

**Name of Work :- Resurfacing of Various Roads of Taluka Lakhpat (Package No. 01)
District Bhuj-Kachchh under Normal Resurfacing Budget-2024-2025 (Total 2 Roads,
Length 1.50 Km.)**

BILL OF QUANTITIES

Memorandum showing item of works to be carried out.

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
1	Clearing and grubbing road land including uprooting wild vegetation grass bushes, shrubs, sapling and trees of girth up to 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable materials as per Clause-201 (area of light density) by mechanical means in area of light jungle.	0.60	Hect.	28393.04	17035.82
2	Earthwork in cutting including preparing the slope and camber and stacking or utilizing the cutting stuff in spoil bank as directed upto 200 meters from the end of cutting with all lead and lift.				
	(A) Hard Murrum	360.00	Cum	248.16	89337.60
3	Earth work for embankment including breaking clods, dressing with all lead and lift (including watering and consolidation) (C) from borrow area within all lead and lift (with minimum 6% CBR)	417.00	Cum	172.87	72086.79
4	Rolling and watering of earthwork in layers with power roller including filling in depressions which occur during the process.	360.00	Cum	22.48	8092.80
5	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 all lead and lift.	310.00	Cum	104.04	32252.40
6	Providing and laying W.B.M. of M.C. metal of size 45 mm to 90 mm size including 0.27 Cu.M. stone screening & 0.08 Cu.M. stone dust as filler including spreading, watering & consolidation by vibratory roller 80KN to 100KN static weight. 100 mm thick compacted.	113.00	Cum	1478.64	167086.32
7	Providing and laying W.B.M. of M.C. metal of size 45 mm to 63 mm size including 0.12 Cu.M. Stone screening & 0.08 Cu.M. stone dust as filler including spreading, watering & consolidation by vibratory roller 80KN to 100KN static weight.	413.00	Cum	1250.46	516439.98
8	Providing and laying compacted of specified murrum in side shoulder including carriage of material and spreading on prepared base including compacting as per MOST specification etc. complete.	300.00	Cum	379.76	113928.00

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
9	Providing and laying bituminous grout 37.5mm compacted thick using B.T. stone aggregates as per required gradation with the asphalt VG-30 grade for tack coat 2.5 Kg/10 Smt on B.T. surface and 4.0 Kg/10 Smt on W.B.M. surface and asphalt VG-30 grade for mixing @ 1.99% i.e. 19.90 kg./ MT by weight of mix including heating and mixing in drum mix plant transporting the mix, spreading the same by pavers finisher and consolidation as per MORTH specification including cost of all materials fuels, labors, tools and plant etc. using contractors own drum mix plant etc. completed as directed.	340.00	M.T.	2047.33	696092.20
10	Providing and laying 37.50 mm thick compacted B.M. using stone chips 0.66 Cum/1 M. ton mix as per gradation with Asphalt VG-30 for tack coat @ 2.50 kg./10 Smt. on B.T. surface and asphalt grade VG-30 for mixing @ 34 kg/M.Ton (i.e. 3.40% of mix) including heating the and aggregate by continuous batching drum mix plant, transporting and mixed material and spreading the same by paver finisher and consolidation by vibratory roller of 80 KN to 100 Kn static weight including the cost of labour oil, lubricants etc. using contractors own machineries and plant.	374.00	M.T.	2664.02	996343.48
11	Providing and laying bituminous seal coat with stone chips 6 to 10 mm size 0.18 Cmt/10 smt. i.e. using 0.66 cmt aggregate per M.T mix using asphalt VG-30 @ of 4.50% of mix including heating the asphalt and aggregate by continuous batching drum mix plant and paver finisher and consolidating by vibratory roller including providing equipment, tools, plant, firewood, oil, kerosene, labour charges etc. using the contractors own machinery and plant.	125.00	M.T.	2902.37	362796.25
12	Providing and laying cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 machine crushed stone aggregates 40 mm nominal size) and curing complete in foundation and plinth.	114.00	Cum	2830.46	322672.44
13	Providing and laying cement concrete grade M-20 (1-Cement : 1.5 sand : 3 coarse aggregate 20mm nominal size) for C.C. road and curing etc. complete including cost of formwork, finishing the cement concrete road by Trimix process inclusive of labour charges for trimix vacume dewatering process on cement concrete road by using vacume dewatering pump, surface floater, including channelling and making grooves & rough finish to surface, providing expansion joint, construction joint including filling the joint with asphalt filler as per direction by engineer in charge and as per specification.	300.00	Cum	4744.98	1423494.00
14	Providing I.S.I. mark T.M.T. bar Fe-500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto two floor level.	6.06	M.T.	76214.60	461860.48
15	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 painting,lettering etc. complete (For O.D. road V.R.)	2.00	No.	704.33	1408.66
16	Providing and fixing Hectometer stone as per I.R.C. type design including painting, lettering etc.complete (i) Fixing in earth.	6.00	No.	116.08	696.48

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
17	Providing and fixing Guard stone as per I.R.C. type design including white washing etc. complete (i) Fixing in earth.	50.00	No.	98.63	4931.50
18	Direction sign (Junction board) :- Providing and fixing sign boards made out of 2mm aluminium sheet size 244 x 122cms. rectangle as per the design of IRC-67-1977 pre treated with phospheting 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, 75 x 75 x 6mm 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)	2.00	No.	14831.71	29663.42
19	Regulatory / Mandatory signs : Providing and fixing sign boards made out of 2mm aluminium sheet size 60cms. diameter circle as per the design of IRC-67-1977 pre treated with phospheting 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; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm, 75 x 75 x 6mm as required; 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 60cms. for each leg including excavation curing etc. complete under the supervision of engineer in charge. (A) Engineer Grade (VR)	6.00	No.	3439.81	20638.86
20	Village name/ Bump Ahead sign :- Providing and fixing sign board made out of 2 mm alluminium sheet size 90 x 60 cms rectangle as per the design of IRC-67-1977 pre treated with phospheting 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.R.T.H. specifications. Letters and numerals should be as per IRC-30-1968, 310m long (2 Nos.) stand post and frame fabricated from suitable size iron angle of 50 x 50 x 5 mm painted with best quality epoxy coating 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 C.C. 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) Engineer grade (VR).	4.00	No.	5045.36	20181.44

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
21	Hazard Marker Sign :- Providing and fixing sign board made out of 2mm aluminium sheet size 90 x 30 cms. rectangle as per the design / drawing attached (IRC) pretreated with phospheting & 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, 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm & 50 x 50 x 5mm painted with best quality epoxy coatings. The fixing at site shall be in 1:2:4 C.C. 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).	8.00	No.	2423.74	19389.92
22	STOP SIGN :- Providing and fixing sing boards made out of 2mm aluminium sheet size 90 x 90cms. rectangle as per the design of IRC-67-1977 pretreated with phospheting 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; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm, 75 x 75 x 6mm as required; 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 60cms. for each leg including excavation curing etc. complete under the supervision of Engineer in charge. (A) Engineer grade (VR).	4.00	No.	4676.06	18704.24
23	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 coefficin et 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	450.00	Sqm	367.72	165474.00

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24	Cat Eye / Road Stud / RPM : Supplying of Moulded Twin Shanks Raised Pavement Markers made 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 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 Kgs. Fixing will be by drilling holes on the road for the shanks to go inside, without	168.00	No.	326.23	54806.64
25	Cautionary Warning Sign :-Providing and fixing sign boards made out 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 phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.6mtr long stand post of 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 bestquality epoxy coatings in black and white bends. The details of symbol foreach board shall be as per theinstruction of engineer in charge. The fixing at site shall be in 1:2:4 CC blockof 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 10 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. (A) Class-C Type-11 Retro Reflective sheeting	6.00	No.	3808.66	22851.96
26	Excavation for foundation up to 1.50 mt. depth including sorting out and stacking of useful material and disposing off the excavated stuff within all lead and lift for all sorts of soil.	152.00	Cum	241.79	36752.08
27	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.	23.00	Cum	3227.94	74242.62
28	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. (A) Height from 0.0 M. to 5.0 M.	200.00	Cum	3227.94	645588.00
29	Filing available excavated earth (excluding rock) in trenches,plinth, sides of foundations etc. in layers not exceeding 20 cm in depth consolidating each diposited layer bby ramming and watering.	152.00	Cum	130.39	19819.28
30	Providing & Laying weep hole in abutments, and returns by using PVC 10kg/sqcm pipe of 110mm dia including laying in proper grade and jointing the completed as per detailed specification.	162.00	No.	186.08	30144.96

It. No.	Description of Item	Qty.	Unit	Rate in figures	Total Amount
1	2	3	4	5	6
31	Providing and laying filter media 600mm thick as directed at the back of abutments and returns and wing walls as per detailed specifications.	161.50	Sqm	1180.34	190624.91
			TOTAL Rs.		6635437.53

i.e. Rs. Sixty Six lacs Thirty Five Thousand Four hundred Thirty Seven and Fifty Three paisa only.

I/We am/are willing to carry out the work @ _____ % above/below percent (Should be written in figures and words) of the estimated rate mentioned above. Amount of my /our tender works out as under.

Estimated amount put to tender	Estimated amount put to tender
Deduct.....% below	Add.....% Above
Net Rs. _____	Total Rs. _____
In words _____	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.

Above all items of "Schedule-B" with Item Description, Unit, Rate & Amount have verified by me and found order.

Deputy Executive Engineer
Panchayat (R & B) Sub Division,
Nalia

Sr. Divisional Account Officer
Panchayat (R & B) Division,
Bhuj-Kutch

Executive Engineer
Panchayat (R & B) Division,
Bhuj-Kutch