

**Name of Work :- Remaining Work of Resurfacing of Rural Road Under SR - 2023-24 Package**  
**No. - SK/SR/14, Ta. - Himatnagar Dist. - Sabarkantha**

**BILL OF QUANTITIES**

<b>Item No.</b>	<b>Description of Item (with brief specification and reference to book of specifications)</b>	<b>Quantity</b>	<b>Rate In figures</b>	<b>Unit</b>	<b>Amount</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Clearing and grubbing road land including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	0.58	28393.03	Hect.	16467.95
2	Earthwork for embankment including breaking clods, dressing with all lead and lift and including watering rolling and consolidation of subgrade in layers at O.M.C. to required dry density including filling the depression which occur during the process using power roller 8T to 10T. From Borrow area with all lead and lift.	4115.41	126.26	Cum	519611.67
3	Providing, laying, and compacting Hard Murrum for Road side shoulders including spreading in uniform thickness, rolling with vibratory roller 80-100 kN static wt. to proper grade and camber including watering etc. complete.	1284.00	266.64	Cum	342365.76
4	Providing laying and spreading Granular materials for Sub base as a Unscreen / Natural Graval in required proportion so as to have mix material gradation of grade II, including spreading in uniform thickness, rolling with vibratory roller 80-100 kN static wt. to proper grade and camber including watering etc. complete.	27.87	682.76	Cum	19028.52
5	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam (Grade-I) (B.T. Metal of size 45 to 90 mm) specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel/ vibratory roller in stages to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density.	584.00	1592.77	Cum	930177.68

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
6	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam (Grade-II) (B.T. Metal of size 45 to 63 mm) specification including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel/ vibratory roller in stages to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting to the required density.	777.80	1502.43	Cum	1168590.05
7	Providing and applying Tack coat, using RS1 emulsion bitumen at the rate 2.5 kg. / 10 sq.m. on W.B.M./ W.M.M./ B.T. surface including cleaning the surface etc. complete.	0.00	11.11	Sqmt	0.00
8	Providing & laying 37.50 mm thick Bituminous grout base course using B.T. stone aggregate as per required gradation with asphalt of VG-30 grade at the rate of 1.99% i.e. 19.90 Kg/ M.T. including heating & mixing in drum mix plant transporting the mix spreading the same by paver finisher and consolidation by vibratory roller as per MORT&H specification including cost of all materials fuel, labours, tools and plant etc using contractors own drum mix plant etc. comp.	661.18	1818.37	M.T.	1202269.88
9	Providing and laying 25 mm thick premix asphalt carpet using 0.66 cmt per 1 MT. mix with M.C. stone agg. with RS1 Emulsion for tack coat @ 2.5 kg./10 Sqmt BT surface and using asphalt VG-30 of 33.60 kg .ie. 3.36 % by Drum Mix Plant & spreading the same by paver finisher with vibratory roller 80 to 100 KN. static wt. incl. providing all equipments tools and plants, fire wood, oil, kerosene, labour charges etc. complete with contractor's own machineries, etc. complete.	670.00	2530.63	M.T.	1695522.10

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
10	Providing and laying bitumenous Seal coat 0.18 cmt / 10 smt. with machine crushed aggregate using 45.00 kg. VG-30 of bitumen per M.T. of total weight of mix agg. (4.50 % of total weight of mix) by drum mix plant and spreading the same by paver finisher and consolidation with vibratory roller 80 to 100 KN static wt. incl. providing all materials equipments, tools and plants, fire wood, oil, kerosene, labour charges etc. comp & flushing sand @ rate of 0.30	339.89	2739.07	M.T.	930982.50
11	Providing and fixing ordinary Kilometer stone of precast C.C. 1:2:4 including necessary reinforcement as per I.R.C. type design in C.C.1:4:8 including letter and paints etc. complete (For N.H., S.H. and M.D.R.)	3.00	1290.57	No.	3871.71
12	Providing and fixing Hectometer as per I.R.C. type design including painting, lettering etc. complete. (ii) Fixing in C.C. 1:5:10	10.00	356.50	No.	3565.00
13	Providing and fixing indicator stone of approved stone as per I.R.C. type design in C.C. 1:4:8 including white washing etc. complete. (ii) Fixing in C.C. 1:5:10	130.00	343.27	No.	44625.10
14	Providing and fixing guard stone as per I.R.C. type design including white washing etc. complete. (ii) Fixing in C.C. 1:5:10	48.00	349.11	No.	16757.28

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
15	Cautionary Warning Sign :-Providing and fixing sign boards madeout of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6mtr long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol 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 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting	2.00	3906.19	No.	7812.38

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
16	<p>Facility Informatory Sign :- Providing and fixing sign boards madeout of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 80 x 60 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6mtr long stand post of Iron Angle 75 x75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol 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 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting.</p>	2.00	3990.64	No.	7981.28

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
17	Regulatory / Mandatory Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 60 cms. Dia Circle as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retroreflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.6mtr long stand post of Iron Angle 75 x75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol 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 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting.	2.00	3540.12	No.	7080.24
18	Providing and fixing Junction board of M.S. plates and angles asper standard I.R.C. design including fixing in C.C. 1:4:8 with necessary excavation painting figuring and lettering on board etc. complete.	2.00	5236.70	No.	10473.40

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
19	<p>Chevron sign :- Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm ACP (Aluminum composite Panel); size 60x50 cm rectangular as per design of IRC-67-2012. Pre treated with phospheting process &amp; acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T. Specifications; 3.3 mtr long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35x35x3 mm; 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 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer &amp; a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-B Type-4 Retro Reflective sheeting</p>	9.00	3711.75	No.	33405.75

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
20	Hazard Marker Sign :- Providing and fixing sign boards made out of 2.0 mm aluminium sheet / 4 mm ACP (Aluminum composite Panel); size 90x30 cms. rectangular as per design of IRC-67-2012. Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with High Intensity Prismatic Grade retro reflective sheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T. Specifications; 1.8mtr long stand post of Iron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality epoxy coatings in black and white bends. The details of symbol 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 60 Cms. for each leg including excavation, curing etc. complete under the supervision of engineer in charge. A warranty for 7 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting	6.00	3518.69	No.	21112.14
21	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficinet on cemend road shall be min 130 mcd/m2/lux and Asphalt road shall be min 100 mcd/m2/lux during the service life during the day time. The marking should meet the performance criteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section-15 of IRC 35-2015. Warranty for the Retro reflectivity should be two years.	917.65	367.72	Sqmt	337438.26



Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
22	Cat Eye / Road Stud / RPM: Supplying of Molded Twin Shanks Raised Pavement Markers made of polycarbonate and ABS moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kgs. tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10-97 DO III Dt 11.06. 1997. The height, width and length shall not exceed 20 mm, 130 mm and 130 mm and with minimum reflective area of 13 Sqcm on each side and the slope to the base shall be 35 +/- 5 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 +/- 2 mm and height not less than 30 +/- 2 mm) from the body is to be a minimum value of 500 Kgf. Fixing will be by drilling holes on the road for the shanks to go inside, without nails and using epoxy resin based adhesive as per manufacturers recommendation and The color of the marker should be as per the IRC 35-2015 and as directed by Engineer-in-charge.	577.00	326.23	No.	188234.71
23	Excavation for foundatiuon upto 1.5 m depth incl. Sorting out & stacking of useful material & disposing of the excavated stuff upto 50m. Lead. (B) Dense or hard soil.	639.69	241.76	Cum	154651.45
24	Providing and filling in foundation with ordinary cement concrete M- 100 mix and providing necessary vertical pin headers including formwork, vibrating, ramming and curing complete.	72.11	3245.56	Cum	234037.33
25	Providing and filling in foundation with ordinary cement concrete M- 150 mix and providing necessary vertical pin headers including formwork, vibrating, ramming and curing complete.	498.44	3615.80	Cum	1802259.35
26	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level.	1680.49	76.21	Kg.	128070.14
27	Providing and laying Weep hole in abutment and return by using PVC. pipe of 100 mm dia including laying in proper grade and joining complete etc as per details specification.	300.00	82.60	No.	24780.00
28	White washing with lime on wall surface (two coats) to give an even shade including thoroughly booming the surface to remove all dirt, dust; mortar drops and other foreign matter.	352.00	12.12	Sqmt	4266.24

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
29	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal diameters. (v) 900mm dia.	15.00	3446.50	Rmt	51697.50
30	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal diameters. (i) 300mm dia.	150.00	649.92	Rmt	97488.00
31	Providing Kachha Diversion may be necessary for traffic and maintaining the same for the period as may be necessary as directed by engineer in charge.	1.00	5050.00	No.	5050.00
32	Dismantalling the existing structure including removing & stacking the dismantalled materials as and where directed.	1.00	5050.00	No.	5050.00
33	Providing & casting in situ Controlled cement concrete M - 250 for Cement Concrete Road laid as directed including tamping, vibrating, finishing, curing, and filling in joints with bitumen complete.	28.83	5230.00	Cum	150780.90
34	Compaction and finishing of cement concrete road by trimix process providing extra labour charges for the trimix vacuum dewatering service process on cement concrete road surface by using vacuum dewatering pump floater surface vibrator including making rough finish to surface as per in including levelling the complete.	277.88	63.04	Sqmt	17517.56
35	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 slope as directed upto 50Mt. lead.	0.00	103.86	Cum	0.00

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Rate In figures	Unit	Amount
1	2	3	4	5	6
36	Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road / ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground / road level, all steel parts and fitments to be galvanised by hot dip process, all fittings to conform to IS:1364, metal beam rail to be fixed on the vertical post with a spacer of channel section 150 x 75 x 5 mm, 330 mm long complete as per clause 810.	350.00	2798.71	Rmt	979548.50
37	Providing panel wall for dry stone pitching in uncoursed rubble masonry with had stone of approved quality in cement. mortar 1.5 including curing etc, complete.	120.00	2524.60	Cum	302952.00
38	Providing and applying Tack coat, using RS1 emulsion bitumen at the rate 4.0 kg. / 10 sq.m. on W.B.M./ W.M.M./ B.T. surface including cleaning the surface etc. complete.	5400.00	16.16	Sqmt	87264.00
<b>Total Rs.</b>					<b>11552786.33</b>
<b>Rupees One Crore Fifteen Lakh FiftyTwo Thousand Seven Hundred EightySix and Paisa ThirtyThree Only</b>					
I / We / am/are willing to carry out the work at _____% above / below percent (should be written in figure and words) of the estimated rates mentioned above. Amount of my/our tender Works out as under.					
Estimated Amount put to tender Rs. _____ Deduct _____% below Net Rs. _____ in words _____			Estimated Amount put to tender Rs. _____ Add _____% above Net Rs. _____ in words _____		

**Note :-**

- 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

Dy. Executive Engineer  
Panchayat R.&B. Sub Division  
Himatnagar

Executive Engineer  
Panchayat R.&B.Division  
Himatnagar