

SCHEDULE - H**(See Clauses 10.1.4 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 OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	74.18%	A- Widening and strengthening of existing road		
		(1) Earthwork up to top of the sub-grade including excavation in soil, soft rock and hard rock including Cleaning & grubbing with required site clearance etc.	25.54%	18.94%
		(2) Granular work (sub- base, shoulders)	4.71%	3.50%
		(3) Bituminous work		
		a)DBM With Prime coat & Tack coat.	5.68%	4.21%
		b)BC with Tack coat.	3.09%	2.29%
		(4) Rigid Pavement	0.00%	0.00%
		(5)Widening and repair of culvert	0.01%	0.01%
		(6)Protection of existing works	0.00%	0.00%
		(7)Widening and repair of minor bridges	0.00%	0.00%
		B - New 2-Lane alignment		
		Earthwork up to top of the sub-grade including excavation in soil, soft rock and hard rock including Cleaning & grubbing with required site clearance etc.	26.84%	19.91%
		(2) Granular work	6.43%	4.77%

ITEM	WEIGHTAGE IN PERCENTAGE TO THE CONTRACT PRICE	STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
		(sub- base, shoulders)		
		(3) Bituminous work		
		a)DBM With Prime coat & Tack coat.	7.58%	5.63%
		b) BC with Tack coat.	4.13%	3.07%
		(4) Rigid Pavement	0.00%	0.00%
		(5)Protection work	0.00%	0.00%
		(6)RCC/Reinf. Earth retaining Wall in approaches of ROB	0.00%	0.00%
		(7)Drainage Works	0.00%	0.00%
		(8)Protection Work	0.00%	0.00%
		C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:		
		(1)Box / Slab Culverts	10.04%	7.45%
		(2) HP Culvert	0.00%	0.00%
		(3) Embankment Protection(New Lane)	0.00%	0.00%
		(4) Grade separated structures	0.00%	0.00%
		(5) Overpass	0.00%	0.00%
		(6) Elephant Underpass	0.00%	0.00%
		(7) Approaches to ROB and Viaduct	0.00%	0.00%
		(8) Minor Bridges	5.94%	4.40%
		(9) Cattles/Pedestrian Underpasses	0.00%	0.00%
		(10) Vehicular Underpass	0.00%	0.00%
Major Bridge works and ROB/RUB	0.00%	A- Widening and repairs of Major Bridges		
		(1) Foundation	0.00%	0.00%
		(2) Sub-structure	0.00%	0.00%
		(3)Super- structure(including wearing coat,crash barrier etc. complete in all respect)	0.00%	0.00%
		B- Widening and repair of		

ITEM	WEIGHTAGE IN PERCENTAGE TO THE CONTRACT PRICE	STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
		(a) ROB	0.00%	0.00%
		(b) RUB	0.00%	0.00%
		C- New Major Bridges		
		(1) other Miscellaneous Items	0.00%	0.00%
		(2) Guide Bundh	0.00%	0.00%
		(3) Foundation	0.00%	0.00%
		(4) Sub structure	0.00%	0.00%
		(5) Super-structure (including wearing coats, crash barriers etc. complete)	0.00%	0.00%
		(6) Protection works	0.00%	0.00%
		D- New rail-road bridges including viaduct		
		(a) ROB	0.00%	0.00%
		(b) RUB	0.00%	0.00%
Structures(Elevated sections, reinforced earth)	0.00%	(1) Foundation	0.00%	0.00%
		(2) Sub-structure	0.00%	0.00%
		(3) Super-structure (including crash barriers etc. complete)	0.00%	0.00%
		(4) Reinforced Earth Wall (includes Approaches of ROB, Underpasses, Overpasses, Flyover etc.)	0.00%	0.00%
Other Works	25.82%	Other Engineering Works		
		Major Junction	0.00%	0.00%
		Road Marking	0.00%	0.00%
		Road Appurtenances	0.15%	0.04%
		Road side plantation	0.00%	0.00%
		Protection Work (Provision of Rip-Rap or similar work in valley side of the curves as special safety features)	0.61%	0.16%
		Service roads/Slip roads	0.00%	0.00%
		Toll Plaza	0.00%	0.00%
		Road side drain & toe wall	24.04%	6.21%

ITEM	WEIGHTAGE IN PERCENTAGE TO THE CONTRACT PRICE	STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
		Project facilities		
		Safety and traffic management during const.	0.00%	0.00%
		Traffic Sign	0.17%	0.04%
		Pavement Marking	1.43%	0.37%
		Crash barrier/W metal crash barrier	2.52%	0.65%
		Boundary stone, km Stone, 5th km stone and hectometer stone	0.03%	0.01%
		Traffic blinker LED delineator, stud, reflective payment marker, tree reflector	0.12%	0.03%
		Traffic Island	0.00%	0.00%
		Median Kerb	0.00%	0.00%
		Bus bays and Bus Shelter	0.17%	0.04%
		Road side plantation and median plantation	0.00%	0.00%
		Protective work of guide bund including construction of flexible aprons, boulder pitching and filter media on slope	0.00%	0.00%
		Minor Junction	3.24%	0.84%
		Median filling shrub plantation and maintenance for 1 year	0.00%	0.00%
		Overhead signboard	0.07%	0.02%
		Painting on kerb	0.00%	0.00%
		Footpath and separator	0.00%	0.00%
		Interlocking concrete block pavement	0.00%	0.00%
		Junctions	0.00%	0.00%
		CC Kerb	0.00%	0.00%
		Painting	0.00%	0.00%
		cable duct	0.00%	0.00%
		Solar stud and solar blinking LED	0.00%	0.00%

ITEM	WEIGHTAGE IN PERCENTAGE TO THE CONTRACT PRICE	STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
		Rest area with development of site including one no bus bay and bus shelter, landscaping and tree plantation	0.00%	0.00%
		Plantation (Vetiver, Hydro seeding and Mulching or similar techniques etc.) for slope protection on exposed hill slopes as slide mitigation measure.	7.18%	1.85%
		Traffic control devices and road safety works	0.00%	0.00%
		Road furniture	0.00%	0.00%
		Road side drain I/C chute drain	4.24%	1.09%
		Repair for protection work	0.00%	0.00%
		Traffic diversion, Safety and traffic management during construction	0.00%	0.00%
		Miscellaneous item	0.00%	0.00%
		Breast Wall and RCC retaining wall	0.00%	0.00%
		Junction improvement	0.00%	0.00%
		Site Clearance	0.00%	0.00%
		M-20 Kerb with channel	0.00%	0.00%
		Prefabricated railing over kerb in median	0.00%	0.00%
		safety barrier	0.00%	0.00%
		(v)Project facilities		
		(a)Truck lay-byes	0.34%	0.09%
		(b) Others	0.24%	0.06%
		(vi)Repairs to bridges/structures		
		Other items(Junctions)	0.00%	0.00%
		Providing wearing coat	0.00%	0.00%
		Replacement of bearing joints	0.00%	0.00%
		Providing crash barrier	0.00%	0.00%
		(vii)Protection Works		

Two Laning of Joram – koloriang Road (NH-713) on EPC basis from design km 32+050 to km 44+000 [Existing km 35.150 to km 50.050] in the State of Arunachal Pradesh under SARDP-NE

ITEM	WEIGHTAGE IN PERCENTAGE TO THE CONTRACT PRICE	STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE	PERCENTAGE WEIGHTAGE vis a vis OVERALL PROJECT
1	2	3	4	5
		Breast Wall	48.37%	12.49%
		Retaining Wall	3.62%	0.94%
		Gabion Wall	0.0%	0.00%
		Parapet	3.43%	0.89%
		Total %		100.00%

1.3 Procedure of estimating the value of work done

1.3.1 Road works including approaches to minor bridges, Major Bridges and Structures (excluding service roads).

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

TABLE 1.3.1

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
A-Widening and Strengthening		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.
(1) Earthwork up to top of the sub-grade including excavation in soil, soft rock and hard rock including Cleaning & grubbing with required site clearance etc.	18.94%	
(2) Granular work (sub- base, base, shoulders)	3.50%	
(3) Bituminous work		
a) DBM with prime coat and Tack coat	4.21%	
b) BC with Tack coat	2.29%	
(4) Concrete Pavement	0.00%	
(6) Widening and repair of culverts	0.01%	Cost of five completed culverts shall be determined pro rata with respect to the total number of culverts. Payment shall be made on the completion of five culverts.
(7) Protection of existing works	0.00%	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.
(8) Widening and repair of minor bridges	0.00%	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 a minor bridge.
B- New 2-lane alignment		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.
(1) Earthwork up to top of the sub-grade including excavation in soil, soft rock and hard rock including Cleaning & grubbing with required site clearance etc.	19.91%	
(2) Granular work (sub- base, base, shoulders)	4.77%	
(3) Bituminous work		
a) DBM with prime coat and Tack coat	5.63%	

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
b) BC with Tack coat	3.07%	
(4) CC Pavement	0.00%	
(5) Protection Works	0.00%	
(6) RCC / Reinf. Earth ret wall in approaches of RoB	0.00%	
(7) Drainage Works	0.00%	
(8) Protection works	0.00%	
C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:		
(1) Box / Slab Culverts	7.45%	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 five culverts.
(2) HP Culverts	0.00%	
(3) Embankment Protection (New Lane)	0.00%	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.
(4) Grade Separated structures	0.00%	Cost of each structure shall be determined on pro rata basis with respect to the total number of structures. Payment shall be made on the completion of each number of structures specified.
(5) Overpasses	0.00%	
(6) Elephant underpass	0.00%	
(7) Approaches to ROB and Viaduct	0.00%	
(8) Minor bridges	4.40%	Cost of each minor bridge/Culvert shall be determined on pro rata basis with respect to the total linear length of the minor bridges/culvert. Payment shall be made on the completion of a minor bridge/culvert.
(9) Cattles/Pedestrian Underpasses	0.00%	Cost of each structure shall be determined on pro rata basis with respect to the total number of structures. Payment shall be made on the completion of each number of structures specified.
(10) Vehicular Underpasses	0.00%	

@. 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:

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

Where P= Contract Price

L = Total length in km

Similarly, the rates per km for stages (1), (2) and (4) above shall be worked out.

1.3 Procedure of estimating the value of work done

1.3.2 Major Bridge works and ROB/RUB.

Procedure for estimating the value of Major Bridge works and of ROB/RUB shall be as stated in table 1.3.2:

TABLE 1.3.2

STAGE OF PAYMENT	WEIGHTAGE	PAYMENT PROCEDURE
A- Widening and repairs of Major Bridges		Cost of each Major Bridge (widening and repairs) shall be determined on pro rata basis with respect to the total linear length (m) of the Major Bridges (widening and repairs). Payment shall be made on completion of each stage of a Major Bridge as per the weightage given in this table.
(1) Foundation	0.00%	
(2) Sub-structure	0.00%	
(3) Super-structure (including wearing coat, crash barriers etc. complete in all respect)	0.00%	
B- Widening and repair of		0.00% 0.00%
(a) ROB	0.00%	
(b) RUB	0.00%	
C- New Major Bridges		Payment shall be made on pro rata basis on completion of 25 (twenty five) percent of each stage of a Major Bridge as per the weightage given in this table.
(1) Other Miscellaneous Items	0.00%	
(2) Guide Bund	0.00%	
(3) Foundation	0.00%	
(4) Sub-structure	0.00%	
(5) Super-structure (including wearing coat, crash barriers etc. complete in all respect)	0.00%	
(6) Protection Works	0.00%	
D- New rail-road bridge		Payment shall be made on pro rata basis on completion of 25 (twenty five) percent of each stage of a ROB/RUB as per the weightage given in this table.
(a) ROB	0.00%	
(b) RUB	0.00%	

TABLE: 1.3.3

STAGE OF PAYMENT	WEIGHTAGE	PAYMENT PROCEDURE
(1) Foundation: On completion of the foundation works including foundations for wing and return walls	0.00%	Cost of each structure shall be determined on pro rata basis in respect to the total linear length (m) of all the structures. Payment shall be made on completion of each stage of a structure as per the weightage given in this table.
(2) Sub-structure: On completion of abutments, piers up to the abutment/pier cap	0.00%	
(3) Super-structure: On completion of the Structure along with super structure, including hand rails/crash barriers, wing walls, return walls, tests on completion etc., elevated structure complete in all respects and fit for use.	0.00%	
(4) Reinforced earth work	0.00%	Payment shall be made on pro rata basis on completion of 20 (twenty) percent of total area.

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	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
Other Engineering Works		
Major Junction	0.00%	Payment shall be made on pro rata basis for completed facilities.
Road Marking	0.00%	
Road Appurtenances	0.04%	
Road Side plantation	0.00%	Unit of measurement is linear length in km. Cost per km shall be determined on pro rata basis with respect to the total length of the service roads/slip roads. Payment shall be made for completed service roads/slip roads in a length of not less than 20 (twenty) percent of the total length of service roads/slip roads.
Protection works(Riprap)	0.16%	
Service roads/slip road	0.00%	
Toll Plaza	0.00%	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.
Road side drains & toe wall	6.21%	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 10 (ten) percent of the total length.
Project facilities		Payment shall be made for completed items.
Safety & traffic mgmt. During construction	0.00%	
Traffic Sign	0.04%	
Pavement marking	0.37%	
Crash barrier/ W metal crash barrier	0.65%	
Boundary stone, km stone, 5th km stone, & hectometre stones	0.01%	
Traffic blinker LED Delineator, stud, reflective payment marker,	0.03%	

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
tree reflector		
Traffic Island	0.00%	
Median Kerbs	0.00%	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 10 (ten) percent of the total length.
Bus Bays & Bus shelter	0.04%	Payment shall be made for completed items.
Road side plantation & medium Plantation.	0.00%	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 10 (ten) percent of the total length.
Protection works of guide bund including construction of flexible aprons , boulder pitching and filter media on slopes	0.00%	
Minor junction	0.84%	Payment shall be made for completed items.
Median filling shrub plantation & maintenance for 1 year	0.00%	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 10 (ten) percent of the total length.
Overhead signboard	0.02%	
painting on kerb	0.00%	
Footpath & Separator	0.00%	
Plantation (Vetiver, Hydro seeding and Mulching etc.) for slope protection on exposed hill slopes as slide mitigation measure.	0.00%	
Interlocking concrete block payment	0.00%	
junctions	0.00%	
CC kerb	0.00%	
Painting	0.00%	
Cable duct	0.00%	
Solar stud & solar blinking LED	0.00%	

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
Rest area with development of site including One no Bus bay and Bus shelter, landscaping and tree plantation	0.00%	
Plantation	1.85%	
Traffic control devices and road safety works	0.00%	
Road furniture	0.00%	
Roads side drains I/C Chute drain & toe wall	1.09%	
Repair of protections works	0.00%	
Traffic diversion, Safety and traffic management during construction	0.00%	
Miscellaneous items	0.00%	
Breast wall and RCC retaining wall	0.00%	
Junction improvement	0.00%	
Site Clearance	0.00%	
M-20 kerb with channel	0.00%	
Prefabricated railing over kerb in median	0.00%	
Safety Barrier	0.00%	
(v) Project facilities	0.00%	Payment shall be made for completed items.
(a) Truck lay-byes	0.09%	
(b) others	0.06%	
(vi) Repairs to bridges/structures		Payment shall be made for completed items.
Other items (Junctions)	0.00%	
Providing wearing coat	0.00%	
Replacement of bearing joints	0.00%	

STAGE OF PAYMENT	PERCENTAGE WEIGHTAGE vis a vis overall Project	PAYMENT PROCEDURE
Providing crash barriers	0.00%	
(vii) Protection works		
Breast wall	12.49%	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 10 (ten) percent of the total length.
Retaining wall	0.94%	
Gabion Wall	0.00%	
Parapet	0.89%	

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.