

Name of Work :- Construction of Slab Drain at Chainage 8/500 on Bayat-Ratadiya-Sherdi-Aasambiya Road. Ta. Mandavi, Dist. Kachchh.

SCHEDULE - B

Memorandum showing item of works to be carried out.

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
	Section (A) PRELIMINARY WORKS				
1	Clearing and grubbing site/road/land [including uprooting all vegetation, grass, bush shrubs, saplings and trees with girth, removal of stumps of trees of girth of all sizes including removing stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable materials as directed by Engineer with all leads and lifts etc. complete as per specification. before commencement and after completion of the work.	0.50	Hectare	28455.09	14227.55
2	Detailed survey of site using Total station, and Marking out the centre line of bridge along longitudinal and transverse axis, and taking Various utilities and all other details of all component , structures, boundary and complete line out and levelling with precise levels using total station /theodolite including constructing necessary CC pillars for lines and levels and establishing necessary bench marks including making AUTOCAD drawings showing all levels, details of utilities, boundary etc all and providing soft copies in AUTOCAD etc. complete as directed.	1.00	LS	20402.00	20402.00
3	Providing and installation of barricades including supplying, painting with fluorescent paint and fixing CGI sheets 24 SWG of 1.8 m height and M.S. Posts angle 40 x 40 x6 mm at 2.0 m c/c and dismantling the same after completion of work as directed by Engineer and as per site requirements.	41.00	Sqm.	211.09	8654.69
4	Dismantling of structures and sorting of the dismantled material, disposal of unserviceable material and stacking serviceable materials as directed by Engineer with all leads and lifts etc. complete as per specification and as per site requirements.				
a)	Dismantling bricks / Stone masonry, PCC Kerb Median	50.00	Cum.	409.22	20461.09
b)	Dismantling of Concrete Structures	50.00	Cum.	930.35	46517.57
c)	Scarifying existing Approaches flexible pavement. (Scarifying gravelled macadam or bitumen macadam surface 6 cm to 10 cm.depth including stacking useful materials on road side and disposing off remaining stuff.)	150.00	Sqm.	41.60	6240.29
d)	Dismantling steel work including distempering and stacking the materials with all lead and lift and Steel Material is Property of R&B /Client as directed by Engineer Incharge.	30.00	Kg	3.85	115.44

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
	Section (B) FOUNDATION & SUBSTRUCTURE				
5	Excavation for foundation in sand, gravel, clay soft soils and murrum (Soft and Hard) etc. Including shoring, strutting dewatering including pumping as necessary, backfilling the trenches with suitable excavated material in layers of 15 to 20 cms and disposing of the surplus excavated stuff with all leads and lift , preparation of bed for concreting of foundations etc. complete as directed by Engineer and as per specification.				
a)	Depth upto 3.0m.	1154.00	Cum.	511.11	589821.52
b)	Depth from 3.0m.to 6.0m.	54.00	Cum.	599.64	32380.40
6	Excavation in large boulders and soft rock by welding including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed.	5.00	Cum.	716.55	3582.77
7	Providing and laying in situ M-15 grade bedding concrete in foundation / below pile cap including dewatering, shuttering, mixing in mechanised batch mix plant, compacting, curing etc. complete true to level and position as directed by Engineer and as per specification.	101.00	Cum.	3737.13	377450.26
8	Providing and laying in-situ RCC M-30 grade Controlled Cement Concrete in foundations of piers, abutments, return wall, pile caps etc. including centering, shuttering, mixing in mechanised batch mix plant, compaction, curing and dewatering if necessary, excluding reinforcement as per specification and as directed by Engineer.	331.00	Cum.	5081.31	1681913.61
9	Providing and laying M-30 grade Controlled cement concrete for cast-in-situ piers, abutments, return wall, staircase, etc. at any height or depth as per approved design and drawings, with necessary centering, shuttering, mixing in mechanised batch mix plant, scaffolding, transporting, placing, compacting by mechanical vibrators, finishing, curing and casting, finishing with decorative panel as per drawing etc. complete excluding reinforcement as directed by Engineer and as per specification.	148.00	Cum.	5424.71	802857.08
10	Providing and laying in situ controlled M-30 grade cement concrete for RCC caps over piers and abutments , staircase ,including necessary scaffolding formwork, centering, mixing in mechanised batch mix plant, transporting, placing, compacting by mechanical vibrators, finishing and curing and casting, finishing with decorative panel as per drawing etc. complete excluding reinforcement, as directed by Engineer and as per specification.	41.00	Cum	5504.50	225684.50
11	Providing and laying in situ controlled M-40 grade cement concrete for RCC pedestals over piers and abutments ,staircase ,including necessary scaffolding formwork, centering, mixing in mechanised batch mix plant, transporting, placing, compacting by mechanical vibrators, finishing and curing and casting, finishing with decorative panel as per drawing etc. complete excluding reinforcement, as directed by Engineer and as per specification.	0.50	Cum	5558.03	2795.24

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
12	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 550D grade) with fusion bonded epoxy coating conforming to IS 1786 of all categories for piers, abutments, returns and retaining wall including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	51.79	MT	80065.73	4146780.54
13	Providing and laying Tar Paper bearing below solid slab as directed by engineer in charge.	17.00	Sqm.	47.08	800.29
14	Providing and applying one coat of zinc-rich epoxy primer and two coats of coal tar epoxy paint of reqd. thickness as per specifications to all concrete surfaces in contact with earth in foundation and substructure including all cost of material, labour, transportation and preparing the surfaces by cleaning, washing, brushing etc. complete as directed by Engineer and as per specification.(Paint shall be got approved from Engineer).	198.00	Sqm.	595.90	117988.20
15	Providing and filling sand behind abutments and between returns in layers as directed	849.00	Cum.	504.42	428256.23
16	Providing and laying 600 mm thick filter media behind abutment as per detailed drawing & specifications etc complete.	276.00	Sqm.	1239.35	342060.82
17	Providing and fixing in position Mild steel dowel bars in pier caps or abutment caps for anchorage in fixed end as per detailed drawings including cutting, bending and welding complete.	50.00	Each	341.29	17064.46
Section (C) SUPERSTRUCTURE					
18	Providing and laying, M-40 grade RCC in-situ or Pre-cast T-Beam Deck slab and Solid Slab type superstructure, deck sheet if required, as per approved drawing and technical specifications, section 1500, 1700 and 2200 of MORTH using 6mm to 20mm machine crushed well graded stone aggregate, sand of approved quality, OPC 53 grade cement with contractor's own concrete mix design etc. complete as per specifications. the rate is inclusive of all materials, Mineral admixtures if required, including necessary mixing in fully automatic batch mix plant, transport, curing, vibrating, ramming, finishing, placing in position, centering, shuttering, scaffolding, staging, formworks, establishing casting yard, transporting using trailer, launching or shifting using crane or any other approved means, making thrust bed, thrust block, gantry, etc all complete. Deshuttering carefully, making good the damages, fixing embedment, inserts, pockets, wherever necessary, with all lead and lift with contractor's labour, tools & plants, machineries, as required with including cost of finishing equivalent to F3 type exposed concrete and form mark. (Minimum cement content :- 440 kg/cum), (Excluding steel reinforcement) (A) For various types of RCC type superstructure in M40 grade	182.00	Cum.	5714.58	1040053.56

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
19	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 550D grade) with fusion bonded epoxy coating conforming to IS 1786 of all categories for super structure including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	25.48	MT	80935.34	2062232.46
20	Providing and applying one coat Epoxy Phenolic primer of DFT 50 micron and two coats of Epoxy Phenolic coating of DFT 100 microns each or any other equivalent epoxy coating system to all concrete surfaces exposed to atmosphere in Substructure, superstructure etc. all including cost of material, labour, transportation, scaffolding and preparing the surfaces by cleaning, washing, brushing, etc. complete and as directed by Engineer and as per specification. (Paint shall be got approved from Engineer and tested from approved laboratory).	716.00	Sqm.	574.69	411478.04
21	Providing and carrying out load test on bridge deck with simulated loading including provision, placing and removal of loading, supplying, fixing and removing deflection measuring instruments etc. complete with platforms for fixing the instruments etc. complete as per the details supplied and specification and as directed by Engineer and including submission of required results in triplicate after satisfactory completion of the load test.	200.00	Tonne	169.92	33984.48
Section (D) MISCELLANEOUS ITEMS					
22	Providing and casting RCC Crash Barrier /RCC Crashbarrier with Friction slab / Central Verge /Medium in M-40 controlled concrete with cast-in-situ or precast members as per detailed drawings including necessary scaffolding, centering, formwork, mixing in mechanised batch mix plant, transporting, placing, compacting, finishing, curing, etc. complete including providing and fixing of inserts if any with all leads and lifts as per drawing & specification and as directed by Engineer, excluding reinforcement.	23.68	Cum.	5231.80	123893.21
23	Type - A, "W" : Metal Beam Crash Barrier (Providing and erecting a "W" metal beam crash barrier comprising of 3 mm thick corrugated sheet metal beam rail, 70 cm above road/ground level, fixed on ISMC series channel vertical post, 150 x 75 x 5 mm spaced 2 m centre to centre, 1.8 m high, 1.1 m below ground/road level, all steel parts and fittings to be galvanised by hot dip process, all fittings to conform 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, 330 mm long complete as per clause 811)	119.00	Meter	3361.28	399992.32

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
24	Providing and casting insitu controlled cement concrete M-40 in Wearing Coat using 6 to 20 mm size coarse aggregates, to the required section at any height or depth including necessary shuttering, scaffolding, staging, etc. complete, placing in position, vibrating, curing, tamping, deshuttering filling in joints with bitumen with all contractor's materials (except steel reinforcement), labour, tools and plants, etc. as directed and as per drawings and specifications and special conditions of contract.	35.88	Cumt	5657.01	202973.52
25	Providing and laying precast RCC Footpath Slab in controlled cement concrete of M-30 grade (minimum 70 mm thickness) including necessary reinforcement and providing and setting cement chequered tiles in CM 1:5 as per drawing including necessary formwork, curing and finishing complete.	59.00	Sqm	1120.09	66085.31
26	Providing and casting insitu controlled cement concrete M-30 in RCC Approach Slab using 6 to 20 mm size coarse aggregates, to the required section at any height or depth including necessary shuttering, scaffolding, staging, etc. complete, placing in position, vibrating, curing, deshuttering, fixing inserts, pockets wherever necessary with all contractor's materials (except steel reinforcement), labour, tools and plants, etc. as directed and as per drawings and specifications and special conditions of contract.	27.27	Cumt	5356.03	146058.94
27	Providing and casting insitu controlled cement concrete M-25 in RCC Railing and Parapet using 6 to 20 mm size coarse aggregates, to the required section at any height or depth including necessary shuttering, staging, etc. complete, placing in position, vibrating, curing, deshuttering, fixing embedments, inserts, pockets wherever necessary with all contractor's materials (except steel reinforcement), labour, tools and plants, etc. as directed and as per drawings and specifications and special conditions of contract.	39.00	Rmt	1281.69	49985.91
28	Providing and placing in position High Yield Strength Deformed (HYSD) bars reinforcement (TMT Fe 550D grade) with fusion bonded epoxy coating conforming to IS 1786 of all categories for super structure including cutting, bending, hooking and tying with 18 gauge mild steel binding wires, supporting in position to ensure lines and levels during concreting, maintaining proper cover / spacing etc. complete as per specification and detailed drawing.	9.55	MT	79449.63	758531.04
29	Providing and applying one Primer Coat and two coats of Synthetic Enamel Paint on Anticrash Barrier and Median Verge surface area exposed to Atmosphere in superstructure including making of strip of two colours including cost of material, labour, transportation, scaffolding and preparing the surfaces by cleaning, washing, brushing, sand / grit blasting etc. complete and as directed by Engineer and as per specification.	198.00	Sqm.	120.26	23811.62
30	Painting two coats (Excluding priming coat) on new steel and other metal surface with synthetic enamel paint , brushing to give an even shade including cleaning surface of all dirt, dust and other foreign matter.	333.00	Sqm.	68.57	22833.44

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
31	Providing and fixing 100 mm dia. G.I. Drainage spouts, as per MOST Drg. No. SD/303 including grating with suitable clean out fixtures including all leads and lifts etc. complete as per specification, design & drawings and as directed by Engineer.	12.00	No.	536.03	6432.33
32	Providing and fixing UPVC pipe as Longitudinal Runner Pipe , Down take pipes, conduits below footpath including cost of all materials, labour, fixing in true line and level, including bends, fixtures, special, etc. complete with all lifts and leads etc. as per specifications and as directed by engineer incharge.				
a)	75 mm dia	78.00	Rmt.	223.21	17410.38
33	Providing & fixing in position 100 mm Dia. A.C. pipes as weep holes in Abutments and Return Walls completed in all respect as per specification and as directed by Engineer.	224.00	Nos	86.70	19420.44
Section (E) APPROACHES & AMENITIES					
34	Box cutting the road surface to proper slope, and chamber for making a base for road work including removing the excavated stuff and depositing on the road side as directed up to all lead & Lift.	326.00	Cum.	109.24	35612.76
35	Earth work in embankment using selected soil and hard murrum, approved by engineer in charge, with contractor's own earth by all lead, and lift, including breaking clods dressing with all lead and lift including watering rolling and consolidation of subgrade in layers of 300 mm or as directed by engineer in charge, at OMC to required dry density including filling the depressions which occur during the process using power roller 8T to 10T	112.00	Cum.	294.92	33031.04
36	Carting of excavated material such as murrum, earth, kapachi, gravel, brickbats, kankar, debris, sand, dismantled material, including, Spreading , levelling loading, unloading, stacking etc. complete at non objectional place as directed by engineer in charge				
	a) Lead up to 5 Km.	79.00	Cum	82.62	6526.82
37	Providing, laying and compacting natural gravel and sand (river bed material C.B.R. not less than 10%) below sub base course including carriage of materials spreading in uniform layer manually on prepared base and compacted with vibratory roller to achieve desired density including all materials, labour etc. complete.	56.00	Cum	639.33	35802.48
38	Construction of granular sub-base (Grade -I, Crushed B T Materials of 53 mm to 26.5 mm @ 35 %, 26.5 mm to 4.75 @ 45 %, below 2.36 mm @ 20 %) by providing close grade material, spreading uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve desire dencity, complete clauses as per 401.				
[a]	For Grading - I Material	152.00	Cum	963.54	146458.08
39	Providing and laying W.B.M. of M.C. metal of size 45 mm to 90 mm size including 0.27 Cu.m stone screening & 0.08 cum stone dust as filler including sperading watering & consolidation by Vibratory roller 80 KN to 100 KN static Weight. 100 mm thick compated.	102.00	Cum	1032.22	105286.44

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
40	Providing and laying W.B.M. of M.C. metal of size 45 mm to 63 mm size including 0.12 Cu.m stone screening & 0.08 cum stone dust as filler including spreading watering & consolidation by Vibratory roller 80 KN to 100 KN static Weight. 2 layer of 75 mm thick compacted.	129.00	Cum	1045.35	134850.15
41	Providing and laying bituminous grout base course 37.5mm thick using Emulsion for tackcoat at the rate of 4.00 kg/10 sqmt on WBM surface using B.T. Stone aggregate as per required gradation with the asphalt of VG-30 grade at the rate of 1.99% i.e. 19.90 Kg/M.T. by weight by mix including heating and mixing in drum mix plant, transporting the mix spreading the same by paver finisher and consolidation by vibratory roller including cost of all materials, fuels, labours, tools and plants etc. using contractors own drum mix plant etc complete.				
[a]	37.50 mm Thick	34.00	MT	2210.89	75170.26
42	Providing and laying 37.5 mm thick compacted bituminous macadam with B.T. Aggregate as per M.O.R.T & H Gradation and Asphalt VG-30 @ 4 Kg/10 Sq Mt and 2.50 Kg/10 sq Mt on existing B.T. Surface for tack coat & Asphalt grade VG-30 for mixing @ 34.00 Kg/M.T. ie 3.40% of total mix weight of the including heating the aggregates and Ashal by continues batching of drum mix plant and spreading the same by paver finisher and consolidation withvibratory roller 80 KN to 100 KN Static weight including providing all materials, Equipments, tools and plants, oil, kerosene, firewood, laboar charges etc. comp. using contractor's own machineries drum mix plant and paver finisher etc complete.	66.00	MT	2724.98	179848.68
43	Providing and laying Bituminous Seal Coat with stone chips 6 to 10 mm size 0.18 Cum/10sqmt i.e. using 0.66 cmt Agg per M.T. mix using Asphalt VG-30 @ of 4.50% of mix including heating the asphalt and aggregate by continous batching drum mix plant and paver finisher and consolidating by vibratory roller including providing equipment, tools, plant, firewood, oil, kerosene, labour charge etc, using the contractors own machinery and plant.	15.00	MT	2990.61	44859.15
44	Supplying and fixing road sign board of MS Plates and angle iron including painting, lettering, etc. complete including excavation, etc. complete as per IRC type design - Reflective Type.	11.00	Nos.	3072.99	33802.84

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
45	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 beads as per IRC:35-2015.the finished surface to be level , uniform and free from streaks and holes. Zebra patta/bump patta lane /center line/edge line/cut patta.The white color marking should provide liminance coefficinet on cemend road shall be min 130 mcd/m2/lux and asphalt road shall be min 100mcd/m2/lux during the service life during the day time.the marking should meet the performancecriteria for night time reflectivity, wet reflectivity and skid resistance as mentioned in the section - 15 of IRC 35-2015.warranty for retro reflectivity shall be two year	75.00	Sqmt	367.72	27579.06
46	Providing and laying Double Walled Corrugated Pipes (DWC) of Polyethene conforming to IS-14930-II of 90mm O.D. with fittings and necessary connecting accessories of same material at required depth for laying cable into crash barrier etc. complete as per specification and as directed by engineer incharge.	64.00	Rmt	112.11	7175.04
47	Cat eye/Road stud/ RPM:Supplying of 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 13635kgs.tested in accrodance 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 130mm 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 the height not less than 30+/-2 mm) from the body is to be a minimum value of 500 kgf. Fixing will be by drilling hole on the road for the shanks to go inside, without nails and using epoxy based adhesive as per manufacturers recommendation and color of the marker should be as per the IRC 35-2015 and as directed by engineer-in-charge.	43.00	Nos.	326.23	14027.89
48	Supplying and fixing the necessary sign boards as per site requirements and as directed and approved by Engineer (Retro-reflective Type)				
[A]	Facility informatory Sign:-				

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
	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 phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.6mtr long stand post of 75 x 75 x 6mm /65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality 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 block of size 45 x 45 x 60 Cms. for each leg.including excavation, curing etc.complete under the supervision of engineer in charge. Awarranty 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	2.00	Nos	5906.48	11812.96
[B]	Cautionary Warning Sign: out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with Micro Prismatic Grade retro reflectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.6mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with best quality 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	2.00	Nos	5077.27	10154.54
[C]	Regulatory / Mandatory sign:				

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
	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 / 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 theinstruction 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) Class-C Type-11 Retro Reflective sheeting	2.00	Nos	4618.73	9237.46
[D]	Flexible Median Marker				
	Flexible Median Marker : Providing and fixing of flexible median marker that are made of tough,high impact resistant,injection-molded,thermoplastic body with property of flexibility to provide high durability.The dimension of flexible median marker should not exceed 18.4 cm in height (including shank height),12.5cm in width,0.65cm in thickness and shank depth shall be 3.4cm the body structure shall be rounded at all its corners and edges.The plastic used for molding the flexible median marker should survive impact load of 5kg continuously for 750 times at room temperature.The logo of the manufacturer shall be embossed on either side of the body in the injection molding process.The median marker shall have flame like shaped body with,fluorescent yellow color retro-reflective sheeting of size not less than 90 cm square,with fully reflective micro prismatic cube corners as its retro-reflective elements as per IRC 67 2012 and ASTM D4956-09 type XI specifications reflectivity values.The retro-reflective sheeting shall be one or both sides of the flexible median marker and shall be edge protected with no exposed edges which will prevent edge lifting, vandalism, sheeting damage, etc.The flexible median marker shall be fixed by a combination of epoxy adhesive and grouting as recommended by manufacturer and engineer in charge.	4.00	Nos	271.69	1086.76
[E]	Providing and Fixing of NJ Reflector made up of 2mm Aluminium of size 100 x 100mm duly pasted with Reflective shetting of Florescent yellow Type -11 Fixed to the Bridge wall/ Parapet with Nails.	4.00	Nos	204.02	816.08

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6
[F]	Blinkers : Providing & fixing solar power road traffic flasher / blinker (24 hour operations) having 300 mm round light source, cluster of high intensity ultra bright LED visibility greater than 500mtr red or amber or as required. Flashing duty cycle 50% operation for 24 hours located 3.0mtr above the ground level on post of 80NB MS Post, design in line with IS 7537-1974 specification of road traffic signals Solar model 12V, 20WP/124, 40W, Battery 12V 60Ah/12 V 110 AH. Operating temperature 0 to 50 C, Humidity 93% EH (NC) complete with Installation.	2.00	Nos	15680.25	31360.50
49	Supplying & laying of Uni-Axial / Bi-axial extruded high modulus polypropylene geogrid conforming to MORT&H specification for base/sub-base reinforcement having minimum tensile strength 30kN/m in the longitudinal and transverse direction, with 10.5kN/m and 21kN/m tensile strength at 2% and 5% strain respectively in the longitudinal and transverse direction, junction efficiency not less than 95% and with 38mm X 38mm mesh opening.	91.00	Sqm	253.51	23069.41
50	Providing the Diversion by proper means i.e. In proper grade, camber and approach etc. for easy passing of traffic incl. Providing necessary sign board, making etc. as per instructions of Engineer in charge and maintaining the same during the period of work up to completion of work.	50.00	Rmt.	1122.11	56105.50
51	Providing and fixing guard stone as per I.R.C. type design including white washing etc. complete.(ii) Fixing in C.C. 1:5:10	50.00	Nos.	350.80	17540.17
52	Supplying and fixing reinforced concrete heavy duty nonpressure 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.(vii) 1200mm dia.	144.00	Rmt.	5560.01	800641.38
53	Providing and laying Pitching on slopes laid over prepared filtermedia including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications. A. Stone/ Boulder	5.00	Cum	1051.41	5257.05
			TOTAL Rs.		1,61,18,344.05

Rupees One Crore Sixty One Lakh Eighteen Thousand Three Hundred Forty Four and Paise Five Only.

It. No.	Item of Work	Qty.	Unit	Rate in Figures	Total Amount
1	2	3	4	5	6

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

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

Note :-

1. The Contractor shall exhibit a board with detailed specification and details of work as directed by the Engineer-In-Charge for which no extra payment shall be made.
2. The labour cess will be deducted as per prevailing rules i.e. 1% of the work done.
3. GST and Income tax TDS will be deducted at a source while making payments of bills.
4. In all R.C.C. Items in Rate Analysis Standard Cement Consumption has been taken as per Govt. G.R.: PRC-10/2017 Cement Consumption/16/C, Date:11/05/2017 as stated in S.O.R. therefore in R.C.C. items where there is a change as per actual mix design the cost of difference of cement consumption have been deducted from the rate of original item at the rate of input rate mentioned in all the tender.
5. **The Contractor will have to submit the all required mix design at his own cost before execution as directed and to be approved from the Engineer in charge.**
6. **Credit for dismantled materials of amount of Rs. 0.00 must be recovered from 1st R.A. bill of Contractor's.**

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

Deputy Executive Engineer
R & B Sub Division (Panchayat)
Mandvi

Sr. Divisional Account Officer
R & B Sub Division (Panchayat)
Kachchh

Executive Engineer
R & B Sub Division (Panchayat)
Kachchh