

Name of Work :: Construction of various Road in Nadiad taluka Dis. Kheda Under MMGSY (OWR) Yojna year 2025-26 Package No.:- 30

Bill of Quantities (BOQ)

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate (Exclusive GST)	Amount
				In Figures	
[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	3.24	Hect	28393.04	91,993.45
[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.(A) From Borrow area within Land width	9531.06	Cum	126.68	12,07,394.68
[3]	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.(ii) 450mm dia.	129.00	Rmt	1176.49	1,51,767.21
[4]	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 vibratory roller 80-100 kN static wt. to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting etc. complete as per Specification.	2130.30	Cum	1395.12	29,72,024.14
[5]	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam (Grade-II) (M.C. Metal of size 40 to 63 mm) specification including spreading in uniform thickness, hand packing, rolling with vibratory roller 80-100 kN static wt. to proper grade and camber, applying and brooming, stone screening/binding materials to fill-up the interstices of coarse aggregate, watering and compacting etc. complete as per Specification. (45 to 63mm size M.C. Metal)	3077.10	Cum	1327.06	40,83,496.33
[6]	Providing and laying Compacted Quarry Spall for side shoulder including carriage of material and spreading on prepared base including compacting as per MOST Specification etc... Complete	648.00	Cum	732.92	4,74,932.16
[7]	Providing & laying 37.50mm thick Bituminous grout base course with VG-30 Bulk for tack coat @ 4.0 kg./ 10 Sqmt WBM surface and 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.	1532.28	MT	2287.07	35,04,431.62
[8]	Providing and laying 25 mm thick premix asphalt carpet using 0.66 cmt per 1 MT.mix with M.C. stone agg. & VG-30 Bulk for tack coat @ rate of 2.50 kg / 10 smt. & 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	1072.59	MT	2856.54	30,63,896.24

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				In Figures	
[9]	Providing and laying sealcoat with B.T. agreegate as specified using agreegate at the rate of 0.18 Cu.mt / 10 Sq.M. and bitumen grade VG-30 for mixing with agreegate at the rate of 4.50 % i.e 45 Kg/M.T. of total mix including heating and mixing in drum mix plant and spreading the same with 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. complete in accordance with the requirement of specification.	557.19	MT	3131.14	17,44,639.90
[10]	Construction of Granular Sub Base (GSB) by providing M.C. coarse graded material of grading-I, spreading in uniform layers 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, complete as per MORTH specification.	87.00	Cum	1243.83	1,08,213.21
[11]	Providing and filling in foundation with ordinary cement concrete M- 100 mix including formwork, vibrating, ramming and curing complete. (A) Foundation and plinth	144.80	Cum	3245.56	4,69,957.09
[12]	Providing and laying contolled cement concret M-30 and curing complete including compacting with surface mechanical vibrator, mechanical floater, channelling formwork, grooving including providing dowel bar, tai bar, expantion joint and construction joint including filling asphalt filler joint as per instruction of Engineer in charge	112.00	Cum	5388.59	6,03,522.08
[13]	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 Micro Prismatic Grade retro reflective sheeting 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 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 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 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) Engineering Grade (VR)g	34.00	Nos	3218.09	1,09,415.06
[14]	Facility Informatory Sign :-Providing and fixing sign boards made out 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 & 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 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	10.00	Nos	3741.44	37,414.40

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				In Figures	
[15]	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 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 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) Engineering Grade (VR)g	22.00	Nos	3113.10	68,488.20
[16]	STOP Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 90 cms Octagone 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 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) Engineering Grade (VR)g	11.00	Nos	4676.06	51,436.66
[17]	Providing and fixing pre cast C.C. M-150 indicator stone with necessary reinforcement as per I.R.C. type design in including painting, lettering etc. complete. (ii) Fixing in C.C. 1:5:10	216.00	Nos	343.27	74,146.32
[18]	Providing and fixing ordinary kilometer stone of precast cc 1:2:4 including necessary reinforcemnent as per IRC type desing and Fixing in cc 1:4:8 including painting and lettering etc.complete	13.00	Nos	704.33	9,156.29
[19]	Chevron sign :-Providing and fixing sign boards made out of 1.5mm aluminium sheet / 3mm ACP (Aluminum composite Panel); size 60x50 cm 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; 3.3 mtr long stand post of 75 x 75 x 6mm as required and frame fabricated from suitable size iron angle of 50 x 50 x5mm; 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 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 originaa manufacturer & a certified copy of 3 year outdoor exposure test report from third party est lab for the product offered shall be submitted by contractor. (A) Engineering Grade (VR)g	34.00	Nos	3711.75	1,26,199.50

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				In Figures	
[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 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; 1.8mtr long stand post of 75 x 75 x 6mm 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) Engineering Grade (VR)g	12.00	Nos	2423.74	29,084.88
[21]	Providing and fixing pre cast C.C. M-150 hectometer stone with necessary reinforcements per I.R.C. type design including painting, lettering etc. complete (ii) Fixing in C.C. 1:5:10	45.00	Nos	356.50	16,042.50
[22]	Route Marker sign :-Providing and fixing sign boards made out of 2.0 mm aluminium sheet / 4 mm ACP (Aluminum composite Panel); size 60x45 cm rectangular plus 30x25cm additional plate 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 latestM.O.S.T.Specifications; 3.6 mtr long stand post of 75 x 75 x 6mm as required and frame fabricated from suitable size iron angle of 35x 35 x 3mm; 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 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) Engineering Grade (VR)g	13.00	Nos	3189.46	41,462.98
[23]	Village Name Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet/ 4mm ACP (Aluminum composite Panel); size 90x60 cms. 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 Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.3mtr long stand post of 75 x 75 x 6mm 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 or inscription/letters / 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 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) Engineering Grade (VR)g	9.00	Nos	4842.24	43,580.16

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate (Exclusive GST)	Amount
				In Figures	
[24]	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 coefficient on cement road shall be min 130 mcd/m ² /lux and Asphalt road shall be min 100 mcd/m ² /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 2 years.	1530.64	Sqm	367.72	5,62,846.94
[25]	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 Kg. 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.	684.00	Nos	326.23	2,23,141.32
[26]	Providing and fixing Junction board of M.S. plates and angles as per standard I.R.C. design including fixing in C.C. 1:4:8 with necessary excavation painting figuring and lettering on board etc. complete.	15.00	Nos	5236.70	78,550.50
[27]	Citizen' s information Board- Providing and fixing of typical information board as per instruction. Two MS plates of 1.6 mm thick, of 900 mm x 750mm size fixed at top & bottom duly welded with MS angles of 25 x 25 x 5 mm thick M.S plate shall be welded by two vertical M.S flats & four horizontal M.S flats 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 75mm, below ground level. Painting New letters & figure of any shade with ready mixed synthetic enamel paint of superior quality in required shade and colour, 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)	5.00	Nos	12254.12	61,270.60

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[28]	"LOGO" Board : Providing and fixing of LOGO informatory sign board with Logo as per section 1700 of MORD specifications and drawing. The board will be a composite unit consisting of Two Plates of ACM (Aluminum Composite Material), material specifications as per clause 17001.3. The top most plate will be of 3mm ACP in diamond shape of 600x600mm size, riveted with MS angle iron frame of 25mmx25mmx5mm size on back on edges. The Lower plate will be of 4mm ACP of 1100x300mm size riveted with MS angle iron frame of 25mmx25mmx5mm size on back on edges. Riveting of all the sheets over angle and flat iron frame will be done neatly to have plain surface on one side. The angle iron frame of Both the plates will be welded to a 75mm x75mmx6mm Mild steel post at Centre and this post will be embedded in cement concrete M15 grade block of 450x450x600mm below ground level. The height of the bottom of the lower plate will be 1200mm from normal ground level. The spacing between the diamond shaped plate and Lower Plate is kept 150mm. logo, letters and numerals on the ACM should be made up of Retro Reflective sheeting of Type-1 AEGP Class-A grade as per the latest MORD section 1700 and IRC 67-2012 specifications. All the section of the frame and posts shall be painted with primer and two coats of epoxy paint. The design, painting and lettering shall be done as per the Logo sign Design and as directed by Engineer in-charge. A warranty for 5 years for the Retro reflective sheeting for Type-1 Class-A from original manufacturer shall be submitted by contractor.	5.00	Nos	4642.33	23,211.65
[29]	Project Information Board: Providing and fixing of typical Project informatory sign board with Logo as per 1700 of MORD specifications and drawing. The board will be a composite unit consisting of Three Plates ACM (Aluminum Composite Material), material specifications as per clause 17001.3. The top most plate will be of 3mm ACM in diamond shape of 600x600mm size, riveted with MS angle iron frame of 25mmx25mmx5mm size on back on edges. The middle 4mm ACM plate will be 1200x150mm size riveted with MS angle iron frame of 25mmx25mmx5mm size on back on edges. The main 4mm ACM lower most plate will be 1500mmx600mm size, riveted with MS angle iron frame of 25mmx25mmx5mm size. Riveting of all the sheets over angle and flat iron frame will be done neatly to have plain surface on one side. The angle iron frame of lower most plate and flat iron frame of the middle plate will be welded to two nos. 75mm x75mm (12 SWG) sheet tubes posts placed at 1125mm apart centre to centre. the top of the middle plate will be flushed with the top of 75mm dia medium steel tube posts and these posts will be embedded in cement concrete M15 grade block of 450x450x600mm below ground level. The height of the bottom of the lower plate will be 1200mm from normal ground level and the bottom of the middle plate will be 100mm above the top level of the lower most plate. the diamond shaped plate mounted over flat angle iron frame will be connected to middle plate by square steel section of 47mmx47mm, thickness 12SWG having a spacing of 100mm between the diamond shaped plate and middle plate and this square section will be riveted to the bottom point of the diamond shaped plate. logo, letters and numerals on the ACM should be made up of Retro Reflective sheeting of Type-1 AEGP Class-A grade as per the latest MORD section 1700 and IRC 67-2012	5.00	Nos	8710.19	43,550.95
[30]	Excavation for foundation upto all depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto all lead (A) Dense or Hard soil.	774.00	Cum	241.79	1,87,145.46
[31]	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.	852.00	Cum	3615.61	30,80,499.72

Item No.	Description of Item (with brief specification and reference to book of specifications)	Quantity	Unit	Rate (Exclusive GST)	Amount
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[32]	Providing TMT Bar FE500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level	2130.00	Kg	76.21	1,62,327.30
[33]	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 .	263.00	Nos	45.81	12,048.03
[34]	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	320.00	Sqm	12.09	3,868.80
[35]	Supplying and fixing reinforced concrete heavy duty non pressure pipes with collars for culverts incl. Setting and joining the pipes in C.M. 1:2 watering & laying (two level or slope) of 900mm dia. NP3 pipe internal diameter of IS 458 / 1971	82.50	Rmt	3446.50	2,84,336.25
[36]	Providing and filling sand below R.C.C. raft in layers including ramming and watering complete.	83.00	Cum	458.14	38,025.62
				Grand Total :-	2,38,43,518.20
Two Crore Thirty Eight Lakh Fourty Three Thousand Five Hundread Eighteen Rupees and Twenty Paise Only					

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 out as under.

Estimated amount put to tender

Estimated amount put to tender

Deduct.....% below

Add.....% Above

Net

Net

In Worlds

In Worlds

(* Please strike out whichever is not applicable).

Note

- 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.
- The labour cess will be deducted as per prevailing rules i.e. 1% of the work done.
- GST and Income tax TDS will be deducted at a source while making payments of bills
- 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.
- Credit of dismantled materials of amount of **Rs. 0.00/-** must be recovered from contractor's 1st R.A. bill.
- All duties, taxes, and other levies except GST payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder. (GST will be paid extra)

Dated Signature of
the Contractor.

Dy. Executive Engineer
R & B (P) Sub Division
Nadiad

Executive Engineer
R & B (P) Division
Kheda