between the two earths used for protection does not exceed 1km.
- v. Keep clear of the track and avoid contact with the rails when electric train within 250m.
- vi. Special care should be taken to carry long pipes, poles or ladders so that it should not come in contact with or within 2 meters of live OHE.
- vii. Cleaning work other than that of surface (i.e. of beam, pillars etc.) should be done during block period only.
- viii. Whenever washing or cleaning using water jets is done, take appropriate power block.
- ix. Cases of electric shock arising out of contact with 25 KV A.C traction equipment shall be reported immediately to TPC.

Don'ts

- Do not approach within 2 meters of any traction wires or live EHV equipment.
- ii. Do not work on or near traction wires or any live equipment unless they are made dead, earthed and shut down notices/ permit to work obtained.
- iii. Do not enter any switching station or remote control centre unless specially permitted.
- iv. Do not touch a person in contact with live traction wires. Remove body only after power supply is switched off & earthed.
- v. Do not touch any traction wire hanging from the mast or fallen on the ground and do not allow anyone else to touch it.
- vi. Cleaning work with conducting materials like Aluminum/ Steel rods

Safety, Health and Environment Management Manual

should be avoided at all times when power block is not availed.

- vii. Do not lift or raise your tools towards traction wires.
- viii. Do not damage the plinth continuity, connection to BEC, OPC and handrail continuity.
 - ix. Do not use steel tape or metallic tape or tape with woven metal reinforcement in electrified area.
 - x. Do not forget to give artificial respiration to the victim as per the prescribed procedure laid down at shock treatment charts.
- xi. Metallic telescopic rods are prohibited for use in the NMRC station.
- xii. Do not throw garbage in haste. Dispose it properly at designated place.

11. Working at Height

The contractor shall ensure that work at height is

- a. properly planned for any emergencies and rescue
- b. appropriately supervised; and
- c. carried out in a manner, which is reasonably practicable safe.

11.1. Falling objects

- a. The contractor shall, where necessary to prevent injury to any person, take suitable and sufficient steps to prevent, so far as is reasonably practicable, the fall of any material or object.
- b. Every contractor shall take suitable and sufficient steps to prevent any person being struck by any falling material or object which is liable to cause personal injury.
- c. The contractor shall ensure that no material or object is thrown or tipped from height in circumstances where it is liable to cause injury to any person.
- d. Every contractor shall ensure that, every workplace where chances of fall of material or other risk exist, shall be properly barricaded or provided with suitable safety net as fall catch arrestors etc.

11.2. Danger areas

Every contractor shall ensure that

- a. where a workplace contains an area in which, owing to the nature of the work, there is a risk of any person at work
 - i. falling a distance; or
 - ii. being struck by a falling object

which is liable to cause personal injury, the workplace be so far as is reasonably practicable, equipped with devices preventing unauthorised persons from entering such area; and such area is clearly indicated

11.3. Inspection of work equipment

The contractor shall ensure that, all work equipment used at work place and exposed to conditions causing deterioration shall be inspected regularly and recorded.

11.4. Requirements for all Working Platforms

Every contractor shall ensure that whenever necessary proper, safe and adequate to the working requirement, working platforms is provided.

11.5. Requirements for fall protection

Every contractor shall ensure that fall protection measures are provided for safe means of access as well as safe working

11.6. Requirements for Ladders

Every contractor shall ensure that a ladder is used for work at height only if a risk assessment has demonstrated that the use of more suitable work equipment is not justified because of the low risk.

- a. Only metal ladders shall be allowed. Bamboo ladders are prohibited
- b. Any surface upon which a ladder rests shall be stable, firm, of sufficient strength and of suitable composition safely to support the ladder so that its rungs or steps remain horizontal, and any loading intended to be placed on it.
- c. A ladder shall be so positioned as to ensure its stability during use.
- d. A portable ladder shall be prevented from slipping during use by -
- e. a. securing the stiles at or near their upper or lower ends;
- f. b. an effective anti-slip or other effective stability device; or
- g. c. any other arrangement of equivalent effectiveness
- h. A ladder used for access shall be long enough to protrude sufficiently above the place of landing to which it provides access unless other measures have been taken to ensure a firm handhold.
- i. No interlocking or extension ladder shall be used unless its sections are prevented from moving relative to each other while in use.
- j. A mobile ladder shall be prevented from moving before it is stepped on
- k. Where a ladder or run of ladders raises a vertical distance of 9 metres or more above its base, there shall, where reasonably practicable, be provided at suitable intervals sufficient safe landing areas or rest platforms.
- I. Every ladder shall be used in such a way that
 - i. a secure handhold and secure support are always available to the user: and
 - ii. the user can maintain a safe handhold when carrying a load unless, in the case of a step ladder, the maintenance of a handhold is not practicable when a load is carried, and a risk assessment has demonstrated that the use of a stepladder is justified because of
 - iii. the low risk: and
 - iv. the short duration of use.
- a. All places should be free from dust, debris or similar materials. Sharp projections or any protruding nails or similar objects shall be suitably guarded or shall even be avoided to make the place safe to work.
- b. Open side or opening where worker, equipment, vehicle or lifting appliance may fall at a building or outside shall be guarded suitably except in places of free access by reasons of nature of work.
- c. Suitable safety net shall be provided at places of material / man falling is possible in accordance with national standards.

Every work place equipment shall be in sound mechanical working condition and certified by either competent person under Factories Act or manufacturers' warranty in case of brand new equipments or authorized persons / firms approved by Employer before induction to any work place.

- 12. Slipping,
 Tripping,
 Cutting and
 Falling
 Hazards
- 13. Work place machinery

14. Machine and General Area Guarding

15. Manual lifting and carrying of excessive weight

16. Work place Electricity

17. Work on or near live conductors

17.1. Inspection and Maintenance

18. Hand Tools and Power Tools

The contractor shall ensure at the work place all dangerous and moving parts of housekeeping machines are securely fenced or legged. The fencing of dangerous part of machinery is not removed while such machinery is in motion or in use.

The contractor shall ensure at his work place no housekeeping staff lifts by hand or carries overhead or over his back or shoulders any material, article, tool or appliances exceeding in weight as said below, unless aided by another housekeeping staff or device.

Person	Maximum weight in kg		
Adult man	55		
Adult woman	30		

- a. Every contractor shall ensure safe usage practices of power supply as well as safe electrical equipments fitted with protection devices.
- b. Cables shall be selected after full consideration of the condition to which they shall be exposed and the duties for which they are required.
- c. The contractor shall ensure plugs, socket-outlets, and couplers available in the work place as per IS/applicable standard.
- d. Every joint and connection in a system shall be mechanically and electrically suitable for use to prevent danger. Proper cable connectors as per standards shall only be used to connect cables.
- e. No loose connections or tapped joints shall be allowed anywhere in the work place, office area, stores and other areas.
- a. For working near OHE & other Electrical installation, the rules/measures provided in the Safety Circular 2 of O&M wing shall be followed.
- b. No person shall be engaged in any work activity on or so near any live conductor (other than one suitably covered with insulating material so as to prevent danger) that danger may arise unless-
- c. a. Suitable precautions (including where necessary the provision of suitable protective equipment) are taken to prevent injury.

All electrical equipment should be permanently numbered and a record kept of the date of issue, date of last inspection and recommended inspection period.

- a. The contractor is wholly responsible for the safe condition of Housekeeping plant and equipment used by his employees and that of his subcontractors.
- b. Use of short / damaged hand tools shall be avoided and the contractor shall ensure all his hand tools used at his work place are safe to work with or stored and shall also train his employees (including his sub-contractors) for proper use thereby.
- c. All hand tools and power tools shall be duly inspected before use for safe operation.
- d. The contractor shall ensure that power tools (electric) are properly grounded or / and double insulated.

19. Fire prevention, protection and fighting system

- a. The contractor shall ensure that storage area is provided with fire extinguishing equipment sufficient to extinguish any small fire at work place.
- b. Recharging of fire extinguishers and their proper maintenance should be ensured and as a minimum should meet Indian National Standards.
- c. Combustible scrap and other work place debris should be disposed off on a regular basis.

20. Corrosive substances

Corrosive substances including alkalis and acids shall be stored and used by a person dealing with such substances at a building / work place in a manner that it does not endanger the worker and suitable PPE shall be provided by the contractor to the worker during such handling and work. In case of spillage of such substances on worker, the contractor shall take immediate remedial measures.

21. Work Permit system

The Contractor's site staff shall abide by Work Permit system of NMRC, used to control certain types of work that are potentially hazardous.

A permit is needed when work place work can only be carried out if normal safeguards are dropped or when new hazards are introduced by the work. Examples of high-risk activities include but are not limited to:

- a. Entry into confined spaces
- b. Work in close proximity to overhead power lines and telecommunication cables.
- c. Work with electrical equipment and operations closer to live power line.
- d. Working on track & operation rooms.

A Work Permit authorisation form shall be completed with the maximum duration period not exceeding one shift.

A copy of each Permit to Work shall be displayed, during its validity, in a conspicuous location in close proximity to the actual works location to which it applies.

22. Work to adjacent track

Whenever work is to be conducted in close proximity to the live track then the following measures shall need to be addressed:

- a. The rules/measures provided in the Safety Circular 2 of O&M manual shall be followed.
- b. No persons are allowed to work onto the track unless specific authority has been given by NMRC. Adequate protection in accordance with the O&M requirements shall be followed.
- c. All persons shall wear high visibility clothing at all times.
- d. Any induction training requirements of the Track shall be strictly observed.

The contractor shall provide required PPEs to workmen to protect against safety and / or health hazards. Primarily PPEs are required for the following protection:

- a. A. Height Work
 - i. Safety Helmet

23. Personal Protective Equipment (PPEs)

Safety, Health and Environment Management Manual

- ii. Full body Safety harness
- b. B. Electrical Operation Room
 - i. Shoes with insulated sole/Rubber Gum boots
 - ii. Electrically insulated Gloves
- c. C. Chemical Handling
 - i. Eye protection i.e. Safety goggles
 - ii. Chemical Gloves for hand protection

Part - III: Occupational Health and Welfare

24. Physical fitness of workmen

The contractor shall ensure that his employees/workmen subject themselves to such medical examination as required under the law or under the contract provision and keep a record of the same.

The contractor shall not permit any employee/workmen to enter the work area under the influence of alcohol or any drugs.

25. Medical Facilities

25.1. Medical Examination

As per BOCW relevant rules, the contractor shall arrange a medical examination of all his employees including his sub-contractor employees employed before employing, after illness or injury, if it appears that the illness or injury might have affected his fitness.

25.2. Ambulance van

The contractor shall ensure that an arrangement is made with a nearby hospital for providing such ambulance van for transportation of serious cases of accident or sickness of workers to hospital promptly.

25.3. First-aid boxes

The contractor shall ensure at a work place one First-aid box provided and maintained for providing First-aid to the workers. Every First-aid box is distinctly marked "First aid" and is equipped with the articles specified in BOCWR.

26. Welfare measures for workers

26.1. Toilets and Urinals

Generally, facilities are available at Metro Station, Depots & other work places and maintained by agencies engaged by NMRC. Contractors workers may utilised these facilities on payment basis.

26.2. Drinking water

As per relevant section of BOCWA the contractor shall make in every work place, effective arrangements to provide sufficient supply of wholesome drinking water with minimum quantity of 5 litres per workman per day. Quality of the drinking water shall conform to the requirements of national standards on Public Health.

Part - IV: Penalty and Awards

27. Charges to be recovered from contractor for unsafe act or condition

NMRC has built an image of safety conscious organisation meticulously over a long period of operation. Any reportable accident (fatality / injury) results in loss of life and/or property damage. These accidents not only result in loss of life but also damage the reputation of NMRC. Most of the accidents are avoidable and caused preliminary due to contractors' negligence. Hence NMRC shall recover the cost of damages from the contractors for every reportable incident (fatality / injury).

28. Stoppage of unsafe activity by contractor

In addition, sometimes our activities are exposed to public scrutiny as the work is executed on public places. Any unsafe act / unsafe condition observed by public further damage our reputation. Without limiting to the unsafe acts and or conditions, the Employer shall have the right to deduct charges for any other unsafe act and or condition depending upon the gravity of the situation on a case-to-case basis.

in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and / or property, and / or equipment at specific work place.

a. The Employer shall have the right to stop the work at his sole discretion, if

- b. The contractor shall not proceed with the work until he has complied with each direction to the satisfaction of Employer.
- c. The Contractor shall not be entitled for any damages / compensation for stoppage of work, due to safety reasons.

The following categories will be considered for awards as per the scheme in practice of Employer

- a. Zero fatality contracts.
- b. 100% adherence to voluntary reporting of all accidents throughout the currency of contract.
- c. Safest Contractor of the year.

29. Awards

Part - V: Environment Management

30. Indian statutory requirements

The Housekeeping works shall be undertaken in accordance with all applicable legislation and Indian statutory requirements listed below but not limiting to:

- a. Environment Protection Act, 1986 and Rules 1986
- b. Air (Prevention and control of Pollution) Act, 1981
- c. Water (Prevention and Control of Pollution) Act, 1974
- d. The Noise Pollution (Regulation & Control) Rules, 2000
- e. Notification on Control of Noise from Diesel Generator (DG) sets, 2002
- Solid Waste Management Rules, 2016
- g. Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016
- h. e-waste (Management) Rules, 2016
- i. Batteries (Management & Handling) Rules, 2001 and amendment 2010
- j. Plastic Waste Management Rules, 2016
- k. Bio-Medical Waste Management Rules, 2016

31. Procurement of materials

Cleaning products shall be bio-based, non-toxic, fragrance free, have a pH between 4 and 9, and have low levels of volatile organic compounds (VOCs). Products may not contain: carcinogens, mutagens, teratogens, ozone-depleting compounds, greenhouse gasses, dyes, petroleum distillates, endocrine modifiers, alkyl phenyl ethoxylates, dibutyl phthalate, heavy metals, more than 0.5% phosphorous, chlorinated solvents, or contribute to petrochemical smog or poor indoor air quality.

In addition, concentrated products are used and properly diluted to reduce impacts to human health and the environment.

Re-usable/washable rags and mops should be used, which are effective and do not shed fibers.

Products used should degrade rapidly, should not harm human health, should not pollute the air or water supply, and should present an economically sound cost of usage.

32. Waste Management

Collection, handling, segregation, transportation and disposal of waste may cause environmental degradation and nuisance. To prevent it, waste has to be handled and disposed properly. As such, collection, handling, segregation, transportation and disposal of all waste shall be strictly managed by the contractor.

Training of staff should be undertaken by the contractor in order to increase awareness of waste management issues.

Information regarding waste segregation shall be posted at appropriate locations around the office.

The contractor shall ensure regular maintenance and cleaning of the waste storage areas.

No lubricants and hazardous waste shall be allowed to discharge into water courses. Burning of any type of waste and illegal dumping of waste is strictly prohibited.

33. Collection

The contractor shall provide sufficient number of bins to collect the waste items. Hazardous waste, used batteries, bio-medical waste, recyclable paper waste, biodegradable and general refuse shall be collected in separate bins to ensure 100% segregation at source itself.

The collection bins shall be as per applicable legal requirement. All waste collections bins shall be of appropriate size with a closed lid. Each bin shall be clearly labelled both with colour code system and labelled in Hindi and English.

Bio-medical waste shall be collected on daily basis.

34. Segregation

The contractor shall collect general refuse on daily basis and shall be segregated into bio-degradable and recyclable. These wastes should be disposed on daily basis through local municipal agency.

35. Storage and disposal Mechanism

The contractor shall take all necessary permits or fulfil all necessary legal requirements for storage of all waste items.

Hazardous waste and batteries shall be stored on an impermeable surface with containment bunding to retain leaks, spills and ruptures.

Storage period and disposal mechanism for different waste stream is tabulated below:

S. No.	Waste Stream	Maximum storage period at site	Disposal Mechanism
1.	General Refuse	48 hours	Through Municipal agency
2.	Recyclable paper waste	3 months	Through paper recycling agency appointed by the Employer
3.	Bio-Medical Waste	48 hours	Authorised agency appointed by the employer
4.	Used Batteries	As per law	Authorised agency appointed by the employer
5.	Hazardous Waste	As per law	Authorised agency appointed by the employer
6.	e-Waste	As per law	Authorised agency appointed by the employer

Appendix – 1: Topics for First Day at Work SHE Orientation Training of Workmen

36. Hazard Hazards on work place:

Identification Procedure

a. Electricity

b. Machinery

c. Handling materials

d. Work place housekeeping

e. Work at Height

f. Fire

37. Personal a. What is available?Protective b. How to obtain it?

c. Correct use and care.

38. Health a. Work place welfare facilities

b. Potential health hazards

c. First Aid/CPR

39. Duties of the contractor

Equipment

a. Brief outline of the responsibilities of the Contractor by law

b. Details of Contractor's accident prevention policy

c. Building and other construction worker Welfare Law

40. Employee's Duties

d. Brief outline of responsibilities of employee under law

e. Explanation of how new employees fit into the Contractor's plan for accident prevention. (induction and orientation).

Appendix – 2: ID Card Format

Dimensions (85 mm x 55 mm)

Front Side of ID Card

	Noida	– Greater Noida I	Metro Corridor F	Project
	Notaa	- Greater Holda I		
Compa	any logo		Name	
			Address	
	Photo		Designation	
	Signature:		Blood group	
			Valid up to	
		Reverse Side	e of ID Card	
	Noida	– Greater Noida I		Project
Employe	e Address			

|--|

Appendix – 3: Safety and Health Posters

Every contractor shall prepare a SHE Communication Plan as a part of work place specific SHE Plan and shall include the following minimum requirement of Posters / Signages / Video as applicable. In case readymade posters are available in any of the category from safety related organisations, they may procure the same and display it. In case the same is not available then the contractors shall make necessary arrangements to get the posters designed and printed on their own. The List of Posters:

- a. Mandatory PPE Usage
- b. Working at Height
- c. Work place Electricity
- d. First Aid

Appendix – 4: Sample Accident Occurrence Form

NMRCL		Safety	Form Referen	ice	Form no:	SAF - 01
Accident/ Dar	ngerous Occ	urrence Form			Accident no:	
Name of the Contractor					Contract no:	
Instructions:						
1. A copy	of this form	shall be complete	ed for every Acc	ident or Dange	rous Occurrence	•
2. It mus	t be signed b	y a senior work p	lace manageme	ent representati	ve	
3. A copy	y shall be ser	nt to the Employer	rs Representativ	e within 24 ho	urs of the Accide	nt
		Part A – I	Details of Injur	ed Person		
Name			DOB		Gender	
Address						
Job title			Employer			
		Part B -	Details of the	Accident		
Date			Time		Location	
Plant and Machinery		Yes/No	If yes,			
involved:			describe			
Witnesses (if a	any)	D4 O	Datalla afti	- 1-1		
l	1	Part C	- Details of th	e injury		
Injury description		Posponeo to ini	Ur) /		Home	
Injury Categor	у.	Response to inju	ui y		поше	
Fatal		Doctor				
Major Minor		Hospital				
IVIII IOI		•	rt D - Certificat	l tion		
I have checker	d the above i	nformation and ca			d of the accident	<u> </u>
		morniadon and Ca		. 13 & 11 46 16601		<u>.</u>
Signed			In-charge name		Date	