

Name of work :- Widening & Strengthening of Kanchardi to (Dhasa Junction) upto State Highway Road (VR) Km 0/000-3/550 Ta.Lathi, Dist.; Amreli. (Under MMGSY-Normal-2025-26)

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 <u>Light jungle.</u> | 0.91 | One Hect. | 28455.09 | 25894.13 |
| 2 | Earthwork for embankment including breaking clods, dressing with all lead and lift (Excluding watering and consolidation) (A) From borrow area with all lead and lift.Executed with machineries.(Selected soil to be used for earthwork shall be from BORROW AREA only having CBR not less than 6.00%) | 5951.00 | One Cum | 157.91 | 939722.41 |
| 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. | 3789.00 | One Cum | 109.41 | 414554.49 |
| 4 | Earthwork in cutting in all sorts of soil and soft Murrum including conveying and spreading the suff embankment as and where directed within 200 meters from the end of the cutting with all required lead and lift. | 1234.00 | One Cum | 134.12 | 165504.08 |
| 5 | Supplying, stacking, spreading, rolling, watering and consolidation to desired density of quarry spall with all lead and lift. | 697.00 | One Cum | 470.43 | 327889.71 |
| 6 | Scarifying graveled macadam or Bitumen macadam surface 6cm to 10cm depth including stacking useful materials on road side and disposing off remaining stuff. | 630.00 | One Sqm | 41.60 | 26208.00 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|----------|--|----------|---------|---------|------------|
| 7 | 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. | 1472.00 | One Cum | 942.74 | 1387713.28 |
| 8 | 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 Clasue.405 By manual means. | 1253.00 | One Cum | 1357.01 | 1700333.53 |
| 9 | 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 Clasue.405 By manual means. | 568.00 | One Cum | 1247.10 | 708352.80 |
| 10 | Rolling and Watering of earthwork in layers with vibratory roller including filling in depression which occur during the process as directed. | 7754.00 | One Cum | 22.95 | 177954.30 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|----------|---|----------|---------|---------|------------|
| 11 | Providing and applying primer coat with bitumen emulsion RS on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75kg/sqm using mechanical means, | 5002.00 | One Sqm | 57.40 | 287114.80 |
| 12 | Providing and laying bitumenous grout 37.50mm thick using Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm on B.T.Surface 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. | 926.00 | One MT | 2568.71 | 2378625.46 |
| 13 | Providing, laying and rolling 37.50mm thick compacted bitumenous Macadam (B.M.) in one layer with B.T. aggregates as specified and using Emulsion RS1 for tack coat at the rate of 2.50kg/10sqm (As per IRC-16) and using bitumen for mixing with agg. at the rate of 3.40% i.e 34.00kg/MT of total mix including mixing in Drum mix plant and spreading the same by paver finisher and consolidation with vibratory roller including necessary including cost of hire charges, firewood, oil, lubricants, labour charges, etc. by using constractor's own Drum mix plant, machineries and equipment, tools etc. complete in accordanace with the requirement of sepcification. | 928.00 | One MT | 3513.17 | 3260221.76 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|----------|---|----------|---------|---------|------------|
| 14 | Providing and laying and rolling of 20mm thick Compacted mix seal surface with B.T. and aggregate as specified 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 0.30cum/10sqm etc. complete in accordance with the requirement of specification. | 518.00 | One MT | 4319.49 | 2237495.82 |
| 15 | Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. Dense or hard soil. | 300.00 | One Cum | 253.88 | 76164.00 |
| 16 | Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead. Hard Murrum | 312.00 | One Cum | 432.61 | 134974.32 |
| 17 | Excavation of foundation in hard murrum and boulders and very stiff or sticky clays and other similar strata including shorting out and strutting and dewatering as necessary and disposing of the excavated stuff as directed. | 219.00 | One Cum | 611.32 | 133879.08 |
| 18 | Excavation in large boulders and soft rock by wedging including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed, | 182.00 | One Cum | 716.55 | 130412.10 |
| 19 | Excavation in hard rock by dry-wet blasting and chiseling including dewatering preparing foundation base by proper benching and stepping and disposing of the excavated stuff as directed (B) Blasting prohibited. | 51.90 | One Cum | 1675.31 | 86948.59 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|----------|---|----------|----------|---------|-------------|
| 20 | Providing and laying rubble for apron (Each stone weighting not less than 40kg) including and packing and filling in the interstices with quarry spall. | 53.00 | One Cum | 1083.81 | 57441.93 |
| 21 | 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. | 990.10 | One Cum | 3921.63 | 3882805.86 |
| 22 | 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. | 753.00 | One Cum | 3345.58 | 2519221.74 |
| 23 | Providing parapet of ordinary cement concrete M-200 as per detailed drawing with necessary reinforcement including shuttering laying vibrating and finishing to line and level complete (ii) cast in situ. | 24.00 | One Rmt. | 1086.63 | 26079.12 |
| 24 | Construction of concrete road using tremix system with 20cm thick controlled M-200 concrete mixing conplast P-211 water reduction admixture @ 100ml/bag of cement and hardner 62.50ml. /bag using fixing and removing "C" channels of required road depth levelling if placed concrte 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. | 1660.00 | One Cum | 6204.02 | 10298673.20 |
| 25 | Providing and casting in situ Controlled cement concrete M-200 for R.C.C. work in Piers, abutment, returns and riding returs as per drawing including centering, shuttering, scaffolding where neccesary laying, vibrating curing and finishing complete (A) For all Height | 162.80 | One Cum | 5227.36 | 851014.21 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|----------|--|----------|---------|---------|-----------|
| 26 | Providing and casting in situ Contolled Cement concrete M 20 mix for R.C.C. works in pier cap, abutment cap, and dirt wall including controlled cement concrete M 25 bed block or pedestals for required size below bearings as per detailed drawings, centering, shuttering, scaffolding wherever necessary laying, vibrating, curing and finishing complete. | 18.50 | One Cum | 5307.46 | 98188.01 |
| 27 | Providing and casting in situ Controlled cement concrete M 25 for R.C.C. Solid slab including centering, scaffolding, curing and finishing complete. | 52.30 | One Cum | 5457.74 | 285439.80 |
| 28 | Providing and casting in situ Controlled cement concrete M-150 mix for average 75/150mm thick wearing coat laid as directed incuding. tamping, vibrating, finishing, curring and filling in joints with bitumen complete. | 13.10 | One Cum | 4371.55 | 57267.31 |
| 29 | Providing and casting in situ Contolled cement concrete- M-200 for average 75/150mm thick wearing coat laid as directed incuding. tamping, vibrating, finishing, curring and filling in joints with bitumen complete. | 47.00 | One Cum | 5300.56 | 249126.32 |
| 30 | Providing and casting in situ Contolled cement concrete- M-200 mix for Approach slab including formwork, curing and finishing complete. | 16.30 | One Cum | 5158.72 | 84087.14 |
| 31 | Providing and casting in situ Controlled cement concrete- M-20 mix for kerbs/Kerb blocks including formwork,curing and finishing complete. | 3.36 | One Cum | 4869.02 | 16359.91 |
| 32 | Providing and laying weep hole in Abutment and returns by using A.C/PVC pipe of 100mm. Incl. fixing in proper grade and jointing the complete as per detailed specification. | 500.00 | One No | 86.39 | 43195.00 |
| 33 | Providing and laying filter media 600mm. thick directed at the back of abutments, returns and wing walls as per detailed specifications. | 40.10 | One Sqm | 1239.35 | 49697.94 |

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|----------|---|----------|----------|----------|------------|
| 34 | Providing and fixing in position Mild steel dowel bars in pier cap or abutment caps for anchorage in fixed end as per detailed drawings including cutting bending and welding complete. | 12.00 | One No | 341.29 | 4095.48 |
| 35 | Providing and fixing in position Mild steel dowel bars in pier cap or abutment caps for anchorage in free end as per detailed drawings including cutting bending and welding complete. | 12.00 | One No | 399.70 | 4796.40 |
| 36 | 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. | 9.340 | One MT | 73858.69 | 689840.16 |
| 37 | 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. | 29.140 | One MT | 73243.01 | 2134301.31 |
| 38 | Providing 12mm. Thick Pre-moulded asphalt filler joints as per drawings | 34.80 | One Sqm | 703.53 | 24482.84 |
| 39 | Providing PVC 100mm. Diameter water spouts including necessary iron gratings as per drawings. | 12.00 | One No | 150.74 | 1808.88 |
| 40 | Filling available excavated earth (excluding rock) in trenches plinth sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering. | 846.00 | One Cum | 136.91 | 115825.86 |
| 41 | Supplying and fixing reinforced concrete heavy duty non presure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specification including setting and joinng the pipes in C.M. 1:2 watering and laying (to level or slope) of I.S. Class NP-3 of following internal diameter with all lead and lift. (i) 900mm Dia. | 37.50 | One Rmt. | 3469.25 | 130096.88 |
| 42 | Demolition and desposal of unserviceable materials with all lead and lift. (II) Unreinforced cement concrete. | 349.00 | One Cum | 623.01 | 217430.49 |

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|----------|---|----------|----------|---------|-----------|
| 43 | Providing temporary all weather and fair weather diversion suitable for traffic during the construction Period of the bridge / Slab drain including providing necessary drains and all safety measures including Earthwork, quarry spal, WBM, Guard stone red lamps / signals at night for traffic etc. complete. | 100.00 | One Rmt. | 1083.93 | 108393.00 |
| 44 | Providing and fixing Precast cement concrete Hectometer as per IRC type design incl. painting, lettering etc. fixing in C.C. 1:5:10. | 14.00 | One No | 356.49 | 4990.86 |
| 45 | 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. | 60.00 | One No | 344.07 | 20644.20 |
| 46 | 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, MDR,SH) | 4.00 | One No | 1293.38 | 5173.52 |
| 47 | 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 | 164.00 | One No | 102.84 | 16865.76 |
| 48 | Supplying and fixing Junction Boards of M.S. plates and angles as per I.R.C. design incl;. Fixing in C.C. 1:4:8 with necessary excavation painting, figuring, lettering on boards etc. complete. | 2.00 | One No | 5236.69 | 10473.38 |
| 49 | Providing and fixing Village name Boards as per standard I.R.C. type design of steel plate incl. painting, lettering etc. complete with fixing in C.C. 1:4:8 block with necessary excavation etc. complete | 2.00 | One No | 3437.59 | 6875.18 |
| 50 | 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. | 4.00 | One No | 3072.98 | 12291.92 |

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|----------|---|----------|--------|---------|----------|
| 51 | 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. | 4.00 | One No | 5045.36 | 20181.44 |
| 52 | Regulatory/Mandatory signs :Providing and fixing sing 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 eteching; coated with one coat of epoxy primer and two coats of best quality epoxy paint; reflectorised with retro refiective 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 75x75x6mm 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)... | 2.00 | One No | 3439.80 | 6879.60 |

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|----------|---|----------|--------|---------|----------|
| 53 | 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 symbole 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 excvation curing etc. comp.under the supervision of engineer-in-charge.(B) Engineering Grade | 4.00 | One No | 2423.73 | 9694.92 |
| 54 | 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 phosphating 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 | 12.00 | One No | 3711.75 | 44541.00 |

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| 55 | 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 | 8562.78 | 8562.78 |
| 56 | Road Marking with Hot Applied paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplasting compund 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. | 1207.00 | One Sqm | 367.72 | 443838.04 |
| 57 | Supplying and fixing cat eye (Stimsonite) made out from acrilol beautiful sterine injuction high compressed molding with reflector made of MMC (Prismatic type size 12cmx6cmx2.5cm) provided with bituminous adhesive 100g. With each unit for fixing (Engineer grade) | 596.00 | One No | 375.72 | 223929.12 |

| Item No. | Description of Item (With brief specification and reference to book of Specification) | Quantity | Unit | Rate | Amount |
|---|--|----------|----------|---------|-------------|
| 58 | Providing and fixing "W" shape metal crash safety barrier comprising of 3mm thick galvanised sheet to be fixed on ISMC 150 (150x75x5.4mm) series channel vertical post to be spaced 2.0 mtr. c/c to be kept 1.650mtr height as per MOST specification incl. necessary foundation, fittings with bolts, painting and required all process as per specification and as per drawings. | 80.30 | One Rmt. | 3198.67 | 256853.20 |
| Rupees Three Crore Seventy Six Lakh(s) Forty One Thousand Four Hundred Twenty Six And Paise Thirty Six Only | | | | | 37641426.36 |

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.

NOTE: Amount Rs. 16916.44 Of Dismantled materials shall be recovered from 1st R.A. bill of Contractor at once.

Signature of Contractor.

Deputy Executive Engineer
Panchayat R&B Sub Division
Lathi

Executive Engineer
Panchayat R&B Division
Amreli