

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]						
Cost Abstract						
Special Repair works of Existing road from km 107+000 to km 133+000						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
SITE CLEARANCE						
1	10.18 (C)	Bush clearance (Clearing road side vegetation, brush wood mooli bamboos, overgrown grass including removal etc. along existing road side, and disposal of the cut bushes down hill side of the road formation. This jungle clearance should includes minimum height of Clearance of 4.5m from top of pavement on uphill side of the road including road shoulder and all the bushes on the shoulder and down hill side of the road.)	Km	26.000	9,559.00	248534.00
2	10.12	Land slide clearance (Clearance of land slides in soil and ordinary rock by a bull-dozer D 80 A-12, 180 HP and disposal of the same on the valley side)- On need basis as & when required. Here it is taken for estimate purpose only	Cum	10000.000	52.00	520000.00
3	3.13	Scarifying existing bituminous surface to a depth of 50 mm by mechanical means (Scarifying the existing bituminous road surface to a depth of 50 mm and disposal of scarified material with in all lifts and lead upto 1000 metres.)	Sqm	77000.000	23.00	1771000.00
4	10.11	Hill side drain clearances (Removal of earth from the choked hill side drain and disposing it on the valley side manually)	m	26000.000	66.00	1768000.00
5		Hiring of JCB (30Days) Per Day 8 Hrs-On need basis as & when required. Here it is taken for estimate purpose only	Hrs	240.000	2,500.00	600000.00
6	10.3	Maintenance of Earth Shoulder (stripping excess soil) (Stripping excess soil from the shoulder surface to achieve the approved level and compacting with plate compactor) Both Sides	Sqm	11000.000	33.00	363000.00
7	10.2	Maintenance of Earthen Shoulder (filling with fresh soil) (Making up loss of material/ irregularities on shoulder to the design level by adding fresh approved soil and compacting it with appropriate equipment.) Both Side of Road	Sqm	11000.000	109.00	1199000.00
Sub Total :						6469534.00
Black Spot Rectification GRANULAR SUB-BASE & BASE COURSE						
8	4.1 B (IV)	Granular Sub base (GSB) for Grading-IV Material (By Mix in Place Method (Construction of granular sub-base by providing the material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per clause 401)	Cum	217.600	2680.00	583168.00

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]						
Cost Abstract						
Special Repair works of Existing road from km 107+000 to km 133+000						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
9	4.11	Wet mix Macadam (WMM) (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.)	Cum	2812.500	3950.00	11109375.00
Sub Total :						11092543.00
BITUMINOUS BASE AND SURFACE COURSES						
10	5.1 (i)	Prime coat - Low Porosity (Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate shown in 500-1 using mechanical means.)	Sqm	2100.000	48.00	100800.00
11	5.2	Tack coat on WMM - Granular Surface Treated with Primer (Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at required rate on the prepared bituminous/granular surface cleaned with mechanical broom.)	Sqm	10500.000	29.00	304500.00
12	5.2 (iii)	Tack coat on DBM Granular Surface Treated with Primer (Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at required rate on the prepared bituminous/granular surface cleaned with mechanical broom.)	Sqm	10500.000	29.00	304500.00
13	5.2 (iii)	Tackcoat on existing bituminous surface (Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor at required rate on the prepared bituminous/granular surface cleaned with mechanical broom.)	Sqm	66500.000	22.00	1463000.00
14	5.4(ii)	Dense Graded Bituminous Macadam for Grading II (19 mm nominal size) (Providing and laying dense bituminous macadam with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 4.0 to 4.5% by weight of total mix of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 507 complete in all respects.)	Cum	525.000	14971.00	7859775.00

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]

Cost Abstract

Special Repair works of Existing road from km 107+000 to km 133+000

SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
15	5.5 (i)	Bituminous Concrete (Providing and laying bituminous concrete with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder @ 5.4 to 5.6 % of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 509 complete in all respects) Case - I using Bitumen 60/70 for Grading-I (13 mm nominal size)	Cum	3052.000	16613.00	50702676.00
16	6.1	Dry Lean Concrete (DLC) -(Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing)	Cum	127.500	7,005.00	893137.50
17	6.2	Cement Concrete Pavement (Construction of unreinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 43 grade cement @ 400 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing)	Cum	196.000	14,761.00	2893156.00
Sub Total :						64521744.50

11

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]

Cost Abstract

Special Repair works of Existing road from km 107+000 to km 133+000

SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		Road side drain (Type I and Type II)				
26		Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)				
	12.11 B (i)	(i) in soil (Depth upto 3 m) by mechanical means	Cum	428.930	90.00	38603.70
	3.11 ii B	(ii) in Ordinary rock (not requiring blasting)	Cum	22.580	119.00	2687.02
27	9.10	PCC M15 (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	21.000	7,900.00	165900.00
28	12.8 B	PCC M-20 in drain Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications	Cum	132.500	10,640.00	1409800.00
29	13.8	Weep holes Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications	No.	800.000	1,733.00	1386400.00
		Sub Total :				3003390.72
		Bridge Repair				
		Existing bridge at Km 128+158, span 1x41m				
31	16.16	Replacement of damaged concrete railing, (1 Side)	m	50.000	490.00	24500.00
32	16.16	Replacement of Expansion Joints complete as per drawings (1 No)	m	8.200	6,874.00	56366.80
33	14.16	Painting on railing (Painting on concrete surface (Providing and applying 2 coats of water based cement paint to unplastered concrete surface after cleaning the surface of dirt, dust, oil, grease, efflorescence and applying paint @ of 1 litre for 2 Sq.m.) Both Sides	m	192.000	321.00	61632.00
		Sub Total :				142498.80

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]						
Cost Abstract						
Special Repair works of Existing road from km 107+000 to km 133+000						
SI No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
		Culverts (Widening and Repair 2 Nos)				
34	12.1 B (i)	Earth work in excavation of foundation (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work.)	Cum	24.888	90.00	2239.92
35	9.10	PCC M15 in leveling course PCC 1:3:6 in Foundation (Plain cement concrete 1:3:6 mix with crushed stone aggregate 40 mm nominal size mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days.)	Cum	5.190	7,900.00	40997.84
36	12.8 B	PCC M20 in head wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	Cum	8.040	10,640.00	85545.60
37		RCC NP-4 Pipe laying Laying Reinforced Cement Concrete Pipe NP4/prestrssed concrete pipe on first class bedding in single row . (Laying Reinforced cement concrete pipe NP4/prestrssed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)				
	9.2B	(a) Laying of NP4 pipe - 1x1200mm dia-	Rm	5.000	21,073.00	105365.00
38	15.1A	Boulder apron (Providing and laying boulders apron for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification)	MT	8.649	2,647.00	22892.95
39	15.20	Boulder apron laid in wire crates (Providing and laying of boulder apron laid in wire crates made with 4mm dia GI wire conforming to IS: 280 & IS:4826 in 100mm x 100mm mesh (weaved diagonally) including 10% extra for laps and joints laid with stone boulders weighing less not less than 40 kgs each)	Cum	8.649	4,120.00	35632.40

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]						
Cost Abstract						
Special Repair works of Existing road from km 107+000 to km 133+000						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
40	13.10	Filter media (Providing and laying of Filter media with granular materials/stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2. of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment; wing wall and return wall to the full height compacted to a firm condition complete as per drawing and technical specification.)	Cum	13.370	2,550.00	34093.79
41	13.4A	RR Stone masonry in CM 1:3 (Stone masonry work in cement mortar for substructure complete as per drawing and Technical Specifications-Random Rubble Masonry in cement mortar 1:3)	Cum	8.040	7,409.00	59568.36
42	13.80	100 mm dia Weep Holes (Providing weep holes in Brick masonry/Plain/Reinforced concrete abutment, wing wall/return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical specifications)	Rm	10.000	1,733.00	17330.00
43	15.12	Gabion Structures for erosion control, river training works-Gabian Structure for Erosion Control, River Training Works and Protection works (Providing and constructing gabain structures for erosion control, river training works and protection works with wire crates of size 2 m x 1 m x 0.3 m each divided into 1m compartments by cross netting, made from 4 mm galvanised steel wire @ 32 Kg per 10 sqm having minimum tensile strength of 300 Mpa conforming to IS 4826, woven into mesh with double twist, mesh size not exceeding 100 mm x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be securely tied with 4 mm galvanised steel wire.	Cum	0.000	3,695.00	0.00
44	15.60	Geo-textile fabric behind th gabion wall all complete-(Laying of a geotextile filter between pitching and embankment slopes on which pitching is laid to prevent escape of the embankment material through the voids of the stone pitching/cement concrete blocks as well as to allow free movement of water without creating any uplift head on the pitching)	Nos.	0.000	458.00	0.00
45	12.8 B	PCC M20 Parapet wall (Plain/Reinforced cement concrete in open foundation complete as per drawing and technical specifications)	cum	9.600	10,640.00	102144.00

Project : Special Repair For NH-06 – Package V [Sethawn to Khamrang (26 km)]						
Cost Abstract						
Special Repair works of Existing road from km 107+000 to km 133+000						
Sl No.	Ref SOR No	Description	Unit	Quantity	Rate Rs	Amount Rs
46		Blockage clearances (40 Pipe Culvert) - (3.14*0.6*0.6*12)*40	Cum	542.592	74.00	40151.81
		Sub Total :				545961.66
		Total				₹ 8,63,75,673
		Work Value Less 6% VAT in above Rate				₹ 8,14,86,484
		GST (12 %)				₹ 97,78,378
		Bid Price (Work Value +GST)				₹ 9,12,64,862
		Agency Charges (9%)				₹ 73,33,784
		GST (18%) on Agency Charges				₹ 13,20,081
		Final Cost (Rs)				₹ 9,99,18,726
		Final cost (Cr)				₹ 9.99

45