

F. No. COVID-19/RoadMap/JS(H)/2020  
Government of India  
Ministry of Road Transport & Highways  
(Highways Section)  
Transport Bhawan, 1, Parliament Street, New Delhi-110001

dated the 11th October, 2024

To,

1. DG (RD) & 55, Roads Wing, MORTH
2. The Chairman, NHAI, G-586, Sector-10, Dwarka, New Delhi-110075
2. The Managing Director, NHIDCL, PTI Building, New Delhi-110001
3. Principal Secretaries/Secretaries of all States/UTs Public Works Department/ Road Construction Department/ Highways Department (dealing with National Highways and other centrally sponsored schemes)
4. All Engineers-in-Chief and Chief Engineers of Public Works Department/ Road Construction Department/ Highways Department (dealing with National Highways and other centrally sponsored schemes)
5. The Director General Border Roads, Seema Sadak Bhawan, Ring Road, New Delhi-110010
6. All CE-ROS, ROs and ELOs of the Ministry of Road Transport & Highways

**Subject: Amendment in Schedule H of the MCA for EPC projects - reg**

Sir,

I am directed to say that the Competent Authority has decided to amend the Schedule-H of model EPC contract Agreement. The amended Schedule H is enclosed as Annexure.

2. The amended Schedule H shall be incorporated in the future tender documents for NH projects to be taken up on EPC mode. In case where bids have been invited suitable amendments may be issued.

Yours faithfully,  
**Signed by Sanjay Kumar**  
**Date: 11-10-2024 17:35:11**

Encl: Amended Schedule H

(Sanjay Kumar)  
Under Secretary to the Government of India  
Telephone No. 011-23714001

Copy with enclosure to:

1. Sr. PPS to Secretary (RT&H)
2. JS&FA, MORTH
3. JS (H&LA)
4. All Joint Secretaries in the MORTH
5. All ADGs/CEs in the MoRTH

6. Sr.Director (NIC), MORTH for uploading on the website of the Ministry

## SCHEDULE – H

See Clauses 10.1 (iv) and 19.3

### Contract Price Weightages

- 1.1 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
<b>I. Road works including culverts, widening and repair of culverts.</b>	[*****]	<b>A- Widening and strengthening of existing road</b>	
		(1) Earthwork up to top of the embankment	[**]
		(2) Sub-Grade	
		(3) Sub-Base Course	[**]
		(4) Non Bituminous Base Course	[**]
		(5) Bituminous Base Course	[**]
		(6) Wearing Coat	[**]
		(7) Widening and repair of culverts	[**]
		<b>B.1- Reconstruction/ New realignment/ bypass (Flexible pavement)</b>	
		(1) Earthwork up to top of the embankment	[**]
		(2) Sub-Grade	
		(3) Sub Base Course	[**]
		(4) Non-Bituminous Base Course*	[**]
		(5) Bituminous Base Course	[**]
		(6) Wearing Coat	[**]
		<b>B.2- Reconstruction/ New realignment/ bypass (Rigid Pavement)</b>	
		(1) Earthwork up to top of the embankment	[**]
		(2) Sub-Grade	
		(3) Sub Base Course	[**]
		(4) Dry Lean Concrete(DLC) Course	[**]
		(5) Pavement Quality Control (PQC) Course	[**]
		<b>C.1- Reconstruction/ New service road (Flexible pavement)</b>	
		(1) Earthwork up to top of the embankment	[**]
		(2) Sub-Grade	

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(3) Sub Base Course	[**]
		(4) Non-Bituminous Base Course*	[**]
		(5) Bituminous Base Course	[**]
		(6) Wearing Coat	[**]
		<b>C.2- Reconstruction/ New Service road (Rigid Pavement)</b>	
		(1) Earthwork up to top of the embankment	[**]
		(2) Sub-Grade	
		(3) Sub Base Course	[**]
		(4) Dry Lean Concrete(DLC) Course	[**]
		(5) Pavement Quality Control (PQC) Course	[**]
		<b>D- Re-Construction and New culverts on existing road, realignments, bypasses :</b>	
		Culverts (length < 6 m)	[**]
<b>II. Minor Bridges/ Underpasses / Overpasses</b>	[****]	<b>A.1- Widening and Repair of Minor bridges (length &gt; 6 m and &lt; 60 m)</b>	
		Minor bridges	
		(1) <b>Foundation:</b> On completion of the foundation work of abutments and piers	[**]
		(2) <b>Sub-structure:</b> On completion of abutments and piers with abutment/ pier cap.	[**]
		(3) <b>Super-structure:</b> On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, handrails, crash barriers, road signs and markings, tests on completion etc. complete in all respect.	[**]
		(4) <b>Approaches:</b> On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope, etc. complete in all respect and fit for use.	[**]
		<b>A.2- New Minor bridges (length &gt;6 and &lt;60 m.)</b>	
		(1) <b>Foundation:</b> On completion of the foundation work of abutments and piers	[**]
		(2) <b>Sub-structure:</b> On completion of abutments and piers with abutment/ pier cap.	[**]

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(3) <b>Super-structure:</b> On completion of the super-structure upto deck slab including bearings.	[**]
		(4) <b>Miscellaneous Works :</b> On completion of wearing coat, expansion joint, crash barrier, railings, protection works and any remaining work associated to bridge including tests on bridge.	[**]
		(5) <b>Approaches:</b> On completion of approaches including wing walls/ return walls, Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	[**]
		(6) <b>Guide Bunds and River Training Works:</b> On completion of Guide Bunds and river Training Works complete in all respects	[**]
		<b>B.1- Widening and Repair of underpasses/ overpasses</b>	
		Underpasses/ Overpasses	[**]
		<b>B.2- New underpasses/ overpasses</b>	
		(1) <b>Foundation:</b> On completion of the foundation work of abutments and piers	[**]
		(2) <b>Sub-structure :</b> On completion of abutments and piers with abutment/ pier cap.	
		(3) <b>Super-structure:</b> On completion of the super-structure upto deck slab including bearing.	[**]
		(4) <b>Miscellaneous Works :</b> On completion of wearing coat, expansion joint, crash barrier, railings and any remaining work associated to bridge including tests on bridge	
		(5) <b>Approaches:</b> On completion of approaches including Wing walls/ Return walls, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	[**]

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
III. Major Bridge (length > 60 m.) works and ROB/RUB/ elevated sections/flyovers including viaducts, if any	[****]	<b>A.1- Widening and repairs of Major Bridges</b>	
		(1) Foundation	[**]
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	[**]
		(3) Super-structure (including bearings)	[**]
		(4) Wearing Coat including expansion joints	[**]
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	[**]
		(6) Wing walls/return walls	[**]
		(7) Guide Bunds, River Training works etc.	[**]
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	[**]
		<b>A.2- New Major Bridges</b>	
		(1) Foundation	
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	
		(3) Super-structure (including bearings)	
		(4) Wearing Coat including expansion joints	
		(5) Miscellaneous Items (like hand rails, crash barriers, road markings etc.)	
		(6) Wing walls/return walls	
		(7) Guide Bunds, River Training works etc.	
		(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope, etc.)	
		<b>B.1- Widening and repair of</b>	
		(a) ROB	
		(b) RUB	

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(1) Foundation	[**]
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	[**]
		(3) Super-structure (including bearings)	[**]
		(4) Wearing Coat: (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 rails, crash barriers, road markings etc.)	[**]
		(6) Wing walls/return walls	[**]
		(7) Approaches (including Retaining walls, stone pitching and protection works)	[**]
		<b>B.2- New ROB/RUB</b>	
		(a) ROB	
		(b) RUB	
		(1) Foundation	[**]
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	[**]
		(3) Super-structure (including bearings)	[**]
		(4) Wearing Coat: (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 rails, crash barriers, road markings etc.)	[**]
		(6) Wing walls/return walls	[**]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]
		<b>C.1- Widening and repair of Elevated Section/Flyovers/ Grade Separators</b>	
		(1) Foundation	[**]
		i) Pile Foundation	
		ii) Open Foundation	
		(2) Sub-structure	[**]

Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(3) Super-structure (including bearings)	[**]
		(4) Wearing Coat including expansion joints	[**]
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	[**]
		(6) Wing walls/return walls	[**]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]
		<b>C.2-New Elevated Section/Flyovers/ Grade Separators</b>	
		(1) Foundation	[**]
		(i) Well Foundation	
		(ii) Pile Foundation	
		(iii) Open Foundation	
		(2) Sub-structure	[**]
		(3) Super-structure (including bearings)	[**]
		(4) Wearing Coat including expansion joints	[**]
		(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.)	[**]
		(6) Wing walls/return walls	[**]
		(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]
IV. Other works	[*****]	(i) Toll Plaza	[**]
		(ii) Road side drains	[**]
		(a) Drain	
		(b) Cover Slab	
		(iii) Road signs, markings, km stones, safety devices etc.	[**]
		(iv) Overhead gantry mounted signs	
		(v) Project facilities (a) Bus Bays (b) Truck lay-byes (c) Rest areas (d) others	[**]
		(vi) Road side plantation	[**]



Item	Weightage in percentage to the Contract Price	Stage for Payment	Percentage weightage
1	2	3	4
		(vii) Protection works# other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROB/RUBs.	[**]
		(a) Crash Barrier	
		(b) Retaining Wall	
		(c) Breast Wall	
		(viii) Safety and traffic management during construction	[**]

\*Note- In case of CTB and AIL layer, this stage may be modified suitably to permit separate weightages for each of these layers.

#Note - For specific type of protection work detailed stages can be included

### 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 existing road</b>	[**]	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 10 (ten) percent of the total length or 500m whichever is less
(1) Earthwork up to top of the embankment		
(2) Sub-Grade	[**]	
(3) <u>Sub-Base Course</u>	[**]	
(4) <u>Non Bituminous Base Course*</u>	[**]	
(5) <u>Bituminous Base Course</u>	[**]	
(6) <u>Wearing Coat</u>	[**]	Cost of completed culverts shall be determined pro rata basis with respect to the total no. of culverts. The payment shall be made on the
(7) Widening and repair of culverts	[**]	

Stage of Payment	Percentage weightage	Payment Procedure
		completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.
<b>B.1- Reconstruction/New realignment/bypass (Flexible pavement)</b>  (1) Earthwork up to top of the embankment	[**]	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 500 m length, whichever is less.
(2) Sub-Grade	[**]	
(3) Sub Base Course	[**]	
(4) Non-Bituminous Base Course*	[**]	
(5) Bituminous Base Course	[**]	
(6) Wearing Coat	[**]	
<b>B.2- Reconstruction/New realignment/bypass (Rigid pavement)</b> (1) Earthwork up to top of the embankment	[**]	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 500 m length, whichever is less.
(2) Sub-Grade	[**]	
(3) Sub Base Course	[**]	
(4) Dry Lean Concrete (DLC) Course	[**]	
(5) Pavement Quality Control (PQC ) Course	[**]	
<b>C.1- Reconstruction/ New service road (Flexible pavement)</b> (1) Earthwork up to top of the embankment	[**]	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 500 m length, whichever is less.
(2) Sub-Grade	[**]	
(3) Sub Base Course	[**]	
(4) Non-Bituminous Base Course*	[**]	
(5) Bituminous Base Course	[**]	
(6) Wearing Coat		
<b>C.2- Reconstruction/ New service road (Rigid pavement)</b> (1) Earthwork up to top of	[**]	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 500 m

Stage of Payment	Percentage weightage	Payment Procedure
the embankment		length, whichever is less.
(2) Sub-Grade	[**]	
(3) Sub Base Course	[**]	
(4) Dry Lean Concrete (DLC) Course	[**]	
(5) Pavement Quality Control (PQC ) Course	[**]	
<b>D- Re-Construction and New culverts on existing road, realignments, bypasses:</b>  (1) Culverts (length < 6m)	[**]	Cost of each culvert shall be determined on pro rata basis with respect to the total number of culverts. Payment shall be made on the completion of atleast one culvert. 75% of the cost will be payable on completion of box/ abutments and slab/ pipe and head wall. Remaining 25% will become payable on completion of protection works including return/ wing walls and any other work associated with culverts.

\*Note- In case of CTB and AIL layer, this stage may be modified suitably to permit separate weightages for each of these layers.

@. 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:

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 other 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 affect and referred in other clauses of the Contract Agreement.

### 1.3.2 Minor Bridges 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
1	2	3
<b>A.1-Widening and repair of minor bridges (length &gt; 6m and &lt; 60m)</b>	<b>[**]</b>	Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.
(i) <b>Foundation:</b> On completion of the foundation work of abutments and piers	<b>[**]</b>	(i) <b>Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e completion of atleast two foundations of each bridge. In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
(ii) <b>Sub - structure:</b>	<b>[**]</b>	(ii) <b>Sub - structure</b> - Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) <b>Super-structure:</b> On completion of the super-structure in all respects including wearing coat, bearings, expansion joints, hand rails, crash barriers, road signs & markings, tests on completion etc. complete in all respect.	<b>[**]</b>	(iii) <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.
(iv) <b>Approaches:</b> On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	<b>[**]</b>	(iv) <b>Approaches:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
<b>A.2- New minor bridges</b>	<b>[**]</b>	Cost of each minor bridge shall be determined on pro rata basis with respect to the total linear length (m) of the minor bridges.
(i) <b>Foundation:</b> On completion of the foundation work of abutments and piers.		(i) <b>Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage completion of atleast two foundations of each bridge.  In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.

Stage of Payment	Weightage	Payment Procedure
1	2	3
(ii) Sub - structure:	[**]	(ii) Sub - structure - Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
(iii) <b>Super-structure:</b> On completion of the super-structure upto deck slab including bearings.	[**]	(iii) <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 upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause.  If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(iv) <b>Miscellaneous Works:</b>	[**]	(iv) <b>Miscellaneous Works:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works, drainage and any other remaining work associated to bridge including tests on bridge for each bridge
v) <b>Approaches:</b> On completion of approaches including Retaining walls, stone pitching, protection works for floor, embankment slope etc. complete in all respect and fit for use.	[**]	(v) <b>Approaches:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing walls/ return walls, retaining walls, stone pitching in all respect as specified in the column of "Stage of Payment" in this sub-clause for each bridge.
(vi) <b>Guide Bunds and River Training Works:</b> On completion of Guide Bunds and river Training Works complete in all respects	[**]	(vi) <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 in all respects as specified for each bridge.
<b>B.1-Widening and repair of underpasses/overpasses</b>	[**]	Cost of each underpass/overpass shall be determined on pro rata basis with respect to the total linear length of the underpasses/overpasses. Payment shall be made on the completion of widening & repair works of a underpass/overpass.
<b>B.2- New Underpasses/</b>	[**]	Cost of each Underpass/Overpass shall be

Stage of Payment	Weightage	Payment Procedure
1	2	3
<b>Overpasses:</b> <b>(i) Foundation</b> On completion of the foundation work including foundations, of abutments and piers		determined on pro rata basis with respect to the total linear length (m) of the Underpasses/Overpasses.  <b>(i) Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of foundation(s) of each underpass/overpass.  In case where load testing is specified for foundation, the trigger of first payment shall include load testing also.
<b>(ii) Sub-structure :</b>	<b>[**]</b>	<b>(ii) Sub-structure:</b> Payment shall be made on pro-rata basis on completion of stage i.e. completion of atleast one sub-structure upto abutment/ pier cap level of each bridge.
<b>(iii) Super-structure:</b> On completion of the super-structure upto deck slab,	<b>[**]</b>	<b>(iii) 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 upto deck slab including bearing as specified in the column of "Stage of Payment" in this sub-clause:  If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
<b>(iv) Miscellaneous Works:</b>	<b>[**]</b>	<b>(iv) Miscellaneous Works:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of wearing coat, expansion joint, crash barrier, railing, protection works and any other remaining work associated to bridge including tests on bridge for each bridge.
<b>v) Approaches:</b> On completion of approaches including wing wall/ return wall, Retaining walls/ Reinforced Earth walls, stone pitching, protection works complete in all respect and fit for use.	<b>[**]</b>	<b>(v) Approaches:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of approaches including wing wall/ return wall, retaining walls, Reinforced Earth walls, stone pitching, protection works complete in all respect for each bridge.

### 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
1	2	3
<b>A.1- Widening and repairs of Major Bridges</b> (1) Foundation	<b>[**]</b>	Cost of each Major Bridge shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges.  (1) <b>Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified hereinunder.
(i) Pile Foundation  (a) Piling - On completion of pile upto bottom of pile cap  (b) Pile Cap : On completion of pile cap		(i) Pile Foundation  (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis.  (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap.  In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	<b>[**]</b>	(2) <b>Sub-Structure:</b> Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of

Stage of Payment	Weightage	Payment Procedure
1	2	3
		the major bridge.
(3) Super-structure (including bearings)	[**]	<p><b>(3) Super-structure:</b></p> <p>Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under :</p> <p>If pre-cast RCC/PSC/Steel girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>
(4) Wearing Coat including expansion joints	[**]	<p><b>(4) Wearing Coat:</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.</p>
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	[**]	<p><b>(5) Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.</p>
(6) Wing walls/return walls	[**]	<p><b>(6) Wing walls/return walls:</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.</p>
(7) Guide Bunds, River Training works etc.	[**]	<p><b>(7) Guide Bunds, River Training works:</b> Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.</p>
(8) Approaches (including Retaining walls, stone pitching and protection works)	[**]	<p><b>(8) Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in</p>



Stage of Payment	Weightage	Payment Procedure
1	2	3
		all respects as specified for each major bridge.
<b>A.2- New Major Bridges</b>	<b>[**]</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.
(1) Foundation		(1) <b>Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the major Bridge as specified here in under:
(i) Well Foundation  (a) On completion of Cutting Edge + Well Curb  (b) Wellsteining : On completion of well steining upto bottom of well cap.  (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation  (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.  (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.  (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation  (a) Piling - On completion of pile upto bottom of pile cap  (b) Pile Cap : On completion of pile cap		(ii) Pile Foundation  (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorota basis.  (b) Pile Cap : Payment of 30% shall be made on completion of pile cap.  In case where load testing is required for foundation, the trigger of first payment shall include load testing

Stage of Payment	Weightage	Payment Procedure
1	2	3
		also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	<b>[**]</b>	(ii) <b>Sub-Structure:</b> Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the major bridge.
(3) Super-structure (including bearings)	<b>[**]</b>	<p>(3) <b>Super-structure:</b> Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p> <p>(For cable stayed bridge and suspension cable bridge, detailed payment stage may be included on case to case basis)</p>
(4) Wearing Coat including expansion joints	<b>[**]</b>	(4) <b>Wearing Coat:</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each major bridge.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	<b>[**]</b>	(5) <b>Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each major bridge.

Stage of Payment	Weightage	Payment Procedure
1	2	3
(6) Wing walls/return walls	<b>[**]</b>	<b>(6) Wing walls/return walls:</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each major bridge.
(7) Guide Bunds, River Training works etc.	<b>[**]</b>	<b>(7) Guide Bunds, River Training works:</b> Payments shall be made on completion of all guide bunds/river training works etc. complete in all respects as specified for each major bridge.
(8) Approaches (including Retaining walls, stone pitching and protection works for floor, embankment slope etc.)	<b>[**]</b>	<b>(8) Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each major bridge.
<b>B.1 -Widening and repairs of</b> (a) ROB (b) RUB  (1) Foundation	<b>[**]</b>	Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.  <b>(1) Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under.
(i) Pile Foundation (a) Piling - On completion of pile upto bottom of pile cap  (b) Pile Cap : On completion of pile cap		(i) Pile Foundation (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis.  (b) Pile Cap : Payment of 30% on pro-rata basis shall be made on completion of pile cap.  In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(ii) Open Foundation		(ii) Open Foundation: Payment shall

Stage of Payment	Weightage	Payment Procedure
1	2	3
		be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	<b>[**]</b>	<b>(2) Sub-Structure:.</b> Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	<b>[**]</b>	<b>(3) Super-structure:</b>  Payment shall be made on pro-rata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under :  If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	<b>[**]</b>	<b>(4) 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 for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	<b>[**]</b>	<b>(5) Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/ RUB.
(6) Wing walls/return walls	<b>[**]</b>	<b>(6) Wing walls/return walls:</b>

Stage of Payment	Weightage	Payment Procedure
1	2	3
		Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/ RUB.
(7) Approaches (including Retaining walls, stone pitching and protection works)	<b>[**]</b>	<b>(7) Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified for each of the ROB/ RUB.
<b>B.2- New</b> <b>(a) ROB</b> <b>(b) RUB</b>  (1) Foundation	<b>[**]</b>	Cost of each ROB/RUB shall be determined on pro rata basis with respect to the total linear length (m) of the ROB/RUBs.  <b>(1) Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the ROB/RUB as specified here in under:
(i) Well Foundation  (a) On completion of Cutting Edge + Well Curb  (b) Wellsteining : On completion of well steining upto bottom of well cap.  (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation  (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.  (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.  (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation  (a) Piling - On completion of pile upto bottom of pile		(ii) Pile Foundation  (a) Piling : Payment of 70% shall be made on completion of piling upto

Stage of Payment	Weightage	Payment Procedure
1	2	3
cap  (b) Pile Cap : On completion of pile cap		bottom of pile cap for each pile on prorota basis.  (b) Pile Cap : Payment of 30% shall be made on completion of pile cap.  In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
2) Sub-structure	[**]	<b>(2) Sub-Structure:</b> Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the ROB/RUB.
(3) Super-structure (including bearings)	[**]	<b>(3) Super-structure:</b> Payment shall be made on prorata basis on completion of a stage i.e. completion of superstructure upto deck slab including bearings of at least one span as specified here in under :  If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
(4) Wearing Coat including expansion joints in case of ROB. In case of RUB, rigid pavement under RUB including drainage facility as specified.	[**]	<b>(4) 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 for each of the ROB and (b) in case of RUB- rigid pavement under RUB including drainage facility complete in all respects as specified for each of the RUB.

Stage of Payment	Weightage	Payment Procedure
1	2	3
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	[**]	(5) <b>Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the ROB/RUB.
(6) Wing walls/return walls	[**]	(6) <b>Wing walls/return walls:</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the ROB/RUB.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]	(7) <b>Approaches:</b> Payments shall be made on completion of both approaches of each ROB including stone pitching, protection works, etc. complete in all respects as specified here in under :  If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.
<b>C.1- Widening and repairs of Elevated Section/Flyovers/ Grade Separators</b>  (i) Foundation		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.  (1) Foundation : Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :
(i) Pile Foundation  (a) Piling - On completion of pile upto bottom of pile cap  (b) Pile Cap : On		(i) Pile Foundation  (a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on prorata basis.  (b) Pile Cap : Payment of 30% on pro-

Stage of Payment	Weightage	Payment Procedure
1	2	3
completion of pile cap		<p>rata basis shall be made on completion of pile cap.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(ii) Open Foundation		(ii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	<b>[**]</b>	<b>(2) Sub-Structure:</b> Payment against Sub-structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearings)	<b>[**]</b>	<p><b>(3) Super-structure:</b> Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure upto deck slab including bearings of at least one span as specified here in under :</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>
(4) Wearing Coat including expansion joints	<b>[**]</b>	<b>(4) Wearing Coat:</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	<b>[**]</b>	<b>(5) Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.



Stage of Payment	Weightage	Payment Procedure
1	2	3
(6) Wing walls/return walls	[**]	(6) <b>Wing walls/return walls:</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]	(7) <b>Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects of each structure.
<b>C.2 -New Elevated Section/Flyovers/ Grade Separators</b>		Cost of each structure shall be determined on pro rata basis with respect to the total linear length (m) of the structures.
(1) Foundation	[**]	(1) <b>Foundation:</b> Payment against foundation shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one foundation of each of the structure as specified here in under :
(i) Well Foundation  (a) On completion of Cutting Edge + Well Curb  (b) Wellsteining : On completion of well steining upto bottom of well cap.  (c) On completion of bottom plug + top plug (if provisioned as per design) + well cap		(i) Well Foundation  (a) Cutting Edge + Well Curb: Payment of 10% shall be made on completion of a stage i.e. completion of cutting edge + well curb.  (b) Well steining : Payment of 65% shall be made on completion of well steining upto bottom of well cap. The payment stage shall be further sub-divided on pro-rata basis i.e. (i) on completion upto 10 m and (ii) on completion of each subsequent 5 m or part thereof.  (c) Bottom plug + top plug (if provisioned as per design) + well cap: Payment of 25% shall be made on completion of a stage i.e. completion of bottom plug, back fill, top plug and well cap.
(ii) Pile Foundation		(ii) Pile Foundation

Stage of Payment	Weightage	Payment Procedure
1	2	3
<p>(a) Piling - On completion of pile upto bottom of pile cap</p> <p>(b) Pile Cap : On completion of pile cap</p>		<p>(a) Piling : Payment of 70% shall be made on completion of piling upto bottom of pile cap for each pile on pro-rata basis.</p> <p>(b) Pile Cap : Payment of 30% shall be made on completion of pile cap.</p> <p>In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.</p>
(iii) Open Foundation		(iii) Open Foundation: Payment shall be made on completion of a stage i.e. on completion of atleast one foundation.
(2) Sub-structure	[**]	<b>(2) Sub-Structure:</b> Payment against Sub- structure shall be made on pro-rata basis on completion of a stage i.e. completion of atleast one sub-structure of abutments/piers upto abutment/pier cap level of each of the structure.
(3) Super-structure (including bearings)	[**]	<p><b>(3) Super-structure:</b></p> <p>Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super- structure upto deck slab including bearings of at least one span as specified here in under:</p> <p>If pre-cast girders/ segments are used, interim payments shall be made at 75% of the cost of that element, as derived from MoRTH Data Book, applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>
(4) Wearing Coat including expansion joints	[**]	<b>(4) Wearing Coat:</b> Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified for each of the structure.

Stage of Payment	Weightage	Payment Procedure
1	2	3
(5) Miscellaneous Items like hand rails, crash barriers, road markings etc.	[**]	(5) <b>Miscellaneous:</b> Payments shall be made on completion of all miscellaneous works like hand rails, crash barriers, road markings etc. complete in all respects as specified for each of the structure.
(6) Wing walls/return walls	[**]	(6) <b>Wing walls/return walls:</b> Payments shall be made on completion of all wing walls/return walls complete in all respects as specified for each of the structure.
(7) Approaches (including Retaining walls/Reinforced Earth wall, stone pitching and protection works)	[**]	<p>(7) <b>Approaches:</b> Payments shall be made on completion of both approaches including stone pitching, protection works, etc. complete in all respects as specified here in under :</p> <p>If reinforced soil wall is used with facia panel/blocks, interim payment shall be made @75% of the Cost of that element as derived from MoRTH data Book. Applicable SOR of State PWD on Base Date with tender discount/premium applied thereon.</p>

#### 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
1	2	3
(i) Toll plaza	[**]	Unit of measurement is each completed toll plaza. Payment for each toll plaza shall be made on pro rata basis with respect to the total of all toll plazas as specified here in under :

Stage of Payment	Weightage	Payment Procedure
1	2	3
(a) DLC(LHS)		(a) DLC (LHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(b) DLC (RHS)		(b) DLC (RHS) : Payment of 12.5% on pro-rata basis shall be made on completion of a stage i.e. completion of DLC on LHS.
(c) PQC(LHS)		(c) PQC(LHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on LHS.
(d) PQC(RHS)		(d) PQC(RHS): Payment of 25% on pro-rata basis shall be made on completion of a stage i.e. completion of PQC on RHS.
(e) Admin Building		(e) Admin Building: Payment of 10% on pro-rata basis shall be made on completion of a stage i.e. completion of Admin Building and miscellaneous works.
(f) Toll Booth, canopy, safety items and all other associated works		(f) Toll Booth, canopy, safety items and all other associated works: Payment of 15% on pro-rata basis shall be made on completion of a stage i.e. completion of Toll Booth, canopy, safety items and all other associated works.
(ii) Road side drains	[**]	
(a) Drains		a) Drains: Unit of measurement is linear length in metre . Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.
(b) Cover Slabs		(b) Cover slabs: Unit of measurement is linear length in metre. Payment shall be made on pro rata basis on completion of a stage in a length of not less than 100 m on one side.

Stage of Payment	Weightage	Payment Procedure
1	2	3
(iii) Road signs, markings, km stones, safety devices, ...	[**]	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 one Km on both sides.
(iv) <b>Overhead gantry mounted signs</b>	[**]	Unit of measurement is each number. Payment shall be made on pro-rata basis on completion of each overhead gantry mounted sign
(v) Project Facilities (a) Bus bays (b) Truck lay-byes (c) Rest areas  (d) others	[**] [**] [**] [**]	Unit of measurement is each number.  Payment shall be made on pro rata basis for completed facilities.
(vi) Roadside plantation	[**]	Unit of measurement is linear length in Km. Payment shall be made on pro rata basis on completion of one Km.
(vii) Protection works other than approaches to the bridges, elevated sections/ flyovers/grade separators and ROB/ RUBs (a) Crash- Barrier (b) Retaining wall (c) Breast wall	[**] [**] [**]	Unit of measurement is linear length.  Payment against items (a), (b) & (c) shall be made on pro rata basis on completion of a stage in a length of not less than 10% (ten per cent) of the total length and 100 m whichever is less.
(viii) Safety and traffic management during construction	[**]	Payment shall be made on prorata basis every six months.

Note: (1) In case of innovative Major Bridge Projects like cable suspension/cable stayed 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.
- (3) (a) In order to maintain cash flow in the project, the Authority shall also make interim monthly payments to the Contractor for the work done during the month for which the corresponding stage, as mentioned in Schedule-H, has not been achieved. Such work shall be measured, in a length, number or area as specified in corresponding stage of Schedule-H and valued in accordance with the proportion of the weightage of Contract Price assigned to that stage in Schedule-H. '90% of value of such work shall be paid as an 'Interim Monthly Payment' under clause 19.3 (i) of Contract Agreement.
- (b) For Pre cast/ pre-fabricated elements to be used in permanent works, interim payments to be made @ 75% of cost of that element ( to be derived from MoRT&H data book) as per schedule H.
- (C) Upon completion of the defined 'stage', a reconciliation of the interim payments shall be carried out, and any balance amount shall be paid. For the avoidance of doubt, it is clarified that the interim monthly payments are made solely to maintain cash flow in the project. In the event of termination of the project, under Clause 23.1, 23.2 or 23.3, as the case may be, such interim payments shall be dealt with as per Clause 23.5 (i) (b) of the Contract Agreement.