

BILL OF QUANTITIES

(A) Percentage Rate Tender (Up to INR 50 Cr.)

Item No.	Quantity	Description of Item (with brief specification and reference to book of specification)	Rate in figures	Unit	Amount
1	6.00	Job Work for Dismantalling the existing Cross Drainage structure including removing and stacking the dismantled materials as and where directed (A) R. C. C. work, Brick masonry , UCR masonry, Pipe etc. Complete as per instruction of Engineer In Charge.	2074.54	Job	12447.24
2	10925.00	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	164.82	Cum	1800658.50
3	1003.00	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.	3834.76	Cum	3846264.28
4	405.00	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 following internal daimeters.(v) 900mm dia.	3469.25	Rmt	1405046.25
5	105.00	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.	5560.00	Rmt	583800.00
6	5410.00	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	5266.72	Cum	28492955.20
7	28870.00	Providing TMT Bar FE 500D reinforcement for R.C.C. work including bending, binding and placing in position complete upto all floor	77.28	Kg	2231073.60
8	3895.00	Filling around the pipes with murrum including dressing , tampering etc. complete.	88.72	Cum	345564.40
9	2211.00	Construction of granular Sub base (Grading -I) by providing close graded material BTMC using metal 53 mm to 26.5 mm@ 27.5%, aggregate 26.5 mm to 9.5 mm @ 22.5% & 9.5 mm to 4.75 mm @ 10% and stone dust 4.75 mm & below @ 40% incl. spreading in uniform layers with motor grader on prepared surface mixing by mix in place method with Front End Loader at OMC and compacting with vibratory roller to achieve the desired density complete as as per MORTH specification.	1182.39	Cum	2614264.29
10	1910.00	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)	63.63	Sqmt	121533.30

11	4282.00	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.	90.82	Each	388891.24
12	6243.00	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	535.45	Cum	3342814.35
13	1047.00	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 of columns and Mass concrete	4069.59	Cum	4260860.73
14	264.00	Providing and Casting in situ controlled Cement Concrete M-200 for R.C.C. Raft and cut-off walls including necessary shuttering laying, vibrating, ramming and curing complete.	4660.01	Cum	1230242.64
15	244.00	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	5815.22	Cum	1418913.68
16	277.00	Providing and casting in situ ordinary cement concrete concrete M-200 for approach slab including formwork curing and finishing complete.	4263.24	Cum	1180917.48
17	3103.00	Providing and laying - Fitter Media 600mm thick directed at the back of abutments, returns and wing walls as per detailed specifications.	1298.37	Sqmt	4028842.11
18	99.00	Providing uncoursed rubble stone masonry in Cement Mortar 1:5 for flooring including curbing pointing in Cement Mortar 1:3 on exposed faces complete.	2306.48	Cum	228341.52
19	1270.00	Providing and laying rubble for Flexible apron (each stone weighting not less than 40Kg.) including and packing and filling in the interstices with quarry-spalls.	1101.22	Cum	1398549.40
20	496.00	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	5339.93	Cum	2648605.28
21	503.49	Providing and placing in position FE 500D bar reinforcement for following items including cutting bending hooking and tying complete as per detailed drawing. For well :- curb, staining, cap and RCC Raft.	73858.69	MT	37187111.83
22	114.70	Providing and placing in position FE 500D TMT. Bar reinforcement including, cutting, bending hooking and tying complete as per detailed drawings.(I) Solid Slab.(II) Deck Slab.	73243.01	MT	8400973.25
23	160.00	Providing and fixing premoulded compressible filler board in black colour conforming to MoRT&H Specifications (Clause 1015), having minimum density 95kg/cum. non-staining with less than 1% water absorption & compression recovery of 93% minimum as per specification for 20 mm wide expansion joint including cutting to required size and shape at all levels etc. complete as directed.	803.22	Sqmt	128515.20
24	588.00	Providing and applying the elastomeric joint sealant two component, high performance polysulfide formulation	258.07	Rmt	151745.16

		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			
25	588.00	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	13.06	Rmt	7679.28
26	64.00	Providing P.V.C. 100 mm diameter water spouts including necessary iron gratings as per drawings.	159.36	Each	10199.04
27	10304.00	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	181.18	Cum	1866878.72
28	539.00	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	957.48	Cum	516081.72
29	928.00	Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification	577.72	Sqmt	536124.16
30	20.00	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 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 / 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 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	3666.30	Nos	73326.00

31	282.00	Providing Yellow and Black Patta (three coat) including distempering (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.	70.88	Sqmt	19988.16
32	3125.00	Excavation for foundation up to 1.50 mt depth including sorting out and stacking of useful material and disposing of the excavated stuff up to 50 mt. lead (1) Loose or soft soil	128.78	Cum	402437.50
33	100.00	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)	2199.78	Mtr	219978.00
34	100.00	"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 treatment shall be done as per IS Standard 119 : 2015.	3934.04	Rmt	393404.00

35	150.00	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 fittings 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 treatment shall be done as per IS Standard 119 : 2015.	4286.40	Rmt	642960.00
36	150.00	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)	1512.98	Cum	226947.00
37	150.00	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.)	2482.58	Cum	372387.00
38	50.00	Grouting with C.M. 1:4 in Pitching as per drawing or as per instruction of Engineer In Charge	2917.66	Cum	145883.00
39	1400.00	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	3190.89	Sqmt	4467246.00

40	2000.00	Eproxy bonding of new concrete to old concrete	520.15	Sqmt	1040300.00
41	1200.00	Guniting concrete surface with cement mortar applied with compressor after cleaning surface and spraying with epoxy complete as per Technical specification	897.89	Sqmt	1077468.00
42	350.00	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	481.77	Nos	168619.50
43	140.00	Sealing of crack / porous concrete with Epoxy Grout by injection through nipples complete as per clause 2803.1.	761.54	Kg	106615.60
44	400.00	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 standard 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.	956.72	Per 25 Kg Bag	382688.00
45	75.00	Repair of RCC Railing (Carrying out repair of RCC M30 railing to bring it to the original shape.)	97.97	Rmt	7347.75
46	75.00	Repair of steel Railing (Repair of steel railing to bring it to the original shape)	294.92	Rmt	22119.00
47	250.00	Providing and laying Rubble stone in cement mortar 1:3 complete as per drawing and Technical specifications etc. Complete as per instruction of Engineer In Charge	3619.84	Cum	904960.00
48	175.00	Construction of precast RCC railing of M30 Grade, aggregate size not exceeding 12 mm, true to line and grade, tolerance 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.	1402.89	Mtr	245505.75
49	150.00	Providing G.I. 100 mm diameter water spouts including necessary iron gratings as per drawings.	536.02	Each	80403.00
50	5355.00	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)	83.83	Sqmt	448909.65
51	1000.00	Applying epoxy mortar over leached, honey combed and spalled concrete surface and exposed steel reinforcement complete as per Technical specification	426.22	Sqmt	426220.00

52	750.00	Replacement of Expansion Joints complete as per drawings	2171.50	Sqmt	1628625.00
53	150.00	Hire Charges for Bituminous Filter oil Fire	178.03	Hour	26704.50
54	150.00	Hire Charges for Bituminous Mixture	160.05	Hour	24007.50
55	150.00	Hire Charges for Boiler	119.83	Hour	17974.50
56	150.00	Hire Charges for Pneumatic Road Roller	560.63	Hour	84094.50
57	150.00	Hire Charges for Tendon Road Roller	560.63	Hour	84094.50
58	150.00	Hire Charges for Compressor	205.42	Day	30813.00
59	150.00	Hire Charges for Crane	706.14	Hour	105921.00
60	150.00	Hire Charges for Mech. Mixer (Extra Cost)	45.27	LS	6790.50
61	150.00	Hire Charges for Mech. Mortar Mill	31.06	LS	4659.00
62	150.00	Hire Charges for Pneumatic drill & Pavement bracker	86.19	Hour	12928.50
63	150.00	Hire Charges for Road Roller	2396.60	LS	359490.00
64	150.00	Hire Charges for Vibrator	34.24	LS	5136.00
65	150.00	Hire Charges for Vibrator Road Roller	41.08	Hour	6162.00
66	150.00	Hire Charges of required pilling Machineries	534.95	Hour	80242.50
67	150.00	Hire Charges of Surface Vibrator	51.35	Each	7702.50
68	150.00	Hydraulic Excavator 1 Cum bucket capacity @ 60 cum per hour	718.97	Each	107845.50
69	150.00	Tipper 10 tonne capacity	1.37	Tonne	205.50
70	150.00	Dozer 80 HP for spreading @ 200 cum per hour	2054.23	Hour	308134.50
71	150.00	Motor grader for grading @ 100 cum per hour	1322.41	Hour	198361.50
72	150.00	Vibratory roller 8-10 tonnes @ 100 cum per hour	850.79	Hour	127618.50
73	150.00	Hire Charges of drilling machine	278.17	Day	41725.50
74	150.00	Tractor with rotovator	209.70	Hour	31455.00
75	150.00	Bitumen emulsion pressure distributor	513.55	Day	77032.50
76	150.00	Excavator Pile Driving	855.93	Day	128389.50
77	150.00	Core Drill	1125.55	Rmt	168832.50
78	150.00	Impact Drill and Hand Socket	513.55	Day	77032.50
79	150.00	Wrench	256.78	Day	38517.00
80	150.00	Scissor Jack	256.78	Day	38517.00
81	150.00	Rail Cutting	213.97	Day	32095.50
82	150.00	Zinc Coating	5135.59	LS	770338.50
83	150.00	Diesel Generator	6419.48	Day	962922.00
84	150.00	Truck (Considering 1 Truck for 20 days @ Rs. 5000 per day)	4279.66	Day	641949.00
85	150.00	Truck Trolley (Considering 1 Truck Trolley for 20 days (8 Hours per Day Rs.245 per Hour)	1677.63	Day	251644.50
86	150.00	Design of the structure using specialised steel framing software	4.28	Kg	642.00
87	150.00	Pre Heat Boiler	85.59	Hour	12838.50
88	300.00	Engaging Bandhani for all type of work as and when required daily as directed by Engineer in Charge.	628.22	Man Day	188466.00
89	300.00	Engaging Bhisti for all type of work as and when required daily as directed by Engineer in Charge.	584.79	Man Day	175437.00

90	300.00	Engaging Blacksmith 1st Class for all type of work as and when required daily as directed by Engineer in Charge.	767.60	Man Day	230280.00
91	300.00	Engaging Blacksmith 2nd Class for all type of work as and when required daily as directed by Engineer in Charge.	676.70	Man Day	203010.00
92	300.00	Engaging Breaker for all type of work as and when required daily as directed by Engineer in Charge.	657.51	Man Day	197253.00
93	450.00	Engaging Bullock with Driver to Mortar Mill for all type of work as and when required daily as directed by Engineer in Charge.	297.34	Man Day	133803.00
94	300.00	Engaging Carpenter 2nd Class for all type of work as and when required daily as directed by Engineer in Charge.	809.01	Man Day	242703.00
95	300.00	Engaging Carpenter 2nd Class for all type of work as and when required daily as directed by Engineer in Charge.	698.92	Man Day	209676.00
96	450.00	Engaging Cowkidar for all type of work as and when required daily as directed by Engineer in Charge.	544.39	Man Day	244975.50
97	300.00	Engaging Compressor Operator for all type of work as and when required daily as directed by Engineer in Charge.	767.60	Man Day	230280.00
98	300.00	Engaging Crane Operator with Helper for all type of work as and when required daily as directed by Engineer in Charge.	948.39	Man Day	284517.00
99	300.00	Engaging Excavator for all type of work as and when required daily as directed by Engineer in Charge.	641.35	Man Day	192405.00
100	200.00	Engaging Extra labar sinking and chisselling for all type of work as and when required daily as directed by Engineer in Charge.	2612.87	Man Day	522574.00
101	300.00	Engaging Fitter for all type of work as and when required daily as directed by Engineer in Charge.	711.04	Man Day	213312.00
102	300.00	Engaging Glazier for all type of work as and when required daily as directed by Engineer in Charge.	715.08	Man Day	214524.00
103	300.00	Engaging Handcart with Mazdoor for all type of work as and when required daily as directed by Engineer in Charge.	556.51	Man Day	166953.00
104	300.00	Engaging Hole Driller for all type of work as and when required daily as directed by Engineer in Charge.	590.85	Man Day	177255.00
105	250.00	Engaging Mason 1st Class for all type of work as and when required daily as directed by Engineer in Charge.	798.91	Man Day	199727.50
106	250.00	Engaging Mason 2nd Class for all type of work as and when required daily as directed by Engineer in Charge.	697.91	Man Day	174477.50
107	300.00	Engaging Mate for all type of work as and when required daily as directed by Engineer in Charge.	514.09	Man Day	154227.00
108	350.00	Engaging Mazdoor (Female) for all type of work as and when required daily as directed by Engineer in Charge.	484.80	Man Day	169680.00
109	250.00	Engaging Mazdoor (Male) for all type of work as and when required daily as directed by Engineer in Charge.	510.05	Man Day	127512.50
110	300.00	Engaging Mistry for all type of work as and when required daily as directed by Engineer in Charge.	773.66	Man Day	232098.00
111	250.00	Engaging Painter for all type of work as and when required daily as directed by Engineer in Charge.	711.04	Man Day	177760.00

112	200.00	Engaging Plumber (Fitter) for all type of work as and when required daily as directed by Engineer in Charge.	736.29	Man Day	147258.00
113	250.00	Engaging Plumber (Fitter) Assist for all type of work as and when required daily as directed by Engineer in Charge.	598.93	Man Day	149732.50
114	200.00	Engaging Polisher for all type of work as and when required daily as directed by Engineer in Charge.	697.91	Man Day	139582.00
115	300.00	Engaging Spraymen for all type of work as and when required daily as directed by Engineer in Charge.	648.42	Man Day	194526.00
116	300.00	Engaging Supervision for Machinery for all type of work as and when required daily as directed by Engineer in Charge.	774.67	Man Day	232401.00
117	300.00	Engaging Welder for all type of work as and when required daily as directed by Engineer in Charge.	761.54	Man Day	228462.00
118	300.00	Engaging White Washer for all type of work as and when required daily as directed by Engineer in Charge.	577.72	Man Day	173316.00
119	300.00	Engaging Winch Operator for all type of work as and when required daily as directed by Engineer in Charge.	793.86	Man Day	238158.00
120	300.00	Engaging Labour for Applying Two coat of Preventive Coating on Steel per day (Painter) for all type of work as and when required daily as directed by Engineer in Charge.	632.26	Man Day	189678.00
121	400.00	Engaging Labour for Removing (Descaling) Rust & Appluig Pme Coat per day (Semi Skilled) for all type of work as and when required daily as directed by Engineer in Charge.	466.62	Man Day	186648.00
122	400.00	Engaging Semi Skill Helper for all type of work as and when required daily as directed by Engineer in Charge.	501.97	Man Day	200788.00
123	450.00	Engaging Unskelled Labour for all type of work as and when required daily as directed by Engineer in Charge.	491.87	Man Day	221341.50
124	400.00	Engaging Labour Charges - Mazdoor with Hand Cart for all type of work as and when required daily as directed by Engineer in Charge.	594.89	Man Day	237956.00
125	500.00	Engaging Helper for all type of work as and when required daily as directed by Engineer in Charge.	456.52	Man Day	228260.00
126	500.00	Engaging Labour Charges Beldar for all type of work as and when required daily as directed by Engineer in Charge.	303.00	Man Day	151500.00
127	400.00	Engaging Labour Charges - Choseler (Semi Skilled) for all type of work as and when required daily as directed by Engineer in Charge.	466.62	Man Day	186648.00
128	400.00	Engaging Applying Operator for all type of work as and when required daily as directed by Engineer in Charge.	757.50	Man Day	303000.00
129	2.00	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	28455.09	Hect	56910.18

130	3065.00	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.	114.44	Cum	350758.60
131	1876.00	Construction of granular Sub base (Grading -IV) by providing close graded material BTMC using metal 26.5 mm to 9 mm @ 64 %, 9.5 mm to 4.75 mm @ 11 %, & 4.75 mm & below @ 25% incl. spreading in uniform layers with motor grader on prepared surface mixing by mix in place method with Front End Loader at OMC and compacting with vibratory roller to achieve the desired density complete as as per MORTH specification.	1968.69	Cum	3693262.44
132	400.00	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.(iii) 600mm dia.	1968.37	Rmt	787348.00
133	6500.00	Providing & laying priming coat with emulsion SS-1 grade and spraying emulsion with spray set fitted on mechanical bouzer using emulsion at the rate of 7.5 Kg./10 Sqm. On WMM surface incl. cleaning the surface etc. complete.	81.97	Sqmt	532805.00
134	299.00	Providing and laying 20 mm thick Mix seal surface with B.T. aggregate as per M.O.R.T. & H. gradaion and specification with asphalt of Grade VG-30 for mixing at the rate of 5.09% i.e. 50.9 Kg/ M.T. by weight of total mix of asphalt & for tack coat at 2.5 kg/10 sq.mt. including heating & mixing in continuos batch 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 contractor's own machineries, hot mix plant and paver finisher etc. complete.	3742.08	MT	1118881.92

135	120.00	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 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.	3540.12	Nos	424814.40
136	60.00	Cautionary Warning Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 90 x 90 x 90 cms. equilateral triangle as per design of IRC-67-2012. Pre treated with phosphating process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ; reflectorised with 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	3906.18	Nos	234370.80

137	30.00	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 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; 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. (B) Class-B Type-4 Retro Reflective sheeting	3518.68	Nos	105560.40
138	30.00	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 phosphating process & acid etching; coated withone coat 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 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	9867.07	Nos	296012.10

139	120.00	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	3711.75	Nos	445410.00
140	30.00	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 phosphating 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 block of 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	9585.24	Nos	287557.20

141	30.00	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	9148.15	Nos	274444.50
142	300.00	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.	217.40	Nos	65220.00
143	345.00	Road marking with hot applied thermoplastic paints with reflectorising glass beads on bitumin surface providing and laying a hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250gms per sqm area, thickness of 2.5mm is excluding of surface applied glass beds as per IRC:35-2015. The finished surface to be level, uniform and free from streaks and holes. zebra patta /bump patta lane/center line/ edge line/cut patta. The white color marking should provide liminance coefficin et on cemend road 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	367.72	Sqmt	126863.40

		retlecinty shall be two years.Warranty for retro reflectivity shall be for two year			
144	1061.02	Demolation and disposal of unserviceable materials with all lead & lift. (ii) Un reinforced cement concrete	974.66	Cum	1034133.75
145	1131.00	Excavation in large boulders and soft rock by welding including shoring, strutting and dewatering as necessary and disposing of the excavated stuff as directed.	750.68	Cum	849019.08
146	173.00	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.	3378.92	Cum	584553.16
147	36.00	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.	450.07	Rmt	16202.52
148	2175.00	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.	4325.03	Cum	9406940.25
149	50.00	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 where necessary laying, vibrating, curing and finishing complete.	5452.76	Cum	272638.00
150	195.57	Providing and casting in situ controlled cement concrete M-300 for R.C.C. solid slab including centering, scaffolding, curing and finishing complete.	5652.12	Cum	1105385.11
151	26.09	Providing and casting in situ controlled cement concrete M-300 for RCC Crash Barrier including curing and finishing complete.	5014.16	Cum	130819.43
152	253.00	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.	3748.97	Cum	948489.41
153	68.99	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.	5604.25	Cum	386637.21
154	58.32	Providing and casting in -situ controlled cement concrete M-300 for approach slab.	5462.41	Cum	318567.75
155	36.00	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.	341.29	Nos	12286.44
156	36.00	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.	399.70	Nos	14389.20
157	35.00	Providing 12 mm thick pre-moulded asphalt filler joints as per drawing.	703.53	Sqmt	24623.55

158	140.00	Providing and fixing tar papper bearing ,shall be provided between abutment / pier cap and RCC slab	111.10	Sqmt	15554.00
159	30.00	Providing flood gauge marks on sub structure as per design including painting complete.	174.98	Rmt	5249.40
160	356.00	Wall painting (three coats) with Plastic emulsion paint of approved brands like Apex or equivalante and manufacture on undecorated wall surfaces to give an even shade including thoroughly brushinf the surface free from mortar droppings and other foreign matter and sand paped smooth. (Black & White Strip)	132.00	Sqmt	46992.00
					161207909.46

(Rs. SIXTEEN CRORES TWELVE LACS SEVEN THOUSAND NINE HUNDRED NINE AND PAISE FORTY SIX 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 /ourtender works out as under.

Estimated amount put to tender

Estimated amount put to tender

Deduct.....% below

Add.....% Above

Net

Net