

# राष्ट्रीय राजमार्ग एवं अवसंरचना विकास निगम लिमिटेड

सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार  
तीसरी मंजिल, पीटीआई बिल्डिंग, 4-संसद मार्ग, नई दिल्ली-110001

**National Highways & Infrastructure Development Corporation Limited**

Ministry of Road Transport & Highways, Govt. of India  
3rd Floor, PTI Building, 4-Parliament Street, New Delhi-110001, +91 11 23461600, www.nhidcl.com



**BHARATMALA**  
ROAD TO PROSPERITY



**NHIDCL**  
BUILDING INFRASTRUCTURE - BUILDING THE NATION  
CIN: U45400DL2014GOI269062

(भारत सरकार का उद्यम)

(A Government of India Enterprise)

**NHIDCL/MANIPUR/TAMENGLONG-MAHUR/2020/PKG-3/1915**

## CORRIGENDUM -IV

Date: 16.02.2021

**Name of Work:** Construction of two lanes with paved shoulders road of Tamenglong-Mahur section in the state of Manipur from km 21.950 at Old Tamenglong to km 34.000 ending near Phelong (PKG-3) on EPC mode.

**Tender ID : 2020\_NHIDC\_601034\_1**

It is to inform to all the prospective bidders that the following amendments are being carried out:

| S. No.  | Reference Item  | Existing Provisions  | Modified Provisions (to be read as)  |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
|---|---|--|--|------|--|-----------------------|------------------------------------|-----------------------|---|-------------------|------|---|-----------------------|------------------------------------|-----------------------|
| 1.  | NIT, RFP; Section -7, Clause 1, Bidding Schedule<br><br>(Refer Clauses 1.1.5,1.3, 2.11.4(i),2.1 2,2.13,2.14. 2.3, 2.15.2 & 3.1.1) | <table border="1"><thead><tr><th>Event Description</th><th>Date</th></tr></thead><tbody><tr><td>Bid Submission End Date (online &amp; physical copy, if any)</td><td>17.02.2021 (1500 hrs)</td></tr><tr><td>Opening of Technical Bids at venue</td><td>18.02.2021 (1630 hrs)</td></tr></tbody></table> | Event Description  | Date | Bid Submission End Date (online & physical copy, if any) | 17.02.2021 (1500 hrs) | Opening of Technical Bids at venue | 18.02.2021 (1630 hrs) | <table border="1"><thead><tr><th>Event Description</th><th>Date</th></tr></thead><tbody><tr><td>Bid Submission End Date (online) (Physical submission of Bid Documents/ PoA, if any, to be intimated later)</td><td>17.03.2021 (1500 hrs)</td></tr><tr><td>Opening of Technical Bids at venue</td><td>18.03.2021 (1630 hrs)</td></tr></tbody></table> | Event Description | Date | Bid Submission End Date (online) (Physical submission of Bid Documents/ PoA, if any, to be intimated later) | 17.03.2021 (1500 hrs) | Opening of Technical Bids at venue | 18.03.2021 (1630 hrs) |
|   |   | Event Description  | Date   |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
| Bid Submission End Date (online & physical copy, if any)  | 17.02.2021 (1500 hrs)   |  |  |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
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| Event Description   | Date  |  |  |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
| Bid Submission End Date (online) (Physical submission of Bid Documents/ PoA, if any, to be intimated later) | 17.03.2021 (1500 hrs)   |  |  |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
| Opening of Technical Bids at venue  | 18.03.2021 (1630 hrs)   |  |  |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |
| 2.  | Modified Technical Schedules  | Existing 'Schedule-G' & 'Schedule-H'.  | Modified 'Schedule - G' & Modified 'Schedule-H' as per Annexure-A of this corrigendum. |      |  |                       |                                    |                       |   |                   |      |   |                       |                                    |                       |

16/2/21

(K.C. Bhatt)

Dy. General Manager (Tech)



**SCHEDULE – G**

*(See Clauses 7.1 and 19.2)*

**FORM OF BANK GUARANTEE**

Annex-I

*(See Clause 7.1)*

**[Performance Security/Additional Performance Security]**

To,  
Managing Director,  
National Highways & Infrastructure Development Corporation Ltd.  
PTI Building, 3rd Floor,  
4, Parliament Street  
New Delhi - 110001

WHEREAS:

- (A) \_\_\_\_\_ [name and address of contractor] (hereinafter called the “**Contractor**”) and [name and address of the authority], (hereinafter called the “**Authority**”) have entered into an agreement (hereinafter called the “**Agreement**”) for the construction of the “: **Construction of two lanes with paved shoulders road of Tamenglong-Mahur section in the state of Manipur from km 21.950 at Old Tamenglong to km 34.000 ending near Phelong (Package-3) on EPC mode.**” subject to and in accordance with the provisions of the Agreement
- (B) The Agreement requires the Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Construction Period/ Defects Liability Period and Maintenance Period} (as defined in the Agreement) in a sum of Rs..... cr. (Rupees ..... crore) (the “**Guarantee Amount**”).
- (C) We, ..... through our branch at ..... (the “**Bank**”) have agreed to furnish this bank guarantee (*hereinafter called the “**Guarantee**”*) by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor’s obligations during the {Construction Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being

required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of General Manager in the National Highways & Infrastructure Development Corporation Ltd., that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Agreement or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.

7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on \*\*\*\*<sup>5</sup>. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.
12. This guarantee shall also be operatable at our..... Branch at New Delhi, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

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<sup>5</sup> Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 7.2 of the Agreement).

13. Bank Guarantee has been sent to authority's bank through SFMS gateway as per the details below:-

| S.No. | Particulars                  | Details   |
|-------|------------------------------|---|
| 1.    | Name of the Beneficiary      | National Highways & Infrastructure Development Corporation Limited  |
| 2.    | Beneficiary Bank Account No. | 90621010002659  |
| 3.    | Beneficiary Bank Branch      | IFSC SYNB0009062  |
| 4.    | Beneficiary Bank Branch Name | Transport Bhawan, New Delhi   |
| 5.    | Beneficiary Bank Address     | Canara Bank (erstwhile Syndicate Bank), Transport Bhawan, 1 <sup>st</sup> Parliament Street, New Delhi - 110001 |

Signed and sealed this ..... day of ....., 20..... at .....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

Annex – II  
(Schedule - G)  
(See Clause 19.2)

**Form for Guarantee for Advance Payment**

To,  
Managing Director,  
National Highways & Infrastructural Development Corporation Ltd.  
PTI Building, 3rd Floor,  
4, Parliament Street  
New Delhi - 110001

WHEREAS:

- (A) [name and address of contractor] (hereinafter called the “**Contractor**”) has executed an agreement (hereinafter called the “**Agreement**”) with the NHIDCL, (hereinafter called the “**Authority**”) for the construction of the “: **Construction of two lanes with paved shoulders road of Tamenglong-Mahur section in the state of Manipur from km 21.950 at Old Tamenglong to km 34.000 ending near Phelong (PKG-3) on EPC mode.**” subject to and in accordance with the provisions of the Agreement.
- (B) In accordance with Clause 19.2 of the Agreement, the Authority shall make to the Contractor an interest bearing @*Bank Rate* + 3% advance payment (herein after called “**Advance Payment**”) equal to 10% (ten per cent) of the Contract Price; and that the Advance Payment shall be made in two installments subject to the Contractor furnishing an irrevocable and unconditional guarantee by a scheduled bank for an amount equivalent to 110% (one hundred and ten percent) of such installment to remain effective till the complete and full repayment of the installment of the Advance Payment as security for compliance with its obligations in accordance with the Agreement. The amount of {first/second} installment of the Advance Payment is Rs. ----- cr. (Rupees ----- crore) and the amount of this Guarantee is Rs. ----- cr. (Rupees ----- crore) (the “**Guarantee Amount**”)§.
- (C) We, ..... through our branch at ..... (the “**Bank**”) have agreed to furnish this bank guarantee (hereinafter called the “**Guarantee**”) for the **Guarantee Amount**.

NOW, THEREFORE, the Bank hereby unconditionally and irrevocably guarantees and affirms as follows:

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§ The Guarantee Amount should be equivalent to 110% of the value of the applicable instalment.

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful repayment on time of the aforesaid instalment of the Advance Payment under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon

its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Authority, under the hand of an officer not below the rank of General Manager in the National Highways & Infrastructural Development Corporation Ltd., that the Contractor has committed default in the due and faithful performance of all or any of its obligations for under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final, and binding on the Bank, notwithstanding any differences between the Authority and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other authority or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Advance Payment or to extend the time or period of its repayment or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Retention Money.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.

8. The Guarantee shall cease to be in force and effect on \*\*\*\*.<sup>5</sup> Unless a demand or claim under this Guarantee is made in writing on or before the aforesaid date, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect up to the date specified in paragraph 8 above or until it is released earlier by the Authority pursuant to the provisions of the Agreement.
12. This guarantee shall also be operatable at our..... Branch at New Delhi, from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.
13. Bank Guarantee has been sent to authority's bank through SFMS gateway as per the details below:-

| S.No. | Particulars                  | Details   |
|-------|------------------------------|---|
| 1.    | Name of the Beneficiary      | National Highways & Infrastructure Development Corporation Limited  |
| 2.    | Beneficiary Bank Account No. | 90621010002659  |
| 3.    | Beneficiary Bank Branch      | IFSC SYNB0009062  |
| 4.    | Beneficiary Bank Branch Name | Transport Bhawan, New Delhi   |
| 5.    | Beneficiary Bank Address     | Canara Bank (erstwhile Syndicate Bank), Transport Bhawan, 1 <sup>st</sup> Parliament Street, New Delhi - 110001 |

<sup>5</sup>Insert date being 2 (two) years from the date of issuance of this Guarantee (in accordance with Clause 7.2 of the Agreement).

Signed and sealed this ..... day of ....., 20..... at .....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

- (i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.
- (ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

Schedule - H  
(See Clauses 10.1 (iv) and 19.3)  
Contract Price Weightages

1. The Contract Price for this Agreement is Rs. \*\*\*\*\*

1.2 Proportions of the Contract Price for different stages of Construction of the Project Highway shall be as specified below:

| Item   | Weightage in percentage to the Contract Price | Stage for Payment  | Percentage weightage |
|--|---|--|----------------------|
| 1  | 2   | 3  | 4                    |
| Road works including culverts, widening and repair of culverts.            | [65.07%]                                      | <b>A- Widening and strengthening of existing road</b>                        |                      |
|  |   | (1) Earthwork up to top of the sub-grade                                     |                      |
|  |   | (2) sub-base Course  | [0%]                 |
|  |   | (3) Non Bituminous base Course   | [0%]                 |
|  |   | (4) Bituminous Base Course   | [0%]                 |
|  |   | (5) Wearing coat   | [0%]                 |
|  |   | (6) Widening and repair of culvert   | [0%]                 |
|  |   |  | [0%]                 |
|  |   | <b>B.1- Reconstruction New 2-lane realignment/bypass (Flexible pavement)</b> |                      |
|  |   | (1) Earthwork up to top of the sub-grade                                     |                      |
|  |   | (2) sub-base Course  |                      |
|  |   | (3) Non Bituminous base Course   | [54.99%]             |
|  |   | (4) Bituminous Base Course   | [6.35%]              |
|  |   | (5) Wearing coat   | [8.25%]              |
|  |   |  | [11.29%]             |
|  | [4.07%]                                       |  |                      |
| <b>B.2- Reconstruction/ New 2-lane realignment/bypass (Rigid pavement)</b> |   |  |                      |
| (1) Earthwork up to top of the sub-grade                                   |   |  |                      |
| (2) sub-base Course  |   |  |                      |
| (3) Dry lean concrete (DLC) Course   |   |  |                      |
| (4) Pavement quality control (PQC) course                                  | [0%]  |  |                      |
|  | [0%]  |  |                      |
| <b>C.1- Reconstruction/ New Service Road (Flexible pavement)</b>           |   |  |                      |
| (1) Earthwork up to top of the sub-grade                                   |   |  |                      |
| (2) sub-base Course  |   |  |                      |
| (3) Non Bituminous base Course   |   |  |                      |
| (4) Bituminous Base Course   |   |  |                      |
| (5) Wearing coat   | [0%]  |  |                      |
|  | [0%]  |  |                      |
| <b>C.2- Reconstruction/ New Service Road (Rigid pavement)</b>              |   |  |                      |
| (1) Earthwork up to top of the sub-grade                                   |   |  |                      |
| (2) sub-base Course  | [0%]  |  |                      |
| (3) Dry lean concrete (DLC) Course   | [0%]  |  |                      |
| (4) Pavement quality control (PQC) course                                  | [0%]  |  |                      |
|  | [0%]  |  |                      |







|   |          |  |         |
|---|----------|--|---------|
| Other works   | 32.62%   | (i) Toll Plaza   | [0%]    |
|   |          | (ii) Road side drains  | [6.65%] |
|   |          | (iii) Road signs, marking, km stones, safety devices,...   | [5.44%] |
|   |          | (iv) Project facilities  |         |
|   |          | (a) Bus bays   | [0.28%] |
|   |          | (b) Truck lay-byes   | [0%]    |
|   |          | (c) Rest areas   | [0%]    |
|   |          | (d) Others   | [0%]    |
|   |          | (v) Road side plantation   | [0%]    |
|   |          | (vi) Repair of protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROB/RUBs. | [0%]    |
| (vii) Safety and traffic management during construction | [0%]     |  |         |
| (viii) Protection Works                                 |          |  |         |
| a. Retaining Wall                                       |          |  |         |
| b. Breast wall  | [44.57%] |  |         |
| c. Gabion Structure                                     | [33.23%] |  |         |
| d. Hydroseeding   | [7.1%]   |  |         |
|   | [2.2%]   |  |         |
| (ix) Other Works  |          |  |         |
|   |          | [0.53%]  |         |

### 1.3 Procedure of estimating the value of work done

#### 1.3.1 Road works

Procedure for estimating the value of road work done shall be as follows:

Table 1.3.1

| Stage of Payment   | Percentage -weightage | Payment Procedure  |
|--|-----------------------|--|
| <b>A-Widening and strengthening of road</b>                                  |                       |  |
| (1) Earthwork up to top of the sub-grade                                     | 0 %                   | Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in a length of not less than 5(five) percent of the total length. |
| (2) sub-base Course  | 0 %                   |  |
| (3) Non Bituminous Base course   | 0 %                   |  |
| (4) Bituminous Base course   | 0 %                   |  |
| (5) Wearing Coat   | 0 %                   |  |
| (6) Widening and repair of culverts  | 0%                    | Cost of ten completed culverts shall be determined on pro-rata basis with respect to the total number of culverts.   |
| <b>B.1Reconstruction/ New 2-lane realignment, bypass (flexible pavement)</b> |                       |  |
| (1) Earthwork up to top of the sub-grade                                     | 54.99%                | Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 0.5 (half) km length, whichever is less.        |
| (2) sub-base Course  | 6.35%                 |  |

|  |        |   |
|--|--------|---|
| (3) Non Bituminous Base course   | 8.25%  |   |
| (4) Bituminous Base course   | 11.29% |   |
| (5) Wearing Coat   | 4.07%  |   |
| <b>B.2 Reconstruction/ New 2-lane realignment, bypass</b><br><br><b>(Rigid pavement)</b> | 0 %    | Unit of measurement is linear length. Payment of each stage shall be made on pro-rata basis on completion of a stage in full length or 5 (five) km length, whichever is less. |
| (1) Earthwork up to top of the sub-grade   |        |   |
| (2) <u>sub-base Course</u>   | 0 %    |   |
| (3) Dry lean concrete (DLC) Course   | 0 %    |   |
| (4) Pavement quality control (PQC) course  | 0 %    |   |
| <b>C.1 Reconstruction/ New Service Road</b><br><b>(flexible pavement)</b>                | 0 %    | Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 5 (five) km length, Whichever is less. |
| (1) Earthwork up to top of the sub-grade   |        |   |
| (2) sub-base Course  | 0%     |   |
| (3) Non Bituminous Base course   | 0 %    |   |
| (4) Bituminous Base course   | 0%     |   |
| (5) Wearing Coat   | 0 %    |   |
| <b>C.2 Reconstruction/ New Service Road</b><br><br><b>(Rigid pavement)</b>               | 0 %    | Unit of measurement is linear length. Payment of each stage shall be made on pro rata basis on completion of a stage in full length or 5 (five) km length, Whichever is less. |
| (1) Earthwork up to top of the sub-grade   |        |   |
| (2) <u>sub-base Course</u>   | 0 %    |   |
| (3) Dry lean concrete (DLC) Course   | 0 %    |   |
| (4) Pavement quality control (PQC) course  | 0 %    |   |
| <b>D. Re-construction and new culverts on existing road, realignments, bypasses:</b>     | 15.05% | Cost of each culverts shall be determined on prorata basis with respect to the total number of culverts. Payment shall be made on the completion of at least five culverts.   |
| (1) Culvert (length<6m)  |        |   |

@. For example, if the total length of bituminous work to be done is 100 km, the cost per km of bituminous work shall be determined as follows:

$$\text{Cost per km} = P \times \text{weightage for road work} \times \text{weightage for bituminous work} \times (1/L)$$

Where P= Contract Price

L = Total length in km

Similarly, the rates per km for stages shall be worked out accordingly.

**Note: The length affected due to law and order problems or litigation during execution due to which the contractor is unable to execute the work, may be deducted from the total project length for payment purposes. The total length calculated here is only for payment purposes and will not be affected and referred in other clauses of the contract Agreement.**

### 1.3.2 Minor Bridge and underpasses/Overpasses.

Procedure for estimating the value of minor Bridge and underpasses/Overpasses shall be as stated in table 1.3.2:

Table 1.3.2

| Stage of Payment  | Weightage | Payment Procedure   |
|---|-----------|---|
| <b>A- Widening and repairs of minor bridges</b><br><br>(length > 6m and < 60m)  | 0%        | Cost of each minor bridge shall be determined on pro-rata basis with respect to the total linear length of the minor bridges. Payment shall be made on the completion of widening & repair works of a minor bridge.   |
| <b>A.2-New Minor bridges</b><br><br>(length > 6m and < 60m)<br><br><b>(1) Foundation +Sub-Structure:</b> On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap. | 75.25%    | (i) Foundation +Sub- Structure: Cost of each minor bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the minor bridges. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of foundation of each bridge.<br><br>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.   |
| <b>(2) Super-structure:</b> On completion of the superstructure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.    | 18.91%    | <b>Super-structure:</b><br><br>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |

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|---|-------|---|
| <b>(3) Approaches:</b> On completion of approaches including retaining wall, stone pitching, protection work complete in all respects & fit for use.  | 5.5%  | <b>Approaches:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches in all respect as specified in the column of "Stage of Payment" in this sub-clause.   |
| <b>(4) Guide Bunds and River Training works:</b> On completion Guide Bunds and River Training works complete in all respects  | 0.34% | <b>Guide Bunds and River Training works:</b> Payment shall be made on pro rata basis on completion of a stage i.e. completion of Guide Bunds and River Training works complete in all respects as specification.  |
| <b>B.1 Widening and repairs of underpasses/overpasses</b>   | 0%    | Cost of each underpasses/ overpasses shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on completion of widening & repair works of a underpasses/ overpasses.  |
| <b>B.2-New underpasses/overpasses:</b><br><br><b>(i) Foundation +Sub-Structure:</b> On completion of the foundation work including foundations for wing and return walls, abutments, piers upto the abutment/pier cap.  | 0%    | <b>Foundation:</b> Cost of each Underpass/ Overpass shall be determined on pro- rata basis with respect to the total linear length (m) of the Underpasses/Overpasses. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of foundation of each Underpasses/ Overpasses.<br><br>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.                      |
| <b>(ii) Super-structure:</b> On completion of the superstructure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.<br>Wearing Coat (a) in case of Overpass- wearing coat including expansion joints complete in all respects as specified and (b) in case of underpass- rigid pavement including drainage facility complete in all respects as specified as specified. | 0%    | <b>Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure of at least one span in all respects as specified in the column of "Stage of Payment" in this sub-clause. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| <b>(iii) Approaches:</b> On completion of approaches including Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all Respect and fit for use.   | 0%    | <b>Approaches:</b> Payment shall be made on pro-rata basis on completion of a stage in all respects as specified.   |

### 1.3.3 Major Bridge works ROB/RUB and Structures.

Procedure for estimating the value of major Bridge works, ROB/RUB and Structures shall be as stated in table 1.3.3:

Table 1.3.3

| Stage of Payment   | Weightage | Payment Procedure   |
|--|-----------|---|
| <b>A.1- Widening and repairs of Major bridges</b><br><b>(i)Foundation:</b>         | 0%        | <b>Foundation:</b><br>Cost of each Major Bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the major Bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.                  |
| <b>(2)Substructure:</b>  | 0%        | <b>Substructure:</b> Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of major bridge.   |
| <b>(3) Super-structure:</b><br>including bearings.                                 | 0%        | <b>Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| <b>(4) Wearing Coat including expansion Joints</b>                                 | 0%        | <b>Wearing Coat:-</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.   |
| <b>(5) Miscellaneous Items like Hand Rails, Crash Barriers, Road Markings etc.</b> | 0%        | <b>Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. complete in all respects as specified.   |
| <b>(6) Wing Walls/Return Walls</b>   | 0%        | <b>Wing Walls/Return Walls :</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified.   |
| <b>(7) Guide Bunds and River Training works, etc.</b>                              | 0%        | <b>Guide Bunds and River Training works:</b> Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified.   |

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|---|----|--|
| <b>(8) Approaches:</b><br>(including retaining walls, stone pitching, protection works) | 0% | <b>Approaches:</b> Payments shall be made on pro-rata basis on completion of 10% of the scope of each stage.   |
| <b>A.2- New Major bridges</b><br><b>(i) Foundation:</b>                                 | 0% | <b>Foundation:</b> Cost of each Major Bridge shall be determined on pro-rata basis with respect to the total linear length (m) of the Major Bridge. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the major Bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.                      |
| <b>(2) Substructure:</b>  | 0% | <b>Substructure:</b> Payment against sub-structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub-structure of major bridge.  |
| <b>(3) Super-structure:</b><br>including bearings.                                      | 0% | <b>Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| <b>(4) Wearing Coat including expansion Joints</b>                                      | 0% | <b>Wearing Coat:-</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.  |
| <b>(5) Miscellaneous Items like Hand Rails, Crash Barriers, Road Markings etc.</b>      | 0% | <b>Miscellaneous:</b> Payment shall be made on Completion of all Misc Works like Hand Rails, Crash Barriers, Road Markings etc. complete in all respects as specified.   |
| <b>(6) Wing Walls/Return Walls</b>  | 0% | <b>Wing Walls/Return Walls :</b> Payment shall be made on Completion of all wing walls/Return walls complete in all respects as specified.   |
| <b>(7) Guide Bunds and River Training works, etc.</b>                                   | 0% | <b>Guide Bunds and River Training works:</b> Payment shall be made on completion of all Guide Bunds/River Training works etc. complete in all respects as specified.   |
| <b>(8) Approaches:</b><br>(including retaining walls, stone pitching, protection works) | 0% | <b>Approaches:</b> Payment shall be made on pro rata basis on completion of 10% of the scope of each stage.  |
| <b>B.1- Widening and repairs of (a) ROB</b>   | 0% | <b>(i) Foundation:</b> Cost of each ROB/RUB shall be determined on pro-rata basis with respect to the total linear length (m) of the ROB/RUB. Payment against  |

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|--|----|---|
| <b>(b) RUB</b><br>(1) Foundation   |    | foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the ROB/RUB. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.  |
| (2) Sub-structure:   | 0% | (ii) Sub-Structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of ROB/RUB.   |
| (3) Super-structure (including bearings)   | 0% | <b>(iii) Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor, 50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| (4) Wearing coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as Specified. | 0% | <b>(iv) Wearing coat:</b> Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.  |
| (5) Miscellaneous Items like hand rail, crash barriers, road markings etc.   | 0% | <b>(v) Miscellaneous:</b> Payment shall be made on completion of miscellaneous work like hand rail, crash barriers, road markings etc. complete in all respects as specified.   |
| (6) Wing walls/return walls  | 0% | <b>(vi) Wing walls/return walls:</b> Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.  |
| <b>(7) Approaches:</b> (including Retaining walls, stone pitching and protection works)  | 0% | <b>Approaches:</b> Payments shall be made on pro-rata basis on completion of 20% of the total area.   |
| <b>B.2- New ROB/RUB</b><br>(1) Foundation  | 0% | (i) Foundation: Cost of each ROB/RUB shall be determined on pro-rata basis with respect to the total linear length (m) of the ROB/RUB. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the ROB/RUB.  |
| (2) Sub-structure:   | 0% | (ii) Sub-Structure: Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. Not less than 25% of the scope of sub- structure of ROB/RUB.   |

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| (3) Super-structure (including bearings)   | 0% | <b>(iii) Super-structure:</b><br>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| (4) Wearing coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as Specified. | 0% | <b>(iv) Wearing coat:</b> Payment shall be made on completion of (a) in case of ROB- wearing coat including expansion joints complete in all respects as specified and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified.  |
| (5) Miscellaneous Items like hand rail, crash barriers, road markings etc.   | 0% | <b>(v) Miscellaneous:</b> Payment shall be made on completion of miscellaneous work like hand rail, crash barriers, road markings etc. complete in all respects as specified.   |
| (6) Wing walls/return walls  | 0% | <b>(vi) Wing walls/return walls:</b> Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.  |
| <b>(7) Approaches:</b> (including Retaining walls, stone pitching and protection works)  | 0% | <b>Approaches:</b> Payment shall be made on pro rata basis on completion of a stage in all respect as specified.  |
| <b>C.1- Widening &amp; Repairs of Elevated Section/Flyovers/Grade Separators.</b><br>(1)Foundation   | 0% | (i) Foundation: Cost of each structure shall be determined on pro-rata basis with respect to the total linear length (m)of the structure. Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the structure. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.  |
| (2) Sub-structure:   | 0% | <b>(ii) Sub-structure:</b> : Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of structure.  |
| (3) Super-structure : including Bearings.  | 0% | <b>(iii) Super-structure:</b><br>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders for each span and balance 50% of the stage payment shall be made on completion of stage specified as above. |

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| (4) Wearing coat including expansion joints.   | 0% | <b>(iv) Wearing coat:</b> Payment shall be made on completion of wearing coat including expansion Joints Complete in all respect as specified.  |
| (5) Miscellaneous Items like hand rail, crash barriers, road markings etc.                                       | 0% | <b>(v) Miscellaneous:</b> Payment shall be made on completion of miscellaneous work like hand rail, crash barriers, road markings etc. complete in all respects as specified.   |
| (6) Wing walls/return walls  | 0% | <b>(vi) Wing walls/return walls:</b> Payment shall be made on completion of all wing walls/return walls complete in all respects as specified.  |
| <b>(7) Approaches:</b><br>(including Retaining walls/Reinforced Earth wall, stone pitching and protection works) | 0% | Payment shall be made on pro rata basis on completion of a stage in all respect as specified.   |
| <b>C.2- New Elevated Section/Flyovers/Grade Seperators.</b><br>(1)Foundation                                     | 0% | (i) Foundation: Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures. Payment against foundation shall be made on prorata basis on completion of a stage i.e. not less than 25% of the scope of foundation of the structure.<br><br>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.                                |
| (2) Sub-structure:   | 0% | <b>(ii) Sub-structure:</b> Payment against sub- structure shall be made on pro-rata basis on completion of a stage i.e. not less than 25% of the scope of sub- structure of structure.  |
| (3) Super-structure : including Bearings.  | 0% | <b>(iii) Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure including bearings of at least one span in all respects as specified. In case of structures where pre-cast girders have been proposed by the Contractor,50% of the stage payment shall be due and payable on casting of girders foreach span and balance 50% of the stage payment shall be made on completion of stage specified as above. |
| (4) Wearing coat including expansion joints.   | 0% | <b>(iv) Wearing coat:</b> Payment shall be made on completion of wearing coat including expansion Joints Complete in all respect as specified.  |
| (5) Miscellaneous Items like hand rail, crash barriers, road markings etc.                                       | 0% | <b>(v) Miscellaneous:</b> Payment shall be made on completion of miscellaneous work like hand rail, crash barriers, road markings etc. complete in all respects as specified.   |

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| (6) Wing walls/return walls  | 0% | <b>(vi) Wing walls/return walls:</b> Payment shall be made on completion of all wing walls/return walls complete in all respects as specified. |
| <b>(7) Approaches:</b><br>(including Retaining walls/Reinforced Earth wall, stone pitching and protection works) | 0% | Payments shall be made on pro-rata basis on completion of 20% of the total area.   |

Note: (1) In case of innovate Major Bridge projects like cable suspension/cable stayed/ Extra Dozed and exceptionally long span bridges, the schedule may be modified as per site requirements before bidding with due approval of Competent Authority.

(2) The Schedule for exclusive tunnel projects may be prepared as per site requirements before bidding with due approval of Competent Authority.

#### 1.3.4 Other works.

Procedure for estimating the value of other works done shall be as stated in table 1.3.4.

**Table 1.3.4**

| Stage of Payment   | Weightage | Payment Procedure  |
|--|-----------|--|
| (i) Toll plaza   | 0%        | Unit of measurement is each completed toll plaza. Payment of each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas.                         |
| (ii) Road side drains  | 6.65%     | Unit of measurement is linear length in km. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 5 % (five per cent) of the total length. |
| (iii) Road signs, markings, km stones, safety devices etc.                               | 5.44%     |  |
| (iv) Project Facilities  |           | Payment shall be made on pro rata basis for completed facilities.  |
| a) Bus bays  | 0.28%     |  |
| b) Truck lay-byes  | 0%        |  |
| c) Rest areas  | 0%        |  |
| d) others  | 0%        |  |
| (v) Road side plantation   | 0%        | Unit of measurement is linear length.  |
| (vi) Repair of protection works other than approaches to the bridges, elevated sections/ | 0%        | Unit of measurement is linear length. Payment shall be made on pro-rata  |

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| flyovers/grade separators and ROBs/RUBs.   |        | basis on completion of a stage in a length of not less than 5% (five percent) of the total length. |
| (vii) Safety and traffic management during construction<br>(viii) Protection Works | 0%     | Payment shall be made on pro-rata basis every six months.  |
| a. Retaining wall  | 44.57% |  |
| b. Breast wall   | 33.23% |  |
| c. Gabion Structure  | 7.1%   |  |
| d. Hydroseeding  | 2.2%   |  |
| (ix) Other Works   | 0.53%  |  |

## 2. Procedure for payment for Maintenance

a) The cost for maintenance shall be as stated in Clause 14.1.1.

b) Payment for Maintenance shall be made in quarterly instalments in accordance with the provisions of Clause 19.7

