## Minutes of the pre-bid meeting held in MRVC Conference Room on 12.03.2019 at 11.30 Hrs in connection with following work of Virar - Dahanu double line corridor project.

Project: Mumbai Urban Transport Project -III

#### **Contract title:**

Construction of Major bridges, Minor Bridges, ROB, Drains, Retaining wall, Boundary wall and Earthwork between Km. 59.50 to Km. 124.50 between Virar station (Including) & Dahanu Road Station (Including) excluding Section between Km. 68.00 to Km. 75.00 for the Quadrupling of Railway Track between Virar - Dahanu Road under MUTP-III:

RFB No: MRVC/W/101 dated 28th February 2019

### Members present:

### Agencies participated:

SN	Name of the Representatives	Name of the Agency	Contact Details
1	Gammon Engineers & Contractors Pvt. Ltd. Mumbai	Shri Dinesh Kumar Bedi	dinesh.bedi@gammonengineers.com Mob. 9821499393 /022-61114000
2	J.M. Mahtre Infra Pvt. Ltd. Panvel	Shri Somnath Sutar	somnath.jmmipl@gmail.com Mob. 7506458619
3	ITD Cementation India Ltd. Mumbai	Shri Hemant Prabhu	hemant.prabhu@itdcem.co.in 9869130826 / 022-67680600
4	Thakur Infra Pvt. Ltd. Panvel	Shri M.P. Tyagi	mpt2865@gmail.com Mob. 9769409032
5	Saidutt Real Infra Pvt. Ltd. Virar	Shri Milind Masekar	milindmasdekar@ yahoo.com Mob. 9960698398
6	Niraj Cement Structurals Ltd. Mumbai	Shri Gulshan V. Chopra	gulshan@niraj.co.in Mob. 9820693839 / 022-6602 7100
7	S.N. Naik & Bros., Panvel	Shri Udit K. Naik	naikudit@gmail.com Mob., 9833393330 / 8976888889

### MRVC Officers

<u>SN</u>	Name of the Officer	<u>Designation</u>
1.	Shri Vijay Nathawat	DP
2.	Shri Harish Gupta	CSTE
3.	Shri Vivek Gupta	CE
4.	Shri Kanhaiya Jha	CPM-I
5.	Shri Sunil Maske	CPM-II
6.	Shri Vivek Dixit	CSTE
7.	Shri Mukesh Kumar	Dy. CPM-I
8.	Shri D.K.Choudhari	Dy. CE(HQ)
9.	Shri A.V. Kulkarni	Dy. CPM-IV
10.	Shri N.V. Joseph	Dy. CSTE-I
11.	Shri S.J. Chauhan	Dy. CSTE-II
12.	Shri K.L. Meena	Dy. CE

- 1. At the outset Shri Vivek Kumar Gupta, Chief Engineer welcome all the participant. He further stated that provisions related to development of domestic industries has been added to the tender document. Therefore, all bidders shall ensure to certify the local content to be used in the works as required by the tender document.
- 2. The scope of the work and proposed alignment was explained in brief by MRVC officials. It was stated that scope of the work, terms & conditions etc. has been described in detail in RFB document. Bidders can ask quarries by e-mail up to 28<sup>th</sup> March 2019.
- 3. No query was received from any bidder or participants.

\*\*\*

### MUMBAI RAILWAY VIKAS CORPORATION LTD.

### ADDENDUM/CORRIGENDUM NO. 1 Date 03-04-2019

RFB No.	MRVC/W/101 Date: 28/02/2019
Name of the Work	Construction of Major bridges, Minor Bridges, ROB, Drains, Retaining wall, Boundary wall and Earthwork between Km. 59.50 to Km. 124.50 between Virar station (Including) & Dahanu Road Station (Including) excluding Section between Km. 68.00 to Km. 75.00 for the Quadrupling of Railway Track between Virar - Dahanu Road under MUTP-III.

The following changes are to be incorporated at the appropriate places in the **Bid Document:** 

### 1. Section I- Instruction to Bidders (ITB)

S. No.	Page No.	Clause No.	Existing	Amended
1.	18	17.3	Deleted.	If a margin of preference applies as specified in accordance with ITB 33.1, domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITB 33.1.
2.	42	38.1	A margin of preference for domestic bidder shall not apply.	Domestic Purchase preference as mentioned in BDS shall be applicable

### 2. Section II - Bid Data Sheet (BDS)

S. No.	Page No.	Clause No.	Existing	Amended
1		ITB 17.3	Not Applicable	Delete this row from BDS
2	57	New Para	-	For the purpose of Development of Domestic Industries, Domestic
	after	ITB 38.1		Purchase Preference of 20 per cent shall be allowed as follows:
		added		-

S. No.	Page No.	Clause No.	Existing	Amended
	ITB 37.1			There has to be a local content of minimum of 50 per cent. To assess purchase preference, the following definition and value shall apply:
				Local Content: Means the amount of value added in India which shall be the total value of the items procured (Excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent. The minimum local content shall be 50%.
				<b>Local Supplier:</b> Means a supplier or Service provider whose product or service offered for procurement meets the minimum local contents as prescribed above. If the local content of a tender submitted by a foreign registered firm/supplier amounts to greater than the 50% minimum Local Content, then the foreign tenderer will also qualify within the meaning of Local Supplier.
				'L1': Means the lowest tender which offers the lowest evaluated cost as adjudged in the evaluation process as per the tender or other procurement solicitation.
				Margin of Purchase Preference: Means the maximum extent to which the price quoted by a local supplier may be above the 'L1' for the purpose of purchase preference. The margin of purchaser preference shall be 20%.
				The local suppliers (meeting the requirement of Local Supplier defined above) are required to make a Declaration of Local contents as follows:

S. No.	Page No.	Clause No.	Existing	Amended
				<ul> <li>(i) The Local Supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.</li> <li>(ii) The Bidder is also required to indicate local content % in bidding form of Local Content available in Section 4: Bidding Forms.</li> <li>(iii) After opening of financial bid, for a bidder who has declared that his local content is 50% and above as per (i) above, his total local content shall be calculated as per bidding form as (ii) above by taking quoted values of individual schedule and it should meet the minimum local content as % of overall value to qualify as local supplier i.e. 50% of total quoted tender value.</li> <li>Procedure for application of Purchase Preference is detailed in Section III – Evaluation and Qualification Criteria (ii) Financial Part</li> </ul>
3	57	ITB 51.1	The procedures for making a Procurement-related Complaint are detailed in the AIIB's "INTERIM OPERATIONAL DIRECTIVE ON Procurement Instructions for Recipients (Annex IV)." If a Bidder wishes to make a Procurement-related Complaint, the Bidder shall submit its complaint following these procedures, In Writing (by the quickest means available, such as by email or fax), to:  For the attention: Shri S. N. Maske	Any complaint(s) related to procurement may be addressed to the designated official below. All procurement related complaints shall be addressed as per the Complaint handling mechanism of MRVC available at <a href="https://mrvc.indianrailways.gov.in/mrvc_complaint.jsp?lang=0&amp;id=0,294">https://mrvc.indianrailways.gov.in/mrvc_complaint.jsp?lang=0&amp;id=0,294</a> . For the attention :Shri S. N. Maske Title/position: Chief Project Manager - II Employer: Mumbai Railway Vikas Corporation Ltd. Email address: cpmii@mrvc.gov.in Fax number: 91-22-22096972

S. No.	Page No.	Clause No.	Existing	Amended
			<b>Title/position</b> : Chief Project Manager - II	Any tenderer found submitting false or misleading information will be dealt with in accordance with Appendix B, paragraph 1.3/1.4 of the tender
			<b>Employer</b> : Mumbai Railway Vikas Corporation Ltd.	documents.
			Email address: cpmii@mrvc.gov.in	AIIB shall monitored such complaints as per Annexure IV of Interim Operational Directives on Procurement Instructions for recipient.
			Fax number: 91-22- 22096972	Operational Directives on Procurement instructions for recipient.
			In summary, a Procurement- related Complaint may challenge any of the following:	
			1. the terms of the Bidding Documents; and	
			2. the Employer's decision to award the contract.	

### 3. Section III - Evaluation and Qualification Criteria (EQC)

S. No.	Page No.	Clause No.	Existing	Amended
1	79	1.5 Contractor's Representative and Key Personnel	Relevant academic qualifications Degree/ Diploma in Civil/Mechanical Engineering	Relevant academic qualifications Degree/ Diploma in Civil Engineering
		Item No. 3 of table; Civil Engineer PSC Work- 3 Nos.	relevant work experience 10 Years in fabrication of	Minimum years of relevant work experience  10 Years in Prestressed Concrete Works of bridges.

b. Following additional equipment at a Underground Cable Det Locator  2 Nuclear Moisture Density Gauge 3 Slope Compactor Vibratory Role 80 (Double Drum) Rope Start 4 Slope Vibratory Compactor 1000 Kg Drum Weight 3 81 2.1 Margin of Preference Purchase preference shall apply Purchase preference shall be given to locate manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli	S. Page No. No.	Amended
1 Underground Cable Det Locator 2 Nuclear Moisture Density Gaug 3 Slope Compactor Vibratory Rol 80 (Double Drum) Rope Start 4 Slope Vibratory Compactor 1000 Kg Drum Weight 3 81 2.1 Margin of Preference Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli	2 80	a. Sr. No. of equipment in table corrected.
Locator  2 Nuclear Moisture Density Gauge  3 Slope Compactor Vibratory Rol 80 (Double Drum) Rope Start  4 Slope Vibratory Compactor 1000 Kg Drum Weight  3 81 2.1 Margin of Preference  Not Applicable Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli		b. Following additional equipment added.
3 Slope Compactor Vibratory Rol 80 (Double Drum) Rope Start  4 Slope Vibratory Compactor 1000 Kg Drum Weight  3 81 2.1 Margin of Preference  Not Applicable Purchase preference shall apply Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli		
80 (Double Drum) Rope Start  4 Slope Vibratory Compactor 1000 Kg Drum Weight  3 81 2.1 Margin of Preference  Not Applicable Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli		2 Nuclear Moisture Density Gauges 1 No
3 81 2.1 Margin of Preference  Not Applicable Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli		
Preference  Purchase preference shall be given to loc manner specified hereunder:  i. Among all qualified bids, the low as L1. If L1 is from a local suppli		
ii. If L1 is not from a local suppl among the local suppliers, will b L1 price subject to local supplier within the margin of purchase contract shall be awarded to such to matching the L1 price.  iii. In case such lowest eligible local	3 81	<ul> <li>i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract will be awarded to L1.</li> <li>ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.</li> </ul>

S. No.	Page No.	Clause No.	Existing	Amended
				invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.  Information submitted by the bidder in the Local content form
				i.e. Form FIN – 3.5 shall be used as the basis to qualify local content requirement.

### 4. Section IV – Bidding Forms

S. No.	Page No.	Clause No.	Existing	Amended
1	85	Letter of Bid  – Technical Part:		
(a)	86	(1)	Fraud and Corruption: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption; and	Prohibited Practices: We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Prohibited Practices; and
(b)	86	(m)	We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against <b>fraud and corruption</b> in force in India	We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against <b>prohibited practices</b> in force in India on date namely "Prevention of Corruption Act 1988".

S. No.	Page No.	Clause No.	Existing	Amended
			on date namely "Prevention of Corruption Act 1988".	
(c)	87	(o) New sub clause added	<del>-</del>	o) We declare that our product and/or services offered for this tender meets /does not meet # (#choose one option) the minimum prescribed local contents and requirement of Local Supplier as per policy of development of Domestic industry mentioned in BDS clause 38.1 and a certificate to that effect has been attached as per para (i) of the said clause.
2	121	Add new FIN 3.5		FORM FIN 3.5: Form of Local Content

### II Appendix to Financial Part – Bill of Quantities

### a. Modification in the existing Item

S. No.	Page No.	Clause No.	Existing	Amended
1	154	Item No.	Quantity of the item 80,000.00 cum	Quantity of the Item 75,075.00 cum
		10(b)		
2	158	Item No. 13	Providing design mixed M-45 grade cement	Providing design mixed M-45 grade cement
		Schedule A	concrete produced from microprocessor	concrete produced from microprocessor
			controlled batching and mixing plant, with	controlled batching and mixing plant, with
			Maximum aggregate size(MAS) of 20mm	Maximum aggregate size(MAS) of 20mm
			graded stone aggregates for precast post	graded stone aggregates for precast post
			tensioned Prestressed Concrete Girders,	tensioned Prestressed Concrete Girders,

S. Page No. No.	Clause No.	Existing	Amended
		precast post tensioned Prestressed concrete slabs(casting in yard) and Cast in situ Voided PSC Slab & launching of girders/slabs with all contractors labour, material, tools and plants including all lead and lift etc. complete as per technical specification.	precast post tensioned Prestressed concrete slabs(casting in yard), Cast in situ Voided PSC Slab and Cast in situ PSC Box Girders & launching of girders/slabs with all contractors labour, material, tools and plants including all lead and lift etc. complete as per technical specification.
		(Minimum Ordinary Portland cement & Micro Silica content per cum of concrete shall be 440kg per cum & 30 kg per cum respectively. Maximum W/C ratio 0.35)	(Minimum Ordinary Portland cement & Micro Silica content per cum of concrete shall be 440kg per cum & 30 kg per cum respectively. Maximum W/C ratio 0.35)
		<ol> <li>Providing HDPE pipes for future HTS strand if any.</li> <li>Platform, formwork, shuttering, centering, scaffolding and supporting system for concreting</li> <li>mixing, vibrating, compaction and curing of the concrete</li> <li>Chemical compound such as super plasticizer, retarder, silica fumes etc.</li> <li>Necessary transportation, handling, lifting, lowering, sliding, aligning, leveling erecting and launching of Girders to its final position from casting yard.</li> <li>Embedding of arrangement for fixing of bearings, if any.</li> <li>Cost of all materials, cement, labour, plants &amp; machinery etc. complete.</li> </ol>	<ol> <li>The rate of the item is inclusive of</li> <li>Providing HDPE pipes for future HTS strand if any.</li> <li>Platform, formwork, shuttering, centering, scaffolding and supporting system for concreting</li> <li>mixing, vibrating, compaction and curing of the concrete</li> <li>Chemical compound such as super plasticizer, retarder, silica fumes etc.</li> <li>Necessary transportation, handling, lifting, lowering, sliding, aligning, leveling erecting and launching of Girders to its final position from casting yard.</li> <li>Embedding of arrangement for fixing of bearings, if any.</li> </ol>

S. Page No. No.	Clause No.	Existing	Amended
		8. all lead and lifts.  Notes:-	<ul><li>7. Cost of all materials, cement, labour, plants &amp; machinery etc. complete.</li><li>8. all lead and lifts.</li></ul>
		<ol> <li>Ready Mixed concrete produced from approved microprocessor controlled automatic concrete mixing &amp; batching plant shall only be used. Extra payment for using Ready Mixed Concrete will be made under relevant item of this schedule.</li> <li>No construction joint or cold joint will be permitted.</li> <li>Only Reinforcement steel &amp; HTS wire will be paid separately.</li> <li>75% payment of this item including reinforcement steel and HTS strand used for each girder will be released after casting and first stage prestressing of girder at casting bed. Balance payment will be released only after launching of girder at its final position and casting of diaphragm of girder.</li> <li>PSC girders shall be casted in casting yard only. No cast in situ of girder will be allowed.</li> </ol>	<ol> <li>Ready Mixed concrete produced from approved microprocessor controlled automatic concrete mixing &amp; batching plant shall only be used. Extra payment for using Ready Mixed Concrete will be made under relevant item of this schedule.</li> <li>No construction joint or cold joint will be permitted.</li> <li>Only Reinforcement steel &amp; HTS wire will be paid separately.</li> <li>75% payment of this item including reinforcement steel and HTS strand used for each girder will be released after casting and first stage prestressing of girder at casting bed. Balance payment will be released only after launching of girder at its final position and casting of diaphragm of girder.</li> <li>PSC girders shall be casted in casting yard only. No cast in situ of girder will be allowed.</li> <li>PSC Box Girder and PSC voided slab shall be cast in situ. Rate is inclusive of staging required for</li> </ol>

S. No.	Page No.	Clause No.	Existing	Amended
				cast in situ including preparation of base for staging in river bed. 7. PSC Box shall be cast in one pour, no construction joint shall be permitted.
3	187	Note No. 1 of Existing Item No. 54 modified	Note 1 of Item No. 54 of Schedule A  1) As no single naturally available material is suitable for blanketing, blending of different type of mechanically produced crushed material are required. Blending of material shall be done with either a) Drum type blenders or by b) Pug mill type blenders as specified in IRS-GE-2.	Note 1 of Item No. 54 of Schedule A  1) Blanketing material shall be prepared by blending of different type of mechanically produced crushed material. Blending of material shall be done with either a) Drum type blenders or by b) Pug mill type blenders as specified in IRS-GE-2.
4		Bill of Quantities Schedule A Description, and quantity of item no. 107 is modified	107. Providing and laying design mix cement concrete in roads, having a cube strength of M-30 using cement, coarse sand and graded stone aggregate of 40mm nominal size as per approved design. Mechanically vibrated, steel form work, curing, providing and filling construction & dummy joints with approved joint filler (conforming to grade B of IS: 1834).Rounding of the edges, making and filling  Quantity: 100	107. Excavation for foundations & trenches by Manual means in all types of soils, boulders, WBM roads, including rock not requiring blasting including dewatering by manual or mechanical means etc. as per specifications with all contractor's own machinery and equipments, crossing of track, shoring, strutting, timbering and buttressing with sand /clay bags and all such measures necessary to retain in position the sides of the foundation pit and including backfilling, rolling the excavated material with watering, ramming, levelling the site and disposing off the surplus/unusable earth to low lying area within railway

S. No.	Page No.	Clause No.	Existing	Amended
				boundary with lead & all lifts as per directions of Engineer.
				Quantity: 10000
5	230 and 235	Change in Sr. No. of Item	Item No. 127 & 128 of Schedule A	Item No. 129 & 130 of Schedule A
6	235	Note of Existing Item No. 128 modified	Note 1 of Item No. 128 of Schedule A  1. Rate for this item is to be quoted as percentage of total cost of Schedule A Civil Work. For example, total cost of the civil work under Schedule A is Rs. 100 Million and rate quoted by the tenderer is 1% then total payment under this item will be Rs 1 Million. Payment against this item will be made at quoted percentage of value of work done & billed in each Interim payment Certificate/on account Bill.	1. Rate for this item is to be quoted as percentage of total cost of Schedule A Civil Work (Sum of Amount of all items from Item no. 1 to 130 of Schedule A). For example, total cost of the civil work under Schedule A is Rs. 100 Million and rate quoted by the tenderer is 1% then total payment under this item will be Rs 1 Million. Payment against this item will be made at quoted percentage of value of work done & billed in each Interim payment Certificate/on account Bill.
7	229	Bill of Quantities Schedule A	New Item added in Schedule A after item no. 126.	127. Providing including casting, supplying and installation of Precast cement concrete blocks of size 25X25 X20cm. or of required size as directed by the Engineer for protective works at bridges & banks, like toe wall, flooring ,etc. using 1:2:4 concrete mix with 20mm

S. No.	Page No.	Clause No.	Existing	Amended
				aggregate size with all contractor's shuttering, leading to bridge site from casting depot, including earthwork, providing gravel backing, laying with Contractor's labour pointing with 1:3 mix and as directed by Engineer-in-charge (Rate is inclusive of all labour and materials including cement by Contractor with all lead and lift). Note:  i) Payment for gravel backing will be paid under relevant item.  ii) 60% Payment shall be made after casting of pre-cast concrete slabs. The balance 40% will be made on completion of laying and finishing  (Filter media to be paid separately under the relevant item)
8		Bill of Quantities Schedule A	New Item added in Schedule A	128. Turfing / planting with planted doob grass, including all lead and lift, and watering as required until properly rooted, with.
				Note - Initially payment of only 40% will be made. Balance 60% will be paid as under if the turfing is properly rooted:  1. After 1st monsoon - 20%  2. After one Year - 20%

S. No.	Page No.	Clause No.	Existing	Amended
				3.After handing over of section to railways/another agency - 20%
9	240	Bill of Quantities Schedule B	Sr. No. 13, Description 4 core 240 sq.mm Al cable, <b>Item Code C.C.2.i</b> ,	Sr. No. 13, Description 4 core 240 sq.mm Al cable, <b>Item Code B.C.2.i</b> ,
10	240	Bill of Quantities Schedule B	Sr. No. 13.1, Description i) Supply, <b>Item Code C.C.2.i.a</b> , Quantity 2.00, Unit Nos	Sr. No. 13.1, Description i) Supply, Item Code B.C.2.i.a, Quantity 2.00, Unit Nos
11	241	Bill of Quantities Schedule B	Sr. No. 20.2, Description ii) Erection, Item Code B.C.3.ii, Quantity 14.00, Unit Nos.	Sr. No. 20.2, Description ii) Erection, <b>Item Code B.C.3.iii.b</b> , Quantity 14.00, Unit Nos.
12	254	Bill of Quantities Schedule B	Sr. No. 72.1, Description i) Supply, <b>Item Code B.K.10a</b> , Quantity 112.00, Unit MT.	Sr. No. 72.1, Description i) Supply, <b>Item Code B.K.1.a</b> , Quantity 112.00, Unit MT
13	255	Bill of Quantities Schedule B	Sr. No. 78.1, Description i) Supply, <b>Item Code B.K.6.i</b> , Quantity 110.00, Unit Set.	Sr. No. 78.1, Description i) Supply, Item Code B.K.6.i.a, Quantity 110.00, Unit Set.
14	255	Bill of Quantities Schedule B	Sr. No. 78.2, Description ii) Erection, Item Code B.K.6.i, Quantity 110.00, Unit Set.	Sr. No. 78.2, Description ii) Erection, <b>Item Code B.K.6.i.b</b> , Quantity 110.00, Unit Set.
15	257	Bill of Quantities Schedule B	Sr. No. 88.2, Description ii) Erection, <b>Item Code B.K.13.i</b> , Quantity 4.40, Unit Km.	Sr. No. 88.2, Description ii) Erection, <b>Item Code B.K.13.i.b</b> , Quantity 4.40, Unit Km.
16	258	Bill of Quantities Schedule B	Sr. No. 90.2, Description ii) Erection, Item Code B.K.13.ii.b, Quantity 9.20, Unit Km.	Sr. No. 90.2, Description ii) Erection, <b>Item</b> Code B.K.13.iii.b, Quantity 9.20, Unit Km.

S. No.	Page No.	Clause No.	Existing	Amended
17	261	Bill of Quantities Schedule B	Sr. No. 104, Description 32A 4P MCB breaking capacity 10kA as incomer and 12 Nos. 6-32 A SPN C-Curve 10 kA breaking capacity 10kA MCB as outgoing in 12 way SPN DB	Sr. No. 104, Description Supply, multiple loading/ unloading, storing, installation, fixing, testing & commissioning of 63A-100A 4P 16 kA breaking capacity MCCB in enclosure with rotary handle including all accessories/ GI nut, bolt, hardware, material/painted MS angle, channel/ bracket, HD PVC/ Flexible pipe, etc. required for fixing/ installation the cost of which is included in the item
18	261	Bill of Quantities Schedule B	Sr. No. 104.1, Description i) Supply, Item Code B.K.23a, Quantity 8.00, Unit Nos.	Sr. No. 104.1, Description i) Supply, Item Code B.K.23a, Quantity 12.00, Unit Nos.
19	261	Bill of Quantities Schedule B	Sr. No. 104.1, Description ii) Erection, Item Code B.K.23b, Quantity 8.00, Unit Nos.	Sr. No. 104.1, Description ii) Erection, Item Code B.K.23b, Quantity 12.00, Unit Nos.
20	261	Schedule B Payment terms for Electrical Works New Added		New note points added at the bottom of page no. 261 and 262.  1 PAYMENT terms for Electrical works under Schedule- B 1.1 Unit prices for materials: The unit prices indicated in the BOQ is inclusive of the prices for supplying of materials required under the particular item of schedule, multiple loading/ unloading, storing, handling, erection testing and commissioning of installation in conformity of specification, Latest Indian Electricity

S. No.	Page No.	Clause No.	Existing	Amended
				Act and rules. The unit price is also inclusive of all incidental charges for transport, loading/unloading and handling of materials, commission for arranging dispatch direct from manufacturer's factory/ authorized dealer/ supplier and completing all necessary formalities in this respect, such as submission of forwarding notes, all insurance premium, bankers charges for bank guarantee, indemnity bonds inclusive of cost of stamps, etc. The unit prices shall include all incidental charges duties and levies except Goods and Service Tax (GST).  1.2 Unit prices for erection:  The unit indicated in the Explanatory Note or as per electrical technical specification given in the tender papers and also cover all cost of administration of the contract, insurance premium, banker's charges for guarantees, cost of stamps, cost of storage, loading and unloading and handling of
				materials and for any road transport which the Contractor may use for carrying materials between his depot/s and site of
				work. The unit price includes cost of works and adjustments necessary to be done by the Contractor during or after the tests carried out. Prices for erection indicated in the BOQ
				are inclusive of cost of erection and material testing to be done by the Contractor to the extent. The unit prices shall include all

S. Page No. No.	Clause No.	Existing	Amended
			incidental charges duties and levies on except GST (As applicable) for works contract for Railways which notified by Govt. of India @12% at present will be paid by MRVC on production of Tax invoice.  For distribution boards, panel, meter box, the complete set as indicated in the particular item of schedule and with quantities required for erection, Testing & commissioning based on its approved design/ drawing and not in piecemeal shall be considered for payment.  2.1 Stages of payment:
			(a) Supply:  80% on supply of materials (80% of the accepted cost of the supply items of the schedule duly inspected by the nominated Inspection Authority) will be paid on receipt of the equipment/material by the consignee. The payment will be made after arrival of material at site and receipt of the invoice & other documents mentioned below and their verification. Since the materials will be in the possession of the contractor, the contractor shall arrange irrevocable indemnity bond for the payment.  Contractor's certificate that all material has been supplied against schedule.  Supplier's Challan and manufacturer's challan.

S. No.	Page No.	Clause No.	Existing	Amended
				Inspection certificate granted by Client's/RITES representative.
				Certificate of receipt of materials in good condition at Contractor's depot/s duly accepted by the Client's Engineer.
				Comprehensive Insurance on supply.
				Indemnity Bond. (Copy enclosed)
				10% on successful erection (10% of the accepted cost of the supply items).
				Alternatively 10% supply payment will be released on completion of one year from the date of 80% payment of particular item of schedule against equivalent amount fresh B.G. against this payment, issued by a Schedule bank valid till the date of commissioning of project.  Balance 10% of cost of supply on provisional acceptance of installation.  (b) Erection:
				90% of erection charges on successful erection of various items.
				Balance 10% of cost of erection on provisional acceptance of installation.
				(c) Inspection charges for the items requiring inspection of RITES will be paid directly to RITES by MRVC. Inspection call shall be given 10 days in advance from the date of inspection date.

No.	Page No.	Clause No.	Existing	Amended
21		Schedule C Payment terms for Signalling and Telecom items added.		New note points added at the bottom of page no. 284  Payment Conditions:  a. 80% of the accepted cost of the supply items of the Schedule [duly inspected by the nominated Inspection Authority] will be paid on receipt of the equipment by the Consignee.  b. 10% of the accepted cost of supply (in addition to the 80% released above) shall be paid after installation / erection of that particular equipment.  c. Balance 10% cost of the material supplied shall be paid after commissioning of the station.  100% will be paid for spares and for items, which are not required to be erected by the contractor on receipt of the equipment and no loss certificate by the consignee.  ii) Execution items:  a. 90% on account payment will be made on the basis of the measurements recorded.  b. The balance 10% will be paid after commissioning of the station.

S. No.	Page No.	Clause No.	Existing	Amended
				a. where supply and erection/installation cost is taken together, 90% payment will be made on installation of the item and balance 10% will be paid on commissioning of the station.

### 5. Section VII – Works Requirements

		Works Requirements		
Sl. No.	Page No.	Clause No.	Existing	Amended
1	300	Scope of Work 1.3.1	Additional sub items	(xx) Construction of Road Over Bridge in lieu of L.C. No. 55A at KM 120/1-3
				(xxi) Extension of Road Under Bridges constructed in lieu of L.C. No. 44,45,46 & 53
				(xxii) Shifting of existing cables/location
				boxes/signals/Emergency Sockets in Virar-Dahanu Road section
				which may infringe due to the Engineering work mentioned in the subject work.
2	311	2.3 Scope of Present		3
		Tender:-		
	314		Additional sub items	(xxii) Construction of Road Over Bridge in lieu of L.C. No. 55A at KM 120/1-3
				(xxiii) Extension of Road Under Bridges constructed in lieu of L.C. No. 44,45,46 & 53

Sl. No.	Page No.	Clause No.	Existing	Amended
				(xxiv) Shifting of existing cables/location boxes/signals/Emergency Sockets in Virar - Dahanu Road section which may infringe due to the Engineering work mentioned in the subject work.
3	423	SPECIFICATIONS FOR BLANKET WORK (TECHNICAL)	2 vi) Minimum Ev <sub>2</sub> – 100 Mpa determined from 2 <sup>nd</sup> step plate load test on top of compacted blanket layer. (Ref: German Code DIN 18134-2001).	Deleted.
	424		5. It is mandatory to mix various materials in wet mix plant to produce blanketing material as per specification given above. MDD (Maximum dry Density) of blanket material shall be more than 1.8 gm/cc	5. It is mandatory to mix various materials in wet mix plant to produce blanketing material as per specification given above.  MDD (Maximum dry Density) of blanket material shall be more than 2.10 gm/cc
4	637/638	17.0 Specification for Lighting Bus bar and Low Power Distribution (Bus bar trunking system):	1.1.b.i.1.1 Tap off outlets shall be with safety shutters to prevent access to live bus bars when not in use	Tap off outlets shall be with safety shutters to prevent access to live bus bars when not in use
5	637/638	17.0 Specification for Lighting Bus bar and Low Power Distribution (Bus bar trunking system):	1.1.b.i.1.2	Deleted
6	638	18.0 Supply, Transportation, Laying, Testing, Commissioning Of Cable	1.1.B.I.1.3 18.0 Supply, Transportation, Laying, Testing, Commissioning Of Cable	18.0 Supply, Transportation, Laying, Testing, Commissioning Of Cable

Sl. No.	Page No.	Clause No.	Existing	Amended
8	638	18.0 Supply, Transportation, Laying, Testing, Commissioning Of Cable	1.1.b.i.1.4	Deleted
9	638	18.0 Supply, Transportation, Laying, Testing, Commissioning Of Cable	1.1.b.i.1.5 18.1 Scope	18.1 Scope
10	681		Item no. A: Wiring and Sub-wiring in conduit/Capping casing	B.A: Wiring and Sub-wiring in conduit/Capping casing
11	681		Item no. A1.1, A1.2 & A2:	Item no. B.A.1.i, B.A.2.i & B.A.2.ii
12	681		Item no. A3	Deleted
13	682		Item no. A4	Deleted
14	682		Item no. A5	Item B.K.22
15	682/683		Item no. A6 to A8	Deleted
16	683		Item no. A9	Item no. B.A.3
17	683		Item no. A10	Item no. B.A.4
18	683		Item no. B	Item no. B.B
19	684		Item no. B1.1	Item no. B.B.1.i
20	684		Item no. B1.2 & B2	Deleted
21	684		Item no. B3	Item no. B.B.2.i & B.B.2.ii
22	684		Item no. B4	Item no.B.B.3.i
23	685		Item no. C	Item no.B.C
24	685		Item no. C1	B.C.1.i to B.C.1.iv
25	685		Item no. C2	Deleted
26	685		Item no.C3 & C4	B.C.2.i.a&b, B.C.2.ii.a&b, B.C.2.iii.a&b, B.C.2.iv.a&b, B.C.3.ii.a&b, B.C.3.iii.a&b,
27	686		Item no. C5	Item no.B.C.5
28	686	Item no. C5:Laying of	The price shall cover cost of	The price shall cover cost of
		cable, testing and	transportation to site from	transportation to site from contractors/
		commissioning of various	contractors/ employer store, if	employer store, if supplied by consignee,
		sizes 1.1 kV grade cables	supplied by consignee, multiple	multiple loading/ unloading, temporary
			29loading/unloading, temporary	storage, laying/erection, testing and

Sl. No.	Page No.	Clause No.	Existing	Amended
			storage, laying/erection, testing and commissioning of various cables as per BOQ items C1 to C4 on wall/ Cable duct/pipe/in trench/Tray/RCC pipes/ on culverts/ under the track as required with necessary accessories, such as fixing clamps, saddles, cleats, nut, bolts, washers, clamps painted bracket/ angles/channels etc. The cost also includes payment of GST on transportation or any other Government duty if any. If cable will be supplied by Railways which is also to be laid will be paid under this item. The cost of cable trays and its accessories will be paid separately.	commissioning of various cables as per BOQ items B.C.1.i to B.C.3.iii.b on wall/ Cable duct/pipe/in trench/Tray/RCC pipes/ on culverts/ under the track as required with necessary accessories, such as fixing clamps, saddles, cleats, nut, bolts, washers, clamps painted bracket/ angles/channels etc. The cost also includes payment of GST on transportation or any other Government duty if any. If cable will be supplied by Railways which is also to be laid will be paid under this item. The cost of cable trays and its accessories will be paid separately.
29	687		Item no. C6	Item no.B.C.6
30	688		Item no. C7	Item no.B.C.7
31	688		Item no. C8	Item no.B.C.8
32	688		Item no. C9	Item no.B.C.9
33	689		Item no. C10	Item no.B.C.10
34	689		Item no. D	Item no. B.D
35	689		Item no. D1 to D5	Item no. B.D.1.i.a&b, B.D.2.i.a&b
36	689/694		Item no. D6.1 to I.2	Deleted
37	694		Item no. J	Item no. B.E
38	694		Item no. J1 & J2	Item no. B.E.1.a&b
39	694		Item J2	Item no. B.E.2.i.a&b
40	695/697		Item no. J3.1 & J3.2 to Item no. K2	Deleted
41	697		Item no. L	Item no. B.F
42	697/698		Item no. L1 to L7 to Item no. L9	Deleted

Sl. No.	Page No.	Clause No.	Existing	Amended
43	698		Item no. L10 to L12	Item no. B.F.1.i.a&b, B.F.2.i.a&b, B.F.3.i.a&b, B.K.23.a&b
44	698		NOTE FOR ITEM NOS. – L1 to L12 LT PANEL / DISTRIBUTION BOARD/ATs / TPN/ JUNCTION BOX/ PILLAR BOX	NOTE FOR ITEM NOS. – B.F.1 to B.F.3 and B.K.23 LT PANEL / DISTRIBUTION BOARD/ATs / TPN/ JUNCTION BOX/ PILLAR BOX
45	698		Item no. M	Item no. B.G
46	698		Item no. M1	Deleted
47	698		Item no. M2	Item no. B.E.1
48	699		Item no. M3	Deleted
49	699		Item no. M4	Item no. B.G.2
50	699		Item no. M5	Item no. B.G.3
51	699		Item no. M6	Item no. B.G.4
52	700		Item no. M7 to Item no. M11	Deleted
53	701		Item no. N	Item no. B.H
54	701		Item no. N1	Item no. B.H.1
55	701		Item no. N2	Item no. B.H.2
56	701		Item no. N2.1	Item no. B.H.2.1.i.a&b, B.H.2.1.ii.a&b
57	701/702		Item no. N3	Deleted
58	702		Item no. N4	Item no. B.H.3
59	702		Item no. N4.1	Item no. B.H.3.1
60	702		Item no. N5	Item no. B.H.4
61	702		Item no. N5 & N6	Item no. B.H.4.1.i to iv, B.H.5
62	703/704		Item no. N7	Item no.B.H.6.1.i.a&b to B.h.6.1.iv.a&b,
				B.H.6.2.i.a&b to B.H.6.2.ii.a&b
63	704		Item no. O	Item no. B.I
64	704		Item no. O1 to O3	Item no. B.I.1 to 3
65	705		Item no. O & Item no. P	Deleted
66	706		Item no. Q	Item no. B.J
67	706		Item no.Q1 to Item no.Q3	Deleted
68	706		Item no. Q4	Item no.B.J.1

Sl. No.	Page No.	Clause No.	Existing	Amended
69	706		Item no. Q5	Item no. B.J.2
70	707		Item no. Q6	Item no. B.J.3
71	707		Item no. Q7	Item no. B.J.4
72	707		Item no. Q8 to Item no. Q11	Deleted
73	708		Item no. S	Deleted
74	708		Item no. T	Item no. B.K
75	708		Item no.T1	Item no. B.K.1.a, B.K.1.b
76	708		Item no. T2	Item no. B.K.2
77	708		Item no. T3	Item no. B.K.3.a&b
78	709		Item no. T4	Item no. B.K.4.a&b
79	709		Item no. T5	Item no. B.K.5.a&b
80	709		Item no. T6	Item no. B.K.6 i.a&b
81	709		Item no. T7	Deleted
82	709		Item no. T8	Item no. B.K.8.a&b
83	709		Item no. T9	Item no. B.K.7.i.a&b
84	710		Item no. T10	Item no. B.K.9.i.a&b
85	710		Item no. T11	Item no. B.K.10.a&b
86	710		Item no. T12	Item no. B.K.11.a&b
87	710		Item no. T13	Item no. B.K.12.a&b
88	710		Item no. T14	Item no. B.K.13.i.a&b to B.K.13.iv.a&b
89	711		Item no. T15	Item no. B.K.14
90	712		Item no. T16	Item no. B.K.15
91	712		Item no. T17	Item no. B.K.16.a&b
92	712		Item no. T18	Item no. B.K.17.a&b
93	712		Item no. T19	Item no. B.K.18.a&b
94	712		Item no. T20	Item no. B.K.19
95	712		Item no. T21	Item no. B.K.20.i.a&b
96	713		Item no. T22	Item no. B.K.21.i.a&b, B.K.21.ii.a&b
97	713		Item no. T23	Deleted
98	713		Item no. T24	Item no. B.K.24
99	713		Item no. T25 & T26	Item no. B.K.25

### 6. Section VIII – General Conditions of Contract

Sl. No.	Page No.	Clause No.	Existing	Amended
1.	882	6.9 (e)	based on reasonable evidence, is	based on reasonable evidence, is
				determined to have in <b>Prohibited</b>
			and Corruption during the execution	Practices during the execution of the
			of the Works	Works
2.	921	15.2 (g)	based on reasonable evidence, has	based on reasonable evidence, has
				engaged in Prohibited Practices as defined
			defined in paragraph 2.2 of the	in the <b>Appendix B</b> to these General
			<b>Appendix B</b> to these General	Conditions, in competing for or in
			Conditions, in competing for or in	executing the Contract
			executing the Contract	

### 7. Section IX – Particular Conditions of Contract

Sl. No.	Page No.	Clause No.	Existing	Amended
1.	941	3.1 (b) (ii)	Variations resulting in an increase of the	Variations resulting in an increase of the Accepted
			Accepted Contract Amount in excess of 1% of	Contract Amount in excess of 1% of the contract price
			the contract price in each case at a time and all	in each case at a time and all variations in excess of
			variations in excess of gross total value of 10	gross total value of 10 (Ten) percent of the contract
			(Ten) percent of the contract Price in aggregate	Price in aggregate or variation leading to
			shall require prior approval of the Employer.	introduction of NS items shall require prior approval
				of the Employer.
2.	970	6.4 (3) (A)	Contractor is to abide by the provision of Payment	Contractor is to abide by the provision of Payment of
			of Wages Act & Minimum Act. In order to ensure	Wages Act & Minimum Wages Act. In order to ensure
			the same, an application has been developed and	the same, an application has been developed and hosted
			hosted on website	on website www.shramikkalyan.indianrailways.gov.in.
			www.shramikkalyan.indianrailways.gov.in .	Contractor shall register his firm/company, etc. and
			Contractor shall register his firm/company, etc.	upload requisite details of labour and their payment in
			and upload requisite details of labour and their	this period. These details shall be available in public
			payment in this period. These details shall be	domain. The Registration/updation of Portal shall be
			available in public domain. The	done as under:
			Registration/updation of Portal shall be done as	
			under:	

Sl. No.	Page No.	Clause No.	Existing	Amended
3.	973	13.5 (b) (ii) SCC	5%	10%
4.	974	13.8	Price Adjustment :	Price Adjustment:
			The contract is subject to price adjustment in accordance with G.C.C. Clause 13.8 and following information regarding coefficients does apply.	The contract is subject to price adjustment in accordance with G.C.C. Clause 13.8 and following information regarding coefficients does apply.
			The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate schedule of BOQ and certified in Payment Certificates, shall be determined from formulae as below:	The adjustment to be applied to the amount otherwise payable to the Contractor, as valued in accordance with the appropriate schedule of BOQ and certified in Payment Certificates, shall be determined from formulae as below:
			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
			"P <sub>n</sub> " is the adjustment multiplier to be applied to the value of the work done (Excluding GST) against which Interim Payment has been made.	"P <sub>n</sub> " is the adjustment multiplier to be applied to the value of the work done (Excluding GST) against which Interim Payment has been made.
			"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;	"a" is a fixed coefficient, stated in the relevant table of adjustment data, representing the non-adjustable portion in contractual payments;
			"b", "c", "d", are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the Table of adjustment data at Appendix 2; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;	"b", "c", "d", are coefficients representing the estimated proportion of each cost element related to the execution of the Works, as stated in the Table of adjustment data at Appendix 2; such tabulated cost elements may be indicative of resources such as labour, equipment and materials;

Sl. No.	Page No.	Clause No.	Existing	Amended
			"L <sub>n</sub> "[Labour], "E <sub>n</sub> "[Equipment], "M <sub>n</sub> "[Material], are the current cost indices or reference prices for period "n", each of which is applicable to the relevant tabulated cost element [Labour, Equipment, Steel, Cement, Fuel/Lubricants, Bitumen, others] taken on a date 28 days prior to the last measurement date for that particular interim payment Certificate; and	"L <sub>n</sub> "[Labour], "E <sub>n</sub> "[Equipment], "M <sub>n</sub> "[Material], are the current cost indices or reference prices for period "n", each of which is applicable to the relevant tabulated cost element [Labour, Equipment, Steel, Cement, Fuel/Lubricants, Bitumen, others] taken on a date 28 days prior to the last measurement date for that particular interim payment Certificate; and
			"L <sub>o</sub> ", "E <sub>o</sub> ", "M <sub>o</sub> ",are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.	"L <sub>o</sub> ", "E <sub>o</sub> ", "M <sub>o</sub> ",are the base cost indices or reference prices, expressed in the relevant currency of payment, each of which is applicable to the relevant tabulated cost element on the Base Date.
			The Price Adjustment shall be done in accordance with Tables 1&2 of Adjustment Data given in Appendix 2. The base and current price of the following items shall be based on the source indicated below:	The Price Adjustment shall be done in accordance with Tables 1&2 of Adjustment Data given in Appendix 2. The base and current price of the following items shall be based on the source indicated below:  (i) Diesel: Selling price of IOC depot at Mumbai.
			<ul><li>(i) Diesel: Selling price of IOC depot at Mumbai.</li><li>(ii) Bitumen: Selling Price of Bitumen from the IOC refinery at Mumbai.</li></ul>	(ii) Bitumen: Selling Price of Bitumen from the IOC refinery at Mumbai.
			The price Adjustment payment will be done bill wise. The value of the work done considered for working out price adjustment shall be exclusive of GST.	The price Adjustment payment will be done bill wise. The value of the work done considered for working out price adjustment shall be exclusive of GST
5.	976	14.2	10% Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is	Mobilisation advance equal to 10% Percentage of the Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount

Sl. No.	Page No.	Clause No.	Existing	Amended
			payable. Advance shall only be payable on submission of unconditional Bank Guarantee in the format given in section X from a nationalized or Scheduled Bank in India. A foreign institution providing a guarantee shall have a correspondent financial institution located in the Employer's Country.	is payable. <b>Mobilisation</b> Advance shall only be payable on submission of unconditional Bank Guarantee in the format given in section X from a nationalized or Scheduled Bank in India. A foreign institution providing a guarantee shall have a correspondent financial institution located in the Employer's Country.
6.	986	Sub-Clause 14.6 Issue of Interim Payment Certificates	The following is added to the third paragraph as (c):  (a) if the Contractor was, or is, failing to perform any ESHS obligations or work under the Contract, the value of this work or obligation, as determined by the Engineer, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Engineer, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:	The following is added to the third paragraph as (c):  (c) if the Contractor was, or is, failing to perform any ESHS obligations or work under the Contract, the value of this work or obligation, as determined by the Engineer, may be withheld until the work or obligation has been performed, and/or the cost of rectification or replacement, as determined by the Engineer, may be withheld until rectification or replacement has been completed. Failure to perform includes, but is not limited to the following:
7.	1004	Appendix 2 Tables of Adjustment Data	Tables of Adjustment Data	Following modifications are done in Appendix 2:  • Amended by adding 2 Item Category at S. No. 9 and 10 in Appendix 2.  • % weightage for items for Schedule B modified Amended Appendix 2 is renamed and enclosed below as Appendix 2R

Sl. No.	Page No.	Clause No.	Existing	Amended
8.	1005	Table 2	Cost Indices and Reference Prices (applicable for specific items) for adjustment in contract prices [as per GCC 13.8].	<ul> <li>Following modifications are done in Table 2:</li> <li>Amended by adding 2 Item Category at S. No. 9 and 10 in Appendix 2.</li> <li>% weightage for items for Schedule B modified</li> <li>Amended Table 2 is renamed and enclosed below as Table 2R</li> </ul>

### 8. Section IX – Particular Conditions of Contract

Sl. No.	Page No.	Clause No.	Existing	Amended
1.		New Added		Standing indemnity bond for on account
				payments/ payments is attached.

(SUNIL MASKE) Chief Project Manager - II

FIN 3.5 Form of Local Content Local content % for various components of the Work (Virar Dahanu Road Earthwork)

S.			Schedules (	Reference Nu	mber) ([Desc	ription of each	n schedule is g	given below] an	d % of Loca	al Content*	
No.		Schedule A		Schedule B		Schedule CI		Schedule CIIA		Schedule CIIB	
	Item	Weightage	Local**	Weightage	Local**	Weightage	Local**	Weightage	Local**	Weightage	Local**
	Category		Content %		Content %		Content %		Content		Content
									%		%
1.	Fixed	15		15		15		15		15	
2.	Labour [L]	20		30		30		35		20	
3.	Steel [S]	10		20		10		-		10	
4.	Cement [C]	10		-		-		-		-	
5.	Plant &	10		-		20		15		20	
	Equipment										
	spares [E]										
6.	Diesel [D]	10		5		5		15		10	
7.	Bitumen [B]	-		-		-		-		-	
8.	Others[O]	25		10		20		20		25	
9.	Copper [Cu]	-		5		-		-		-	
10.	Aluminium [A]	-		15		-		-		-	
	Total	100%		100%		100%		100%		100%	

<sup>\*</sup> While indicating local content % in above table, the bidder has to indicate value of local content for various categories as above in each schedule as % of total value quoted for that category. Percentage of local content based on rate quoted for that schedule shall be calculated and verified after opening of financial bid to ascertain whether it meets the minimum local content to be eligible for Local Supplier if so claimed by the bidder. Formula to arrive at value of local content shall be:

### (% of local content for an item category in a schedule) X (Total Value of the schedule) X (Weightage %).

For example, a bidder has quoted 50% local content for Steel for schedule A having steel weightage of 10% and total value of schedule quoted by the bidder is 200 crores. Than local content shall be  $50/100 \times 200 \times 10/100 = 10$  crore.

The total value of Local Content shall be calculated by adding local content of all the schedules.

#### **BOO SCHEDULES**

Schedule A -: Civil Engineering Works,

Schedule B (B): Electrical Work

Schedule C Part – I(C-I): Signaling Material

Schedule C Part II - A(C-IIA): Telecommunication

Schedule C Part II - B (C-IIB): Telecommunication

<sup>\*\*</sup> For calculating local content %, please refer clause 38.1 of BDS.

### Appendix 2R

## Tables of Adjustment Data (Cl. 13.8 of GCC)

Table 1: Coefficients governing the adjustment for changes in cost

S.	Coefficients	Symbol		Schedules (Reference Number)					
No.	Name			[Description of each schedule is given below]				w]	
			A	-	В	-	C-I	C-IIA	C-IIB
1.	Fixed	a	15	-	15	-	15	15	15
2.	Labour [L]	b	20	-	30	-	30	35	20
3.	Steel [S]	c	10	-	20	-	10	-	10
4.	Cement [C]	d	10	-	-	-	-	-	-
5.	Plant &	e	10	-	-	-	20	15	20
	Equipment spares [E]								
6.	Diesel [D]	f	10	-	5	-	5	15	10
7.	Bitumen [B]	g	-	-	-	-	-	-	-
8.	Others[O]	h	25	-	10	-	20	20	25
9.	Copper [Cu]	i	-	-	5	-	-	-	-
10.	Aluminium [A]	j	-	-	15	-	_	-	-
	Total		100	-	100	_	100%	100%	100%
			%		%				

### BOQ SCHEDULES

Schedule A -: Civil Engineering Works

Schedule A – Part II ( A-II): Track Work - Not Applicable for this work. Schedule B (B): Electrical Work

Schedule C Part –I(C-I): Siganalling Material Schedule C Part II -A (C-IIA): Telecommunication Schedule C Part II -B(C-IIB): Telecommunication

Table 2R: Cost Indices and Reference Prices (applicable for specific items) for adjustment in contract prices [as per GCC 13.8]. WPI with base 2011-2012 = 100 on the Base Date

Base Date = 28 Days prior to Deadline for submission of bids

S.	Cost Element	Symbol	Base Date = 28 Days prior to D Indices or Cost on the Base Date	Index for adjustment	Sources of Index
No.	Cost Element	Symbol	indices or Cost on the Base Date	Index for adjustment	Sources of Index
[1]	[2]	[3]	[4]	[5]	[6]
1.	Fixed	a			
2.	Labour	ь	Lo- all India average Consumer Price Index(CPI) Number for Industrial Workers for Mumbai centrel (Base 2001 = 100) on the base date.	Ln-CPI on the date which is 28 days prior to the last measurement date for that interim payment certificate.	Labour Bureau, Ministry of Labour and Employment, Government of India. http://labourbureaunew.gov.in/LBO_in dnum.htm
3.	Steel	С	So – Whole-sale Price Index (WPI) for Steel [Mild Steel Long Products]	Sn-WPI on the date which is 28 days prior to the last measurement date for that interim payment certificate	Economic Advisor, Ministry of Commerce and Industry, Government of India. http://eaindustry.nic.in/home.asp
4.	Cement	d	Co-WPI for Ordinary Portland Cement	Cn-WPI on the date which is 28 days prior to the last measurement date for that interim payment certificate	Economic Advisor, Ministry of Commerce and Industry, Government of India http://eaindustry.nic.in/home.asp
5.	Plant & Equipment spares	e	Eo-WPI for Manufacture of machinery for mining, quarrying and construction	En – WPI on the date which is 28 days prior to the last measurement date for that interim payment certificate	Economic Advisor, Ministry of Commerce and Industry, Government of India http://eaindustry.nic.in/home.asp
6.	Diesel2	f	Do-Unit Cost from the identified depot on the base date	Dn-Unit Cost on the date which is 28 days prior to the last measurement date for that interim payment certificate	From the Indian Oil Corporation (IOC) Depot at Mumbai Depot. https://www.iocl.com/Product_Previou sPrice/DieselPreviousPriceDynamic.as px
7.	Bitumen3	g	Bo-Unit Cost from the identified refinery on the base date	Bn- Cost per unit quantity on the date which is 28 days prior to the last measurement date for that interim payment certificate	From IOC Refinery at Mumbai https://www.iocl.com/Products/Bitume n.aspx

<sup>&</sup>lt;sup>1</sup> The Centre to be specified should be the relevant one for which CPI is published by the Labour Bureau.
<sup>2</sup> The PCC specifies the identified depot for the rate of diesel for the base date and the applicable date for price adjustment.

<sup>&</sup>lt;sup>3</sup> The PCC specifies the identified refinery for the rate of Bitumen for the base date and the applicable date price adjustment.

S. No.	Cost Element	Symbol	Indices or Cost on the Base Date	Index for adjustment	Sources of Index
8.	Others	h	Oo- All India Wholesale Price Index(WPI) for all commodities	On- All India WPI for all commodities on the date which is 28 days prior to the last measurement date for that interim payment certificate	Economic Advisor, Ministry of Commerce and Industry, Government of India http://eaindustry.nic.in/home.asp
9	Copper	i	Cu <sub>o</sub> -IEEMA copper wire rod prices for manufacturing Insulated cable	Cu <sub>n</sub> . IEEMA copper wire rod prices for manufacturing of Insulated cable one month prior to the last measurement date for that interim payment certificate	Indian Electrical & Electronics manufacturing association (IEEMA) <a href="https://www.ieema.org">https://www.ieema.org</a>
10	Aluminium	j	A <sub>o-</sub> IEEMA LME average settlement price for ingots for manufacturing Insulated cable	A <sub>n</sub> - IEEMA LME average settlement price for ingots for manufacturing Insulated cable one month prior to the last measurement date for that interim payment certificate	Indian Electrical & Electronics manufacturing association (IEEMA) <a href="https://www.ieema.org">https://www.ieema.org</a>

IPC – Interim Payment Certificate

# STANDING INDEMNITY BOND FOR ON ACCOUNT PAYMENTS/ PAYMENTS (On paper of requisite stamp value)

We, M/sdo hereby undertake to hold at our stores Depot(s)/ sub Depot(s) worksite at/between
We shall be entirely responsible for the safe custody and protection of the said materials against all risk till they are duly delivered as erected equipment to the employer or as he may direct otherwise and shall indemnify the employer against any loss, damage or deterioration whatsoever in respect of the said materials while in our possession and against disposal of surplus materials. The said materials shall at all times be open to inspection by any officer authorized by the <u>Chief Electrical Engineer (Project)</u> , <u>Mumbai Railway Vikas Corp. Ltd. Mumbai</u> .
Should any loss, damage or deterioration of materials occur or surplus materials disposed off and refund becomes due, the employer shall be entitled to recover from us the full cost as per price included in Schedule (BOQ) to the Contract and also compensation for such loss or damage if any along with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time hereafter becomes due to us under the said or any other Contract.
Dated thisday of
For and behalf of
Signature of witness
Name of witness in Block Letters
Address.