

National Highways & Infrastructure Development Corporation Limited

Project Name: Up-gradation to 2 lane with paved shoulders of Pawlrang - Rulchawm section of NH-102B of Aizawl - Imphal Economic Corridor from Existing Chainage km 72.030 to km 104.129 including 2.459 km re-alignment section from Tuivawl River to Rulchawm connecting km 48.150 of NH-6 [Design Chainage km 68.170 to km 98.579] (Package-III) in the State of Mizoram under Bharatmala Pariyojna on EPC mode.

Contract Package No.: NHIDCL/Mizoram/NH-102B/Package-III/2021-22

Tender Id: 2020_NHIDC_638525_1

Amendment No. 1

Sl. No.	Reference/clause no./ Annexure	Existing Provision	Modified Provision (To be read as)		
1.	Footnote of Annexure-IV of Appendix-IA of RFP, Page no. 69	In case of unauthorized sub-contractor proof of authorize sub-contracting has to be submitted	Deleted		
2.	Schedule-H of Technical Schedules, Pg no. 105	Modified Schedule-H is enclosed as Annexure-I .			
3.	Clause 2.11.2 & 2.11.3 of RFP	The Bidders are not required to submit the bid documents physically by date and time given in Data Sheet. Only the successful bidder has to submit the original documents physically before issue of LOA.			
4.	Data Sheet, Section-7, Page no. 49	Sl. No.	Event Description	Existing Date	Modified Date
		5.	Physical Submission of Bid Securing Declaration/POA etc	[Upto 11:00 hrs IST on BID Opening Date]	As modified above.



(R. S. Puri)
General Manager (Technical)

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 % of CP	Stage for Payment	Percentage
1	2	3	4
Road Works including Culverts, widening and repair of culverts	70.00	A- Widening and strengthening of existing road	
		B.1-Reconstruction/New 2-Lane Realignment /Bypass (Flexible Pavement)	
		(1) Earthwork up to top of the sub- grade	35.00
		(2) Sub-base Course	15.00
		(3) Non bituminous Base course	10.50
		(4) Bituminous Base Course	9.00
		(5) Wearing Coat	15.00
		B.2-Reconstruction/New 8-Lane Realignment/ Bypass (Rigid Pavement)	
		C.1-Reconstruction/ New Service Road (Flexible Pavement)	
		C.2- Reconstruction/New Service Road (Rigid Pavement)	
		D- Reconstruction & New Culverts on existing road, realignments, bypasses Culverts (length <6m)	15.50
Minor bridge	2.00	A.1-widening and repairing of Minor Bridges (length >6 m<&60m)	
		Minor Bridges	[Nil]
		A.2- New Minor bridges (length >6 mand<60m)	
		(1) Foundation	40.00
		(2) Sub-Structure	30.00
		(3) Super-structure (including bearings)	28.50
		(4) Approaches	1.50
		(5) Guide Bunds and River Training Works	[Nil]
		B.1- Widening and repairs of underpasses/overpasses	
		Underpasses/ Overpasses	[Nil]
B.2-NewUnderpasses/Overpasses	[Nil]		
Major bridge	7.00	A.1- Widening and repairs of Major Bridges	
		A.2-NewMajorBridges	
		(1)Foundation	27.50
		(2)Sub-structure	7.00

Item	Weightage in % of CP	Stage for Payment	Percentage
		(3)Super-structure (including bearings)	63.00
		(4)Wearing Coat including expansion joints	1.50
		(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	0.50
		(6) Wing walls/return walls	[Nil]
		(7)Guide Bunds, River Training works etc.	[Nil]
		(8)Approaches (including Retaining walls, stone pitching and protection works)	0.50
		B.1-Wideningandrepairof (a) ROB (b) RUB	
		B.2-NewROB/RUB	
		C.1- Widening and repair of Elevated Section/Flyovers/Grade Separators	
		C.2- New Elevated Section/Flyovers/Grade Separators	
Other Works	20.50	(i) Toll Plaza	[Nil]
		(ii) Road side drains	24.00
		(iii) Road signs, markings, km stones, etc	6.50
		(iv) Project facilities	
		(a) Lay-byes	1.50
		(b) Passenger Shelter, Rest Area	0.75
		(v) Road side Plantation	[Nil]
		(vi) Repair of Protection Works other than approaches to the bridges, elevated sections/ flyover/ grade separators and ROB/ RUBs	[Nil]
		(vii) Safety &Traffic Management during const.	[Nil]
		(viii) Breast Wall	8.00
		(ix) Toe Wall	[Nil]
		(x) Retaining Wall	26.00
		(xi) Crash Barrier	9.50
		(xii) Gabion wall	5.00
		(xiii) Hydro Seeding	7.00
		(xiv) Seeding and Mulching with Jute Net	4.00
		(xv) Seeding and Mulching with Coir Net	4.00
		(xvi) Balance Slope Protection work	3.50
		(xv) Junction Improvement	0.25
Electrical Utilities and Public Heath Utilities (Water pipe lines and sewage lines)	0.50	(i) Estimate for Shifting and Re-Alignment of LT Lines.	13.00
		(ii) Estimate for Shifting and Re-Alignment of 11KV Lines	7.00
		(iii) Installation of Gravity Main	35.00
		(iv) Distribution System	23.00
		(v) Providing Public Hydrant	5.00
		(vi)Providing Public Standpost	1.00
		(vii) Installation of Private House Connections damaged by widening	8.00
		(viii) Drilling of Borehole (HPTW)	6.00
		(ix) Installation of T/Cluster	2.00

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
A- Widening & Strengthening of road	[Nil]	
B.1- Reconstruction/New 2-Lane Realignment/Bypass (Flexible Pavement)		Unit of measurement is linear length. Payment 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.
(1) Earthwork up to top of the sub-grade	30.00	
(2) Sub-base Course	10.00	
(3) Non bituminous Base course	15.00	
(4) Bituminous Base course	15.00	
(5) Wearing Coat	15.00	
B.2- Reconstruction/New 8-Lane Realignment/Bypass (Rigid Pavement)	[Nil]	
C.1- Reconstruction/New Service Road/ Slip Road (Flexible Pavement)	[Nil]	
C.2- Reconstruction/New Service Road (Rigid Pavement)	[Nil]	
D-Reconstruction & New Culverts on existing road, realignments, bypasses		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 at least three culverts.
Culverts (length <6m)	15.00	

@ 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 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.

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
A.1-Widening and repairs of Minor Bridges (length>6m&<60m)	Nil	
A.2- New Minor Bridges (length > 6m & < 60m)		
(1) Foundation: On completion of the foundation work including foundations for wing and return walls, abutments, piers.	40.00	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 each foundation of the bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-Structure: On completion of abutments, piers up to the abutment/pier cap.	30.00	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 Sub-Structure shall be made on pro-rata basis on completion of each Sub-Structure upto abutment/pier cap level of each bridge.
(3) Super-structure: 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.	28.50	Payment shall be made on pro-rata basis on completion of a stage i.e., completion of super-structure of atleast one span in all respects as specified in the column of "Stage of Payment" in this sub-clause.
(4) Approaches : On completion of approaches including Retaining walls, stone pitching, protection works complete in all and fit for use	1.50	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.
(5) Guide Bunds and River Training Works: On completion of Guide Bunds and river training works complete in all respects	[Nil]	
B.1- Widening and repairs of underpasses/overpasses	[Nil]	
B.2- New Underpasses/Overpasses	[Nil]	

1.3.3 Major Bridge works, ROB/RUB and Structures: Not Applicable

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
A.1- Widening and repairs of Major Bridges		
A.2-New Major Bridges		
(1) Foundation	27.50	Foundation: 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 subject to completion of atleast two foundations of major Bridge. In case where load testing is required for foundation, the trigger of first payment shall include load testing also where specified.
(2) Sub-structure	7.00	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 major bridge subject to completion of atleast two sub-structures of abutments/piers upto abutment/pier cap level of the major bridge.
(3) Super-structure (including bearings)	63.00	Super-structure: Payment shall be made on pro-rata basis on completion of a stage i.e. completion of super-structure including bearings of atleast one span in all respects as specified.
(4) Wearing Coat including expansion joints	1.50	Wearing Coat: Payment shall be made on completion of wearing coat including expansion joints complete in all respects as specified.
(5) Miscellaneous Items like handrails, crash barrier, road markings etc.	0.50	Miscellaneous: Payments shall be made on completion of all miscellaneous works like handrails, crash barriers, road markings etc. complete in all respects as specified.
(6) Wing walls/return walls	[Nil]	
(7) Guide bunds, River Training works etc.	[Nil]	
(8) Approaches (including Retaining walls, stone pitching and protection works)	0.50	Approaches: Payments shall be made on both approaches including stone pitching, protection works, etc. complete in all respects as specified.
B.1- Widening and repairs of (a)ROB (b)RUB	[Nil]	
B.2-New ROB/RUB	[Nil]	
C.1-Widening and repairs of Elevated Section/ Flyovers/Grade Separators	[Nil]	
C.2-New Elevated Section/ Flyovers/Grade Separators	[Nil]	

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
1	2	3
(1) Toll Plaza	[Nil]	
(2) Roadside drains	20.00	Unit of measurement is linear length. Payment 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.
(3) Road signs, markings, km stones, safety devices etc.	5.00	
(4) Project Facilities		Payment shall be made on pro-rata basis for completed facilities.
(a) Lay-byes	2.00	
(b) Passenger Shelter	1.00	
(5) Road side Plantation including Horticulture in Wayside Amenities	[Nil]	
(6) Repair of Protection Works other than approaches to the bridges, elevated sections/flyover/grade separators and ROB/ RUBs	[Nil]	
(7) Safety and traffic management during construction	[Nil]	
(8) Protection Works		Unit of measurement is linear length. Payment 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.
(a) Breast Wall	8.50	
(b) Toe Wall	[Nil]	
(c) Retaining Wall	26.00	
(c) Crash Barrier	10.00	
(d) Gabion Wall	7.00	
(e) Hydro-seeding	7.00	Unit of measurement is Sqm. Payment shall be made on pro-rata basis on completion of a stage in an area of not less than 5% (five percent) of the total quantity. Payment shall be made on successful growth of grass of minimum 6 inches (and not on the plantation of grass).
(f) Seeding and Mulching with Jute Net	5.00	
(g) Seeding and Mulching with Coir Net	5.00	
(h) Balance Slope Protection work	3.00	
(9) Junction Improvement	0.50	Payment shall be made on pro rata basis for completed facilities.

1.3.4 Utility Shifting.

Procedure for estimating the value of Utility Shifting done shall be as stated in table 1.3.5.

Table 1.3.5

Stage of Payment	Weightage	Payment Procedure
1	2	3
(i) Estimate for Shifting and Re-Alignment of LT Lines.	13.00	Unit of measurement is as per completed activities. Cost per activity shall be determined on pro-rata basis as per its weightage with reference to total cost. Payment shall be made for completed activity.
(ii) Estimate for Shifting and Re-Alignment of 11KV Lines	7.00	
(iii) Installation of Gravity Main	35.00	
(iv) Distribution System	23.00	
(v) Providing Public Hydrant	5.00	
(vi) Providing Public Standpost	1.00	
(vii) Installation of Private House Connections damaged by widening	8.00	
(viii) Drilling of Borehole (HPTW)	6.00	
(ix) Installation of T/Cluster	2.00	

2. Procedure for payment for Maintenance

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

2.2 Payment for Maintenance shall be made in quarterly installments in accordance with the provisions of Clause 19.7.

