

Panchayat R & B Division Junagadh

Name of Work :Construction Work of New Cross Drainage, Repairing of Cross Drainage , Structure & bridge repair Work & Other Misc. Work on Various Roads as & When required or in Emergency Under District (R & B) Division Junagadh Panchayat

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
1	Job Work for Dismantalling the existing Cross Drainage structure including removing and stacking the dismantelled materials as and where directed (A) R. C. C. work, Brick masonry , UCR masonry, Pipe etc. Complete as per instruction of Engineer In Charge.	250.00	Job	792.69	1,98,172.50
2	Excavation for foundation upto 1.5 m depth including sortingout and stacking of useful materials and disposing off theexcavated stuff upto 50 Meter lead.(B) Dense or Hard soil	20576.00	Cum.	157.15	32,33,518.40
3	Providing and casting in situ Ordinary cement concrete M-150 for R.C.C. Raft and cut-off walls including necessary shuttering laying,vibrating, ramming and curing complete.	3524.00	Cum.	3798.45	1,33,85,737.80
4	Supplying and fixing reinforced concrete heavy duty non-pressurepipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2watering and laying (to level or slopes) of class NP3 of followinginternal daimeters.(v) 900mm dia.	2700.00	Rmt.	3469.25	93,66,975.00
5	Supplying and fixing reinforced concrete heavy duty non-pressurepipes with collars for culverts carrying heavy traffic as per IS 458 1991 specifications including setting the pipes in C.M. 1:2watering and laying (to level or slopes) of class NP3 of followinginternal daimeters.(vii) 1200mm dia.	450.00	Rmt.	5560.00	25,02,000.00
6	Providing and casting in situ controlled cement concrete M-200 for R.C.C. return as per drawings including centering shuttering ,scaffolding where necessary, laying vibrating, curing and finishing complete.(A) Height from 0.0 to 5.0 M. For wall	12711.00	Cum.	5227.35	6,64,44,845.85
7	Providing and laying in position FE 500D TMT bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following.(A) Piers (B) Abutments (C) R.C.C. Returns	127110.00	kg.	73.86	93,88,016.66
8	Filling around the pipes with murrum including dressing , tampering etc. complete.	16716.00	Cum.	86.03	14,38,077.48

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
9	Construction of granular sub-base 200mm thick layer by providing machine crushed B.T. material satisfying MORT&H specification (Fifth revision) of grading III including spreading in uniform layer 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 etc. complete.	2106.00	Cum.	1433.19	30,18,298.14
10	Painting Two Coats on New Concrete Surfaces (Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces)	7640.00	Sqmt.	80.80	6,17,312.00
11	Providing & laying weep hole in Abutments, and returns by using A.C. pipe of 100mm including laying in proper grede and jointingthe completed as per detailed specification.	3240.00	each	61.46	1,99,130.40
12	Excavation for foundation in sand, gravel, clay soft soils and murrum etc. including shoring, strutting dewatering as necessary and disposing of the excavated stuff as directed.(A) Depth up to 3.0 M. and lead upto 100 m for 10 Cum	2819.00	Cum.	511.11	14,40,819.09
13	Providing and laying controlled cement concrete M.150 for curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings,Base ofcolumns and Mass concrete	368.00	Cum.	4028.21	14,82,381.28
14	Providing and Casting in situ controlled Cement Concrete M-200 for R.C.C. Raft and cutt-off walls including necessary shuttering laying, vibrating, ramming and curing complete.	71.00	Cum.	4620.44	3,28,051.24
15	Providing and casting in situ controlled cement concrete M-200 for R.C.C. return as per drawings including centering shuttering,scaffolding where necessary, laying vibrating, curing and finishingcomplete.(A) Height from 0.0 to 5.0 M. (1) Piers (2) Abutmen (3) RCC return	434.00	Cum.	5227.35	22,68,669.90
16	Providing and casting in situ controlled cement concrete M-200 for R.C.C. work in superstructure including centering,ramming vibrating curing and finishing complete.(A) T-Beam and Deck slab type of superstructure (I) Deck slab	75.00	Cum.	5775.84	4,33,188.00
17	Providing and casting in situ ordinary cement concrete concrete M-200 for approach slab including formwork curing and finishing complete.	78.00	Cum.	4227.44	3,29,740.32

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Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
18	Providing and laying - Fitter Media 600mm thick directed at theback of abutments, returns and wing walls as per detailed specifications.	1010.00	Sqmt.	1239.35	12,51,743.50
19	Providing uncoursed rubble stone masonry in Cement Mortar 1:5 for flooring including curring pointing in Cement Mortar 1:3 on exposed faces complete.	37.00	Cum.	2294.11	84,882.07
20	Providing and laying rubble for Flexible apron (each stone weighting not less than 40Kg.) including and packing and filing in the interestices with quarry-spalls.	732.00	Cum.	1083.81	7,93,348.92
21	Providing and casting in situ controlled cement concrete M-200 for average 75 mm thick wearing coat laid as directed including tamping, vibrating, finishing, curing and filling in joints with bitumen complete	236.00	Cum.	5300.56	12,50,932.16
22	Providing and placing in position FE 550D bar reinforcement for following items including cutting bending hooking and tying complete as per detailed drawing.For well :- curb, staining, capand RCC Raft.	17.50	MT	73858.69	12,92,527.08
23	Providing and laying in position FE 550D TMT bar reinforcement including cutting, bending, hooking and tying complete as per detailed drawings for the following.(A) Piers (B) Abutments (C)R.C.C. Returns	433.30	MT	73858.69	3,20,02,970.38
24	Providing and placing in position FE 550D TMT. Bar reinforcement including, cutting, bending hooking and tying complete as per detailed drawings.(I) Solid Slab.(II) Deck Slab.	36.30	MT	73243.01	26,58,721.26
25	Providing and fixing in position FE 500D TMT bar reinforceent including cutting, bending and tying complete as per detailed drawings. (A) R.C.C. Kerb. (B) R.C.C. Footpath.(C) R.C.C. Approch slab.(D) Wearing Coat.	16.00	MT	73243.01	11,71,888.16
26	Providing and fixing premoulded compressible filler board in black colour confirming to MoRT&H Specifications (Clause 1015),having minimum density 95kg/cum. non-staining with less than1% water absorption & compression recovery of 93% minimum asper specification for 20 mm wide expansion joint including cutting to required size and shape at all levels etc.complete as directed.	52.00	Sqmt.	803.22	41,767.44

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1	2	3	4	5	6
27	Providing and applying the elastomeric joint sealant two component, high performance polysulfide formulation conforming to BS:4254 and ASTM C 920 having weathering resistance to ultra-violet rays and shall exhibit shore A hardness of 25 and have movement accommodation factor 25% including using of compatible primer of approved standard etc. complete.For 20 mm thick joint	200.00	Rmt.	178.69	35,738.00
28	Providing and fixing 25 mm diameter backup rod having minimum density 22 kg per cum (ASTMD - 3575) & compression strength of 0.40 kg per sqm (ASTM - 5249) and finishing with polysulphide sealant etc. complete. For 20 mm wide expansion joint	200.00	Rmt.	13.06	2,612.00
29	Providing P.V.C. 100 mm diameter water spouts including necessary iron gratings as per drawings.	28.00	each	159.36	4,462.20
30	Providing & laying weep hole in Abutments, and returns by using A.C. pipe of 100mm including laying in proper grade and jointing the completed as per detailed specification.	2974.00	each	61.45	1,82,745.06
31	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 .(E) From Borrow area within 3.0KM. lead	8480.00	Cum.	177.91	15,08,676.80
32	Providing and laying Pitching on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications A) Stone/Boulder	890.00	Cum.	1051.41	9,35,754.90
33	Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification	1329.00	Cum.	877.69	11,66,450.01

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Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
34	Hazard Marker Sign :-Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm 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 Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D 4956 and latest M.O.S.T. Specifications; 1.8mtr 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 the instruction 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	8.00	each	3666.30	29,330.40
35	Providing Yellow and Black Patta (three coat) including distempeing (Three coats) with oil bound distemper of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with distemper primer of approved brand and manufacture after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth as per instruction of Engineer Incharge.	112.00	Sqmt.	65.82	7,371.84
36	Excavation for foundation upto 1.5 m depth including sortingout and stacking of useful materials and disposing off theexcavated stuff upto 50 Meter lead.(A) Loose or soft soil	4287.00	Cum.	122.93	5,27,000.91
37	Providing and casting in situ controlled cement concrete M-250 for R.C.C. return as per drawings including centering shuttering ,scaffolding where necessary, laying vibrating, curing and finishing complete.(A) Height from 0.0 to 5.0 M. For wall	1892.00	Cum.	5357.84	1,01,37,033.28

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Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
38	Tubular Steel Railing on Medium Weight steel channel (ISMC series) 100 mm x 50 mm (Providing, fixing and erecting 50 mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mm x 50 mm, 1.2 metres high above ground, 2 m centre to centre, complete as per approved drawings)	200.00	Rmt.	2385.62	4,77,124.00
39	"THRIE" : Metal Beam Crash Barrier with base plate Providing and erecting a "Thrie" W - metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre. The vertical post fixing at site shall be on Base Plate of Size 240 x 320 x 16 mm thick with 6 Nos 20 mm dia 4.6 grade anchor bolt upto minimum depth of 200 mm & ISMC Vertical Post shall be fixed with base plate with 12 mm thick stiffner plate of 100 x 80 mm & This base shall be casted in M25 grade Cement concrete of size 35 x 35 x 12 cms. for each post including necessary fabrication work etc. complete. All steel parts and fitments to be galvanised by hot dip process, all fittings to confirm to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical Post with a spacer of channel section 150 x 75 x 5 mm, 550 mm long complete as per Morth Specification clause 810 including butt welding to all nuts & bolts etc. complete as per instruction of Engineer In Charge. Also radium red colour strip of size 100 x 300 mm shall be fixed on vertical front side of each post for better night visibility. The end barrier treatmment shall be done as per IS Standard 119 : 2015.	200.00	Rmt.	3936.40	7,87,280.00

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Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
40	Type - B, "THRIE" : Metal Beam Crash Barrier Providing and erecting a "Thrie" W - metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 85 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 2 m high with 1.15 m below ground level. The vertical post fixing at site shall be in M25 grade Cement concrete of size 35 x 35 x 120 cms. for each post including excavation curing etc. complete. All steel parts and fitments to be galvanised by hot dip process, all fittings to confirm to IS:1367 and IS:1364, metal beam rail to be fixed on the vertical Post with a spacer of channel section 150 x 75 x 5 mm, 550 mm long complete as per Morth Specification clause 810 including butt welding to all nuts & bolts etc. complete as per instruction of Engineer In Charge. Also radium red colour strip of size 100 x 300 mm shall be fixed on vertical front side of post for better night visibility. The end barrier treatmment shall be done as per IS Standard 119 : 2015.	500.00	Rmt.	4278.31	21,39,155.00
41	Gabian Structure for Retaining Earth (Providing and construction of a gabain structure for retaining earth with segments of wire crates of size 7 m x 3 m x 0.6 m each divided into 1.5 m 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:280 and galvanizing coating conforming to IS:4826, woven into mesh with double twist, mesh size not exceeding 100 x 100 mm, filled with boulders with least dimension of 200 mm, all loose ends to be tied with 4 mm galvanised steel wire)	550.00	Cum.	1560.45	8,58,247.50
42	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:280 and galvanizing coating 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.)	275.00	Cum.	2533.08	6,96,597.00

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1	2	3	4	5	6
43	Grouting with C.M. 1:4 in Pitching as per drawing or as per instruction of Engineer In Charge	150.00	Cum.	2903.86	4,35,579.00
44	Jacketing : - Providing and casting in situ design mix concrete M.25 mix for 23 cm thick jacketing consisting 16 mm dia 200mm c/c both ways , 16 dia pin @ 400mm c/c vertically & 800mm c/c horizontally with base supported with 300 x 450 mm beam reinforced with main 6 No. 16 mm dia. bar and stirrups 8 mm dia. 150 mm c/c etc. complete including drilling holes in the pier, providing steel bars for connecting existing pier to jacketing and filling the holes with rich mortar including shuttering, scaffolding wherever necessary, laying, vibrating curing and finishing etc. complete	1400.00	Sqmt.	3173.72	44,43,208.00
45	Eproxy bonding of new concrete to old concrete	2100.00	Sqmt.	529.24	11,11,404.00
46	Guniting concrete surface with cement mortar applied with compressor after cleaning surface and spraying with epoxy complete as per Technical specification	800.00	Sqmt.	775.68	6,20,544.00
47	Providing and inserting nipples with approved fixing compound after drilling holes for grouting as per Technical specifications including subsequent cutting/removal and sealing of the hole as necessary of nipples after completion of grouting with Cement/Epoxy	500.00	each	502.98	2,51,490.00
48	Sealing of crack / porous concrete with Epoxy Grout by injection through nipples complete as per clause 2803.1.	120.00	kg.	794.87	95,384.40

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1	2	3	4	5	6
49	Chipping & removing the debonded/ delaminated/ loose/ disintegrated concrete at the places and in the manner and upto the depth and in regular shape as advised by the Engineer in charge without damaging the reinforcement/ RCC with the help of chisel and light hammering or equivalent equipments. Cleaning the surface with wire brushes making the surface free from dust, oil and all impurities etc. as directed by Engineer Incharge. (Actual consumed bag shall be measured for payment.) Patch repair to damaged concrete up to average 50 mm depth (by using ready to use patch repair mortar of best stanadard approved brand as per data sheet) and as per the work methodology and specifications & cost of all material, labour, machinery, equipment, taking necessary safety measures for all floors as directed and approved by EIC.	500.00	beg	983.28	4,91,640.00
50	Repair of RCC Railing (Carrying out repair of RCC M30 railing to bring it to the original shape.)	50.00	Rmt.	118.17	5,908.50
51	Repair of steel Railing (Repair of steel railing to bring it to the original shape)	100.00	Rmt.	298.96	29,896.00
52	Providing and laying rubble for apron (each stone weighting notless than 40Kg.) including and packing and filing in the interesticeswith quarry-spalls.	300.00	Cum.	3791.54	11,37,462.00
53	Construction of precast RCC railing of M30 Grade, aggregate size not exceeding 12 mm, true to line and grade, tolurence of vertical RCC post not to exceed 1 in 500, centre to centre spacing between vertical post not to exceed 2000 mm, leaving adequate space between vertical post for expansion, complete as per approved drawings and technical specifications.	110.00	Rmt.	2127.06	2,33,976.60
54	Providing G.I. 100 mm diameter water spouts including necessaryiron gratings as per drawings.	80.00	each	536.02	42,881.60
55	Removal of existing cement concrete wearing coat including its disposal complete as per Technical specification without causing any detrimental effect to any part of the bridge structure and removal of dismantled material with all lifts and lead upto 1000m(Thickness 75 mm)	2100.00	Sqmt.	163.46	3,43,266.00

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1	2	3	4	5	6
56	Applying epoxy mortar over leached, honey combed and spalled concrete surface and exposed steel reinforcement complete as per Technical specification	500.00	Sqmt.	436.32	2,18,160.00
57	Replacement of Expansion Joints complete as per drawings	450.00	Rmt.	2733.06	12,29,877.00
58	Hire Charges for JCB Machine (Hydraulic Excavetor 0.9 cum bucket) for removal of earth, debris, trees, plant, advertisement hoardings etc. complete including charges of operator, fuel, oil etc. complete.	50.00	Hr	2715.89	1,35,794.50
59	Hire Charges for Motor Grader 3.7 metre blade with driver, fuel, oil and required maintenance repairing etc. complete.	50.00	Rmt.	5473.19	2,73,659.50
60	Hire Charges for Dozer - 175 HP with driver, fuel, oil and required maintenance repairing etc. complete.	50.00	Hr	4893.45	2,44,672.50
61	Hire Charges forFront End loader 2.1 cum bucket capacity with driver, fuel, oil and required maintenance repairing etc. complete.	50.00	Hr	2540.15	1,27,007.50
62	Hire Charges forBackhoe-loader 1 cum bucket capacity with driver, fuel, oil and required maintenance repairing etc. complete.	50.00	Hr	1734.17	86,708.50
63	Hire Charges for Tractor with Trolley with driver, fuel, oil and required maintenance repairing etc. complete.	50.00	Hr	247.45	12,372.50
64	Hire Charges for Water Tanker (12 KL) capacity (12 Hour) with driver, fuel, oil and required maintenance repairing etc. complete.	10.00	day	1282.70	12,827.00
65	Engaging labour for all type of work as and when required daily as directed by Engineer-in-charge.	100.00	day	510.05	51,005.00
66	Engaging semiskilled labour for all type of work as and when required daily as directed by Engineer-in-charge.	100.00	day	501.97	50,197.00
67	Engaging unskilled labour for all type of work as and when required daily as directed by Engineer-in-charge.	100.00	day	491.87	49,187.00
68	Dewatering of water by using Dewatering Pump 10 HP during the monsoon	30.00	Hr	316.13	9,483.90
69	Hire charges of Smooth Wheeled Roller 8 tonne with operator, fuel, oil and required maintenance repairing etc. complete.	40.00	Hr	1986.67	79,466.80
70	Supplying and arranging empty cement bags filled with sand at the damaged portion or arranging on road side around rain cut in breaches, including packing, stacking with all material and labour etc. complete as directed by Engineer in charge.	400.00	each	77.87	31,148.00

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1	2	3	4	5	6
71	Loading and unloading of stone boulder / stone aggregates / sand / kanker / moorum. (Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip). Tipper-18 cum	200.00	Cum.	64.50	12,900.00
72	Cost of Haulage Excluding Loading and Unloading on Surfaced Road tipper 18 cum	80000.00	Tone. Km	1.74	1,39,200.00
73	Cost of Haulage Excluding Loading and Unloading on Katcha Track and Track in river bed / nallah bed and choe bed. Tipper 18 cum	15000.00	Tone. Km	4.09	61,350.00
74	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	1.00	hec.	28455.08	28,455.08
75	Box cutting the road to proper slope and camber for making a base for road work including removing the excavated stuff and (Refilling same) depositing on road in layer wise, side slope as directed up to all lead etc. complete.including disposed the surplus soil as and where directed with all lead and lift without any extra cost etc. comp.	2299.00	Cum.	109.24	2,51,142.76
76	Construction of granular sub-base 200mm thick layer by providing machine crushed B.T. material satisfying MORT&H specification (Fifth revision) of grading III including spreading in uniform layer 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 etc. complete.	1407.00	Cum.	1433.19	20,16,498.33
77	Graded II Granular sub base (GSB) Providing & Laying of Compacted closed graded Granular Sub base(GSB) in single layer of graded granular material consisting of only black trap crushed stone aggregate as per grading-IV given table 400-1 of the specification MORT & H and compacted to the required desity with vibratory roller with plain drum or heavy pneumatic tyred roller of minimum 200 to 300 KN weight in all seasons as per MORT&H, maintaining the required slope & grade during the operation as approved by the engineer in charge & watering to the proper moisture content and sprinkled with the help of truck mounted water tank fitted with suitable arrangements (Fully saturated having CBR value not less than 30)	1263.00	Cum.	1182.71	14,93,762.73

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1	2	3	4	5	6
78	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. (iii) 600mm dia.	400.00	Rmt.	1968.37	7,87,348.00
79	Providing and Spraying Prime Coat with Bitumen emulsion S S-1 @ 7.50 Kg / 10 SqM including Cost of asphalt	4875.00	Sqmt.	65.65	3,20,043.75
80	Providing and laying 20mm thick Mix Seal Surface with tack coat @ 2.0 kg/10 sqm using B.T. chips as per M.O.R.T. & H. gradation type A and specification with VG-30 for mixing @ 51.00 Kg / M.T. i.e. 5.1 % of total weight of mix using including heating and mixing the aggregate and asphalt in continuous of drum mix plant and hot laid process spreading the same by paver finisher and consolidation with roller as per M.O.R.T. & H. specification to achieve desire density, including providing all materials equipments, tools and plants, fire wood, oil, kerosene, labour charges etc. complete using contractor's own machinery, drum mix plant and paver finisher etc. complete.	224.00	MT	3927.89	8,79,847.36
81	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 .(E) From Borrow area within 3.0KM. lead	4488.00	Cum.	177.91	7,98,460.08

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1	2	3	4	5	6
82	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 retro reflectivesheeting 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 bestquality 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 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 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.	120.00	Cum.	3540.12	4,24,814.40

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Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
83	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 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 reflectivesheeting 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 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 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	60.00	Cum.	3906.18	2,34,370.80

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
84	<p>Hazard Marker Sign :-Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm 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 reflectivesheeting 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 bestquality 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 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 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.</p> <p>(B) Class-B Type-4 Retro Reflective sheeting</p>	30.00	No	3518.68	1,05,560.40

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
85	<p>Diversion Ahead Sign :-Providing and fixing sign boards made outof 2mm aluminium sheet / 4mm ACP (Aluminum compositePanel); size 180x60 cms. rectangular as per design of IRC-67-2012.Pre treated with phospheting process & acid etching; coated withone coat of epoxy primer and two coats of best quality epoxypaint ; reflectorised with High Intensity Prismatic Grade retroreflectivesheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications ; 3.1 mtr long stand post (2 Nos.) of IronAngle 50 x 50 x 5mm / 50NB Circular MS Pipe as required andframe 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 in1:2:4 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 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</p>	30.00	No	9867.07	2,96,012.10

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
86	Chevron sign:-Providing and fixing sign boards made out of 1.5mm aluminium sheet/3mm ACP (Aluminum composite Panel); size 60x50cm 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 reflectivesheeting 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 35x35x3mm; painted with bestquality 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 & 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	120.00	No	3711.75	4,45,410.00

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
87	<p>Around the Island / Road Direction Sign (Big) :- Providing andfixing sign boards made out of 2mm aluminium sheet / 4mm ACP(Aluminum composite Panel); size 180x60 cms. as per design ofIRC-67-2012. Pre treated with phospheting process & acidetching; coated with one coat of epoxy primer and two coats ofbest quality epoxy paint ; reflectorised with High IntensityPrismatic Grade retro reflectivesheeting of Type-4 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.3 mtr long stand post ofIron Angle 75 x 75 x 6mm / 65NB Circular MS Pipe as required andframe 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 for each board shall be as per theinstruction of engineer in charge. The fixing at site shall be in1:2:4 CC blockof size 45 x 45 x 60 Cms. for each leg includingexcavation, curing etc.complete under the supervision ofengineer in charge. A warranty for 7 years for the Retro reflectivesheeting from original manufacturer & a certified copy of 3 yearoutdoor exposure test report from third party test lab for theproduct offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting</p>	30.00	No	9585.24	2,87,557.20

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
88	Men at work (Heavy) sign :-Providing and fixing sign boards madeout of 2mm aluminium sheet / 4mm ACP (Aluminum compositePanel); size 120cm x 90cm as per design of IRC-67-2012. Pretreated with phospheting process & acid etching; coated with onecoat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with High Intensity Prismatic Grade retroreflectivesheeting of Type-4 as per ASTM D-4956 and latestM.O.S.T.Specifications; 3.6 mtr long stand post (2 Nos.) of IronAngle 75 x 75 x 6mm / 65NB Circular MS Pipe as required andframe fabricated from suitable size iron angle of 50x50x5mm;painted with bestquality epoxy coatings in black and white bends. the details of symbol or inscription / numerals for each boardshall be as per the instruction of engineer in charge. The fixing atsite shall be in 1:2:4 CC blockof size 45 x 45 x 60 Cms. for each legincluding excavation, curing etc.complete under the supervisionof engineer in charge. A warranty for 7 years for the Retroreflective sheeting from original manufacturer & a certified copyof 3 year outdoor exposure test report from third party test labfor the product offered shall be submitted by contractor. (B) Class-B Type-4 Retro Reflective sheeting	30.00	No	9148.15	2,74,444.50
89	Cat Eye/ Road Stud/RPM: Supplying 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 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 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 color of the marker should be as per the IRC 35-2015 and as directed by Engineer-in-charge.	300.00	No	217.40	65,220.00

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
90	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 shalll 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 crlterla for night time reflectivity, wet reflectivity and skld resistance as mentioned in the section-15 of IRC 35 2015.warty for retro retlecinty shall be two years.Warranty for retro reflectivity shall be for two year	345.00	Sqmt.	367.72	1,26,863.40
91	Demolation and disposal of unserviceable materials with all lead & lift. (ii) Un reinforced cement concrete	857.72	Cum.	930.35	7,97,977.97
92	Excavation in large boulders and soft rock by welding including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed.	908.00	Cum.	716.55	6,50,627.40
93	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.	94.00	Cum.	3345.58	3,14,484.52
94	Providing and fixing mild steel dowel bars of minimum 32mm dia. for anchoring by drilling holes in foundation strata including necessary bending, hooking of dowel bars and grouting the holes complete as per detailed drawing and as directed.	36.00	Rmt.	450.07	16,202.52
95	Providing and casting in-situ ordinary cement concrete M-200 mix and providing necessary pin headers including shuttering, scaffolding laying vibrating, curing and finishing complete without V-grooves.	1701.00	Cum.	4291.12	72,99,195.12

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
96	Providing and casting in situ controlled cement concrete M-250 for RCC work in pier caps / Abutment caps & Dirt wall including ordinary cement concrete M-250 bed block or pedestal of required size below bearings as per detailed drawings centering, shuttering, scaffolding wherever necessary laying, vibrating, curing and finishing complete.	35.00	Cum.	5413.11	1,89,458.85
97	Providing and casting in situ controlled cement concrete M-300 for R.C.C. solid slab including centering, scaffolding, curing and finishing complete.	185.60	Cum.	5616.13	10,42,353.73
98	Providing and casting in situ controlled cement concrete M-300 for RCC Crash Barrier including curing and finishing complete.	26.09	Cum.	4972.29	1,29,727.05
99	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.	122.19	Cum.	3715.63	4,54,012.83
100	Providing and casting in situ controlled cement concrete M - 300 for average 75mm. thick Wearing coat laid as directed including tamping, vibrating, finishing, curing, and filling in joints with bitumen complete.	28.40	Cum.	5564.68	1,58,036.91
101	Providing and casting in - situ controlled cement concrete M-300 for approach slab.	40.00	Cum.	5422.83	2,16,913.20
102	Providing and fixing in position mild steel 32 mm dowel bars in pier caps for anchorage in fix end as per detailed drawing including cutting , bending & welding complete.	18.00	No	341.29	6,143.22
103	Providing and fixing in position mild steel 32 mm dowel bars in pier caps for anchorage in free end as per detailed drawing including cutting , bending & welding complete.	18.00	No	399.70	7,194.60
104	Providing 12 mm thick pre-moulded asphalt filler joints as per drawing.	25.00	Sqmt.	703.53	17,588.25
105	Providing and fixing tar paper bearing ,shall be provided between abutment / pier cap and RCC slab	49.00	Sqmt.	202.00	9,898.00
106	Providing flood gauge marks on sub structure as per design including painting complete.	15.00	Rmt.	156.34	2,345.10

BILL OF QUANTITY

Sr. No.	Description of Item	Quantities Estimated but may be more or less	Unit	Tendered Rate	Total amount according to estimated quantites
1	2	3	4	5	6
107	Wall painting (three coats) with Plastic emulsion paint of approved brands like Apex or equivalent and manufacture on undecorated wall surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth. (Black & White Strip)	178.00	Sqmt.	125.40	22,321.20
Total Amount :					20,83,57,243.00
Twenty crores Eighty Three Lakhs Fifty Seven Thousand Two Hundred Forty Three only					

Note :-

I/We am/are willing to carry out the work at % above / below percent [should be written in figures and words] of the estimated rates mentioned above. Above of my / our tender works out as under.

Estimated Amount

Put to tender Rs.

Deduct % below Rs.

Net

In words

[Please strike out whichever is not applicable]

Estimated Amount

Put to tender

Deduct % Above

Net

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 Bidder

Deputy Executive Engineer
Panchayat R & B Sub-Division
Keshod - 1

Executive Engineer
Panchayat R & B Division
Junagadh