

**Addendum – 1 to NIT NO.: JIL-YEW/RFP/2020-2021/01 read with
NIT No. JIL-YEW/RFP/2020-2021/02, NIT No. JIL-
YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

Chapter – 1

Addendum in respect of Scope of Work

1. Allowing Bidders with their own crash Tested Design

- a) The Bidders are allowed to quote based on their own designed crash tested system meeting the performance criteria as per specifications (**EN – 1317 – Part – 2 with H2 Containment Level or MASH with TL4 Containment Level**) however certain preferred design parameters have been specified for the safety barriers in the technical specifications.
- b) For the same purpose the technical specification has been revised and the same is attached here with in Annexure.
- c) The Bidder shall fill in details of “Key Design Parameters” of their crash tested system in the table provided along with the quoting sheet and shall also furnish general Arrangement Drawings clearly providing dimensional and material details of each of the components of the crash barrier system including details of all accessories such as “end terminals” Treatment of transitions with rigid barriers at structures location”, “Splice Details”, etc.

2. Design Information / certificate of Crash Tested System:

- a) The Primary Criteria for the approval of the crash Barrier is that it must have been successfully crash tested & Result evaluated in accordance with **EN1317 Part-2 and /or MASH** meeting the performance specifications as detailed out in MORTH Circular dated 1st Jan 2020.
- b) The Bidder shall demonstrate their compliance to above specifications by submitting authenticated crash tested reports along with videos of the actual crash testing along with their technical bid.
- c) The Crash Tests must have been conducted in crash tested laboratories / institutions which have been accredited to carryout crash tests specially for safety barrier systems as per EN – 1317 and/or MASH standards. The bidders must submit certificate in this regard for the crash testing Laboratory / Institution.
- d) In addition to the crash test report identified above the bidder shall submit separately the summary of Key design parameters as identified above as part of their technical bid.
- e) The Technical bid shall be evaluated first, for accepting vendor’s proposed crash tested system and subsequently, on qualifying for technical bid, the financial bid shall be evaluated.

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NIT No. JIL-YEW/RFP/2020-2021/02, NIT No. JIL-
YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

- f) The selected bidders may also be asked to make presentation on their Crash Tested Designs along with discussions related to crash test reports & videos, Installation Methodology and the system performance during the tests.
- g) A Point System for evaluating technical & Financial bid shall be considered.

3. Metallic Marker Specifications

- a. Metallic Marker referred are the retro reflective Tapes or reflectors generally provided on the guard rail (Thrie-Beam or W-Beam).
- b. Provide the suitable Hazard Markers at the end of crash barriers to make the end terminals conspicuous. Also, the same shall be provided at transition locations at Bridges/Structures, where the MCB meets the rigid (RCC) crash barriers.
- c. Bidders shall take prior approval for types & specification of retro reflective Tapes/sheeting or reflectors generally provided on MCB before executing the work.

4. Maintenance/Replacement of MCB and or its components:

- a. The Bidders shall submit the maintenance/Replacement Cost proposal against (Replacement of Crash Barrier) system damaged due to road accidents, and the replacement of Crash Barrier due to thefts for the portion work completed and handed over to Client along with the bid which shall be valid for the complete project execution period. The cost proposal shall consider the salvage value of the damaged parts/components. In addition to the cost of replacement of the damaged portion for per meter length of crash barrier, the bidder shall also include the item wise cost of all parts / components of the crash barrier system in the proposal.
- b. In order to ensure replacement of the crash barrier system within 48 to 72 hrs. of time window during the project execution period whether on chargeable or non-chargeable basis the bidder must maintain inventory of all spare parts of the complete crash barrier system for 3 KM Length of crash barrier, at project site the spare parts shall be stored in three locations along the expressway as specified by the client.
- c. As designated maintenance team shall be provided at project site by the bidders throughout the project execution period for carryout maintenance/replacement of crash barriers as identified above.

5. Transition of MCB with rigid concrete barrier at Bridge/Structures Locations:

- a) Total No. of Structures where transition is required for each phase of project are incorporated in revised technical specification.

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YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

- b) No addition payment shall be payable for transition of MBCB with rigid concrete crash barrier at structures/Bridges location. Using the information on the total number of structures in each phase of the work the bidder shall build in the addition cost of providing the transitions at both ends of all the structures. The payment shall be made for total running meter length of Thrie type MBCB.
- c) The Design of the transition shall be as per details provided in IRC: SP:99-2013. However, if the bidder wants to use his own design for transitions, the same is allowed, provided it is crashed tested meeting the requirements of EN 1317/MASH standards.

6. Selection Criteria with Point System:

- a) As part of selection criteria, first Technical Bid will be evaluated and subsequently, Financial Bid will be opened only for bidders who are qualified based on evaluated technical bid.
- b) As per MORTH Circular for using crash tested barrier system as per specified performance criteria has been introduced recently only, there is still no clarity whether certain design criteria such as height of barrier above carriageway level, embedment of posts into soil, thickness of Thrie Beam etc. shall be followed or not. Accordingly, such parameters have now been specified as **“preferred”** Parameters. The bidders allowed to bid based on their own designs of crash tested systems; however technically & financially qualified bids will be evaluated using a point system based on closeness towards “preferred” design criteria.
- c) Point system shall be based on 60% Technical & 40% Financial.
- d) Assessment criteria for point system 60% Technical.
 - I. 60% is further bifurcated into two parts (20% + 40%),
 - II. 20% for Financial capabilities as per NIT Clause No. 2 (B) & “Similar Work” Experience as per Addendum Chapter 2 Clause No. 4.
 - III. 40% on assessment of bidder’s own design of Crash Tested MBCB based on closest of our “preferred” or mandatory values of Design Parameters. As per Attached Table of Key Design Parameters filled by bidders.

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YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

Chapter – 2

Addendum in Respective Clauses under NIT ITT & GCC

**1) Annexure – I Memorandum S.No. 16 & GCC Clause No. 7
Escalation**

- a) Escalation Provision to be allowed due to price variation on account of material Steel & Zinc only.
- b) Base Price of Steel & Zinc to be considered for escalation calculation and shall be based on average Steel & Zinc price direct from reputed manufacturers (for Steel TATA/SAIL/JINDAL and For Zinc Hindustan Zinc Limited).
- c) The base month for base pricing shall be the month of award of work. The base prices of Steel & Zinc shall be reviewed on Quarterly basis.
- d) Escalation to be applicable beyond +/- 3% for Steel & +/- 5% for Zinc price variation. Within this band, no escalation will be applicable. However, beyond this band, the difference %age escalation shall be applicable both upside & downside.
- e) The escalation calculation methodology to be kept simple i.e. with rise or decrease of material price of Steel & Zinc, the unit selling price (Supply & Installation) for the complete system will change depending upon the weight of Steel & Steel used per meter length of the complete system.
- f) The Bidder shall provide the breakup of the system price into two components viz. "Material & Installation" costs. (Material only Steel & Zinc) In Addition the weight of steel and zinc used per meter length of complete system shall be provided.

2) GCC Clause No. 23 Payments

- a) Intermediate Bills Invoices shall be raised by bidder considering monthly billing frequency or Min Amount (INR) 2.5 Crore of Invoice, against Work done as per the intimated work progress in Project Duration.
- b) From the date of submission of Monthly RA Bill 10 days are to be kept for verification and there after 21 days are to be kept for payment processing. Thus, the payment to be release within 31 days of submission of Monthly RA Bill by bidders.

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YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

- c) Provision of Retention Money from each RA Bills shall continue to be applicable as per GCC Clause No. 3.1 Security Deposit / Retention Money.
- d) No Separate payment against “Delivery of Material at site” and on “Installation of the System”. Since supply & Installation are in the scope of same bidder the payment shall be made to the contractor based on installed length of complete system handed over to JIL.
- e) Recovery of Advances Mobilization Advance & Secure Advance shall be same as per GCC Clause No. 4 & 5.

3) Annexure – I Memorandum S.No. 17 & GCC Clause No. 38

Defects Liability Period

- a) The Defect Liability shall cover Material/ Manufacturing defects and defects arising out of poor workmanship at site.
- b) The Replacement of the Crash Barrier system damaged due to road accidents, during and after the project execution period, shall not be part of Defect Liability. The same shall however, be replaced by the bidder as & when requested during the project execution period on chargeable basis within 48 to 72 Hr. of request made.
- c) If the damage to the crash barrier system is due to road accident on account of safety lapses by the bidder during installation works at site such as improper barricading of traffic lane, not installed adequate warning signs etc., then the same shall be replaced by the bidder on non-chargeable basis.
- d) The Replacement of the crash barrier system due to thefts for portion of the work completed and handed over to the client, shall be carried out by the bidder, on chargeable basis within 48 to 72 Hrs. of intimation. However, till such time the portion of the work is not handed over to the client the damage to the installed crash barrier system due to theft or loss of stored/uninstalled material at site shall be replaced by the vendor on non-chargeable basis within 48 to 72 Hrs. of intimation.
- e) Defect Liability Period shall apply stretch-wise, if the stretch/chainage handed-over by bidder with completed formalities & documentation and the same taken over by JIL.

4) NIT Clause No. 2 Minimum Eligibility Criteria

- a) In NIT Document “Similar Works” has been defined as Supply & Installation of Metal Beam Crash Barriers of Minimum 80KM.
In the same we shall clarify that the **“Similar Work” shall include supply & installation of Crash Tested Metal Beam Crash Barrier**

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YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

**(W Beam or Thrie beam type), meeting the performance
requirement of EN1317 and/or MASH.**

- b) In the same Way bidders are allowed to bid with re defined "Similar Works" in para (a) including works that are currently being executed by the bidder where 50% of Scope of work has been completed.
- c) In line with Para (b) above the cost of "Three Similar Work" or "Two Similar Work" or "One Similar Work" shall also be modified as below.

Three similar works each costing not less than 30% of the estimated cost put to tender.

OR

Two similar works each costing not less than 40% of the estimated cost put to tender

OR

One similar work costing not less than 50% of the estimated cost put to tender.

- d) **Joint Ventures – JV's are not allowed.**

**5) For Submission of Tender Documents AS per NIT Clause No. 20 &
Section – 2 Instructions to Tenderer:**

Further to clarify that The Financial bid is required to be submitted in hardcopy format also in addition to online submission.

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NIT No. JIL-YEW/RFP/2020-2021/02, NIT No. JIL-
YEW/RFP/2020-2021/03, NIT No. JIL-YEW/RFP/2020-2021/04**

Chapter – 3

Addendum in Respective Clauses under SCC

**1) SSC Section – 3 Additional Conditions Clause No. 3.2
Guarantee/Warranty**

- a) With reference of GCC Clause No. 38 Defect liability period has been defined as 12 Months from the date of taking over the work by JIL. Defect liability period shall apply stretch wise as they are taken over by JIL.
- b) Minimum 15 Years of “Warranty” Period for the hot – dipped galvanizing on the steel members and accessories including nuts & bolts.

**2) SSC Clause 3.3b, of Volume – II
Temporary Barricades & Dust Mitigation measures**

MORTH’s Specification shall be consulted for standard Temporary Barricading & Dust mitigation measures description & specifications.

**3) SSC Clause 3.4, of Volume – II
Anti-Smog gun for controlling localized (50 to 75mm) dust.**

During the period of execution, bidder to provide anti-smog guns for controlling the localised dust pollution in respect of compliance of order of Hon’ble Supreme Court of India dated 13.01.2020

MORTH’s Specification shall be consulted for standard Anti-Smog Gun description & Specification.

Chapter – 4

Addendum in Respective Revised Documents

1) Revised Documents attached as per change in scope mentioned in Addendum Chapter – 1

- a) **Revised Technical Specification:** Revised Methodology and specifications for Thrie Type Metal Beam Crash Barrier (MBCB) for installation on median side of Yamuna Express Way.
- b) **Drawings:** **Earlier Attached drawing of “Modified Thrie Beam” has been withdrawn,** General arrangement Figures 1 & 2 as per revised technical specification attached for reference.
- c) **Key Design Parameters Table:** A Table of Key Design Parameters for Crash Tested MBCB System with mentioned our preferred Values & Specified (Mandatory) Values, the same to be filled by bidders and submitted along with technical bid.