

Name of work :- Resurfacing of Raygadh Approach Road (NP-BT) Km.0/000 to 1/680
Ta.Dhrangadhra, Dist.; Surendranagar. (Under MMGSY-Normal-2026-27)

BILL OF QUANTITIES

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
1	Clearing and grubbing of road land incl.uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth upto 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials © By mechanical means in area of Light jungle.	0.38	One Hect.	28393.03	10789.35
2	Earthwork for embankment including breaking clods, dressing with all lead and lift (Excluding watering and consolidation) (A) Selected soil should be From borrow area with all lead and lift and should have CBR not less than 6.00%.	1864.20	One Cum	150.38	280338.40
3	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side slopes as directed upto all lead.	132.60	One Cum	104.20	13816.92
4	Scarifying graveled macadam or Bitumen macadam surface 6cm to 10cm depth including stacking useful materials on road side and disposing off remaining stuff.	540.00	One Sqm	39.62	21394.80
5	Granular Sub-base with Black trap crushed stone well Graded Material (Table.400.1) by Mix in place Method. Construction of Granular Sub-base by Providing Black Trap cruhsed stone well greded material, spreading in uniform layers with motor graded on prepared surfce, mixing by mix in place method with rotavator at OMC, and compacting with Vibratory roller to achieve the desired density, complete as per Technical Specification Clause-401. For Grading-1 Materials.	365.10	One Cum	1054.84	385122.08

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
6	WBM Grading-1 Providing, laying, spreading and compacting stone agg. Of 90mm to 45mm size to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 KN in stage to proper grade and camber, applying and brooming, stone screening/binding material to fill-up the intersties of coarse agg., watering and compacting to the required density grading-1 as per Technical Specification Clause.405 By manual means.	258.30	One Cum	1538.23	397324.81
7	WBM Grading-2 Providing, laying, spreading and compacting stone agg. Of 63mm to 45mm size to water bound macadam specification including spreading in uniform thickness, hand packing, rolling with smooth wheel roller 80-100 KN in stage to proper grade and camber, applying and brooming, stone screening/binding material to fill-up the intersties of coarse agg., watering and compacting to the required density grading-2 as per Technical Specification Clause.405 By manual means.	60.30	One Cum	1421.37	85708.61
8	Rolling and Watering of earthwork with vibratory roller including filling in depression which occur during the process and as directed.	1895.00	One Cum	22.48	42599.60
9	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 of 0.70 to 1.0 kg/sqm using mechanical means,	1980.00	One Sqm	38.58	76388.40

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
10	Providing and laying bitumenous grout 37.50mm thick using bulk Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm on Bitumin surfacer and using BT chips for required gradation with the asphalt of grade VG-30 at the rate of 1.99% i.e 19.90kg/MT by weight of mix including heating and mixing in drum mix plant , transporting the mix and spreading the same by paver finisher and consolidation as per MOST specification including cost of all materials fuel, labours, tools and plants etc. using contractor's own drum mix plant etc. complete.	299.00	One MT	2795.17	835755.83
11	Providing and laying and rolling of 20mm thick Compacted mix seal surface with B.T. and aggregate as spedified using bitumen Grade VG-30 for mixing with aggregate at the rate of 5.10% i.e 51.00Kg/MT of total mix including heating and mixing in drum mix plant and spreading the same by paver finisher and consolidation with vibratory roller including necessary firewood, oil, lubricants, labour charges using contractor's own drum mix plant, machineries and equipment, tools etc including flushing of sand 0.27cum/10sqm etc. complete in accordance with the requirement of spefication.	172.00	One MT	4443.69	764314.68

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
12	Providing, laying and rolling of 25mm thick using asphalt viscosity grade of VG-30 open graded premix bituminous carpet with B.T aggregates as specified and using bulk Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm on B.T.Surface (As per IRC-16) and using bitumen for mixing with aggregate at the rate of 3.36% i.e 33.60kg/MT. of total mix including heating and mixing in drum mix plant, spreading the same with paver finisher and consolidation with vibratory roller including necessary firewood, oil, lubricants, labour charges etc. using equipment tools etc. completed in accordance with the requirement of specification.	196.00	One MT	3603.68	706321.28
13	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. (B) Dense or hard soil.	343.80	One Cum	241.79	83127.40
14	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. (C) Hard Murrum	288.60	One Cum	412.00	118903.20
15	Providing and casting in situ ordinary cement concrete M-150 mix and providing necessary pin headers including shuttering, scaffolding, laying vibrating, curing and finishing complete Without V-Grooves For all Hieght.	818.60	One Cum	3799.60	3110352.56
16	Providing and filling in foundation with ordinary cement concrete M-100 mix and providing necessary vertical pin headers incl. Formwork, vibrating, ramming and curing complete.	141.10	One Cum	3226.63	455277.49

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
17	Construction of concrete road using tremix system with 20cm thick controlled M-250 concrete mixing fixing and removing "C" channels of required road depth levelling if placed concrete with surface vibrator, finishing the surface with power floater and towel tight brooming as directed with providing expansion joints 20x200mm and contraction joints 20x20mm using concrete cutter machine etc. complete.	62.30	One Cum	6513.52	405792.30
18	Providing and casting in situ Contolled cement concrete- M-200 for average 75/150mm thick wearing coat laid as directed including. tamping, vibrating, finishing, curring and filling in joints with bitumen complete.	149.20	One Cum	5101.10	761084.12
19	Providing and laying weep hole in Abutment and returns by using A.C pipe of 100mm. Incl. fixing in proper grade and jointing the complete as per detailed specification.	128.80	One No	53.44	6883.07
20	Providing and laying in Position FE - 500/500D TMT bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following (A) Piers (B) Abutments (C) Returns (D) Walls etc.	4.970	One MT	73217.52	363891.07
21	Providing and Fixing in position FE-500/500D TMT bar reinforcement including cutting, bending, hooking, and tying complete as per detailed drawaing (A)RCC kerb (B) RCC Footpath (B) RCC Solid Slab/ App. Slab / Wearing coat.	4.060	One MT	72601.86	294763.55
22	Providing and fixing Precast cement concrete Hectometer as per IRC type design incl. painting, lettering etc. fixing in C.C. 1:5:10.	5.00	One No	356.49	1782.45
23	Providing and fixing Precast cement concrete Guard stone as per I.R.C. type design including white washing etc. complete. Fixing in C.C.1:5:10.	180.00	One No	327.69	58984.20

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
24	Providing and fixing ordinary Kilometer stone of pre-cast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C. 1:4:8 including painting lettering etc. complete. (For ODR, VR)	2.00	One No	704.33	1408.66
25	Providing and fixing Indicator stone of approve stone as per I.R.C. type design in C.C. 1:4:8 including white washing etc. complete Fixing in Earth	77.00	One No	102.84	7918.68
26	Providing and fixing Road sign of M.S. plate and angle iron incl. painting, lettering etc. complete. fixing in C.C. 1:4:8 block with necessary excavation etc. complete as per IRC type design (i) Reflective Type.	6.00	One No	3072.98	18437.88
27	Providing and fixing Flood guage post mark of 'C' angle size 100mm x 50mm x 6mm thick (in head wall 0.500mt. And 1.50mt. Out side with painting and lettering with redeum color as directed.	4.00	One No	1134.23	4536.92
28	Village/Bump Ahead sign. : Providing and fixing sign boards made out of 2mm Aluminium sheet size 90x60 cms. Rectangle as per the design of IRC-67-1977 pre treated with phospheting process and acid etching coated with one coat of apoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest MOST specification letter and numbers should be as per IRC:30-1968, 3.1 Mt. long (2 nos) stand post and frame fabricated from suitable size iron angle of 50x50x5mm, painted with best quality epoxy coating in black and white bends, the details of symbole on inscription/ numerals for each board shall be as per the instruction of the Engineer in charge. The fixing at site shall be in C.C 1:2:4 block of size 45x45x60cms. for each leg including excavation curring etc. complete under the supervision of engineer in charge (A) Engineer Grade.	5.00	One No	5045.36	25226.80

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
29	Hazard Marker sign : Providing and Fixing sign boards made out of 2mm aluminum sheet : size 90*30 cms. rectangle as per design / Drawing attached (IRC). Pretreated with phosphating process and acid etching : coated with one coat of epoxy primer and two coats of best quality epoxy paint: reflectorised with retro reflective sheeting as per latest M.O.S.T specification: 3.1 M. long (2 nos) stand post and frame fabricated from suitable size iron angle of 35*35*3mm and 50*50*5mm : painted with best quality epoxy coatings in black and white bends the details of symbols or inscription / numerals for each board shall be as per the instruction of engineer in charge the fixing at site shall be in 1:2:4 CC block of size 45*45*60 cms for each leg: including excavation curing etc. comp.under the supervision of engineer-in-charge.(B) Engineering Grade	6.00	One No	2423.73	14542.38
30	Direction sign (Junction board):-Providing and fixing sign boards made out of 2mm aluminium sheet; size 244 x 122cms. rectangle as as per the design of IRC-67-1977 pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorised with retro reflective sheeting as per latest M.O.S.T. Specifications; Letters and numerals should be as per IRC-30-1968, 3.1m long (2 nos) stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5mm 75x75x6mm as required; painted with best quality epoxy coatings in black and white bends. the details of symbol or inscription / numerals for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60cms. for each leg. including excavation curing etc. complete under the supervision of engineer in charge.(A) Engineer Grade(VR)...	1.00	One No	14831.70	14831.70

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
31	Cautionary Warning Sign : Providing and fixing sign boards made out of 2mm Aluminium sheet size 90x90x90 cms. Equilateral triangle as per the design of IRC-67-1977 pre treated with phospheting process and acid etching coated with one coat of apoxy primer and two coats of best quality epoxy paint reflectorised with retro reflective sheeting as per latest MOST specification 3.1 Mt. long stand post and frame fabricated from suitable size iron angle of 35x35x3mm, 75x75x6mm. as required painted with best quality epoxy coating in black and white bends the details of symbole for each board shall be as per the instruction of Engineer in charge the fixing at site shall be in 1:2:4 CC block of size 45x45x60cms. for each leg including excavation curring etc. complete under the supervision of engineer in charge (A) Engineering Grade.	4.00	One No	3808.65	15234.60
32	Citizen's information Board. Providing and fixing of typical MMGSY information board as per instruction. Two MS sheets of 3 mm thick, of 900 mm x 750mm size fixed at top & bottom duly rivetted with MS angles of 25 x 25 x 5 mm thick M.S angle shall be welded by two vertical M.S angle of 5 mm thick to 75 mm x 75 mm of 12 SWG square tubes posts duly embedded in cement concrete M-15 grade blocks of 600mm x 600mm x 750mm, below ground level. The letters & figure of any shade reflectorised with High Intensity Prismatic Grade Retro Reflective Sheeting of Type-4 as per ASTM D-4956 and latest MORD specifications; All sections of framed posts and steel tube will be painted with primer and two coats of epoxy paints as per drawing Clause 1701 and Annexure 1700.1 (10.16). (A) Class-B High intensity Grade Retro Reflective sheeting.	1.00	One No	7325.53	7325.53

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
33	Road Marking with Hot Applied paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplasting compound 2.5mm thick including reflectorising glass beads @250 gm per sq.mtr area, thickness of 2.5mm is excluding of surface applied glass beads as per IRC:35-2015 the finished surface to be level, uniform and free from streaks and holes, zebra patta/bump/centerline/edge line/ cut patta. the while color marking should provide liminance coefficient on cement road shall be min. 130 mcd/m2/lux and asphalt road shall be min 100 mcd/m2/lux during the survice life during the date the marking should meet the performanace criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015 warranty for retroreflectivity shall be two years.	370.00	One Sqm	367.72	136056.40
34	Cate eye / road stud/ RPM : Supplying Raised Pavement markers of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens (No glass bead lens) capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordanace to ASTM D 4280 type H and complying to specification of category A of MORTH circular No RW/NH/33023/10-97-DO III Dt. 11-06-1997. the height, width and length shall be exeed 20mm, 130mm and 130mm and with minimum reflective area of 13sqcm on each side and the slope to the base shall be 35+/-5 degree. the body of the marker should having finger grip for easy and accurate placement and application with epoxy /bituminous adhesive as recommended by the manufacturer of the marker. the colour of the marker should be as per the IRC:35-2015 and as directed by Engineer-in-charge.	60.00	One No	326.23	19573.80

Item No.	Description of Item (With brief specification and reference to book of Specification)	Quantity	Unit	Rate	Amount
35	Providing and erecting a "W" metal crash barrier comprising of 3mm thick corrugated sheet metal beam rail, 70cm above Road/Ground level, fixed on ISMC series channel vertical post, 150x75x5mm spaced 2m center to center, 1.8m high, 1.1m below ground/road level, all steel parts and fittings to be galvanized by hot dip process, all fittings to conform to IS:1367 and IS:1364 metal beam rail to be fixed on the vertical post with a spacer of channel section 150x75x5mm, 330mm long complete as per clause 810	120.00	One Rmt.	3723.46	446815.20
Rupees Ninety Nine Lakh(s) Ninety Two Thousand Six Hundred Twenty Four And Paise Seventy Three Only					9992624.73

I \ We am \ are willing to carry out the work at % above \ below percent (Should be written in figures and words) of the estimated rate mentioned above. Amount of My \ Our tender works put as under.

* Estimated Amount

Put to tender **Rs**.....

Deduct.....%

Net **Rs**.....

In words.....

* Estimated Amount

Put to tender **Rs**.....

Add.....%

Total **Rs**.....

In words.....

1.The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-Charge for which no extra payment shall be made.

2.The labour cess will be deducted as per prevailing rules i.e. 1% of the work done.

3.GST and Income tax TDS will be deducted at a source while making payments of bills

4.In all R.C.C. Items in Rate Analysis Standard Cement Consumption has been taken as per Govt. G.R.: PRC-10/2017 Cement Consumption/16/C Date:11/05/2017 as stated in

S.O.R. therefore in R.C.C. items where there is a change as per actual mix design the cost of difference of cement consumption have been deducted from the rate of original item at the rate of input rate mentioned in all the tender.

Signature of Contractor.

Deputy Executive Engineer
Panchayat R&B Sub Division
Dhrangadhra

Executive Engineer
Panchayat R&B Division
Surendranagar