

item_code	description	uom_name	quantity	rate
1	Clearing and grubbing road land including uprooting rank vegetation, grass, bushes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, including removal and disposal of top organic soil not exceeding 150 mm in thickness complete as per specifications . II. By mechanical Means:A. In area of light jungle. MORTH Specification No. 201 including all lead & lift and as per the directions of Engineer Incharge of work.	Ha	35.96	20,725.00
2	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with Disposal. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 Km and complete as per specifications.MORTH Specification No.301 including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	17875.00	46.00
3	Excavation in Hard Rock (blasting prohibited) Excavation for roadway in hard rock (blasting prohibited) with rock breakers including breaking rock, loading in tippers and disposal and trimming bottom and side slopes in accordance with requirements of lines, grades and cross sections complete as per specifications. B. Manual Method. MORTH Specification No. 301 including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	250.00	682.00
4	Construction of Embankment with Material deposited from Roadway cutting. KSRRB M300-54. Construction of embankment with approved material deposited at site from roadway cutting and excavation from drain and foundation of other structures graded and compacted to meet requirement of Table 300-2 complete as per specifications.which includes , watering charges & compaction by vibratory roller) MORTH Specification No. 305 including all lead & lift and as per the directions of Engineer Incharge of work.	cum	17875.00	66.00
5	Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications. (Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305 including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	17332.50	302.00
6	Construction of sub-grade and earthen shoulders with approved material Gravel/Murrum with all lifts & leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of Table No. 300-2 complete as per specifications (including cost of earth, watering charges & compaction by vibratory roller compaction by vibratory roller to 97% of proctors density) MORTH Specification No. 305 including all lead & lift and as per the directions of Engineer Incharge of work.	cum	129109.08	331.00
7	Dismantaling of Flexible Pavements Dismantaling of Flexible pavements and disposal of dismantaled materials up to a lead of 1000 meters, stacking servicable materials separately including all labour, hire charges of all machineries, complete (dismantaled materials to be transported mechanically) II by Mechanical Means A Bituminous course including all lead & lift and as per the directions of Engineer Incharge of work.	cum	9922.50	255.00
8	Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, spreading in uniform layers with motor grader on prepared surface, mixingby mix in place method by rotavator at OMC, and compacting with vibratory power roller to achieve the desired density, complete as per specifications. B. By Mix in Place Method. - For Grading III Material including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	64618.13	1,353.00
9	Wet Mix Macadam (WMM) Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 WMM_Grade-1 including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	36343.28	1,668.00

10	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 including all lead & lift and as per the directions of Engineer Incharge of work.	Sqm	131015.24	26.00
11	Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with sensor paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen including all lead & lift and as per the directions of Engineer Incharge of work..	Cum	18850.10	6,770.00
12	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Chapter 5, including all lead & lift and as per the directions of Engineer Incharge of work.	Sqm	262030.48	12.00
13	Providing and laying bituminous concrete (BC) 40mm thick with hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 Using 40-60 TPH capacity HMP with sensor Paver, Gr-I (50-65mm) with 5.2 % of modified bituminus binder consisting of 4.78% VG- 30 bitumen (60/70 grade) and 0.42% Plastomeric Thermoplastics (Waste plastic), including all lead & lift and as per the <u>directions of Engineer Incharge of work.</u>	Cum	6732.18	7,599.00
14	Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.. MORTH Specification No. 601 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	3574.12	3,761.00
15	Cement Concrete Pavement :- Construction of un- reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 25mm and down size graded granite metal coarse aggregate with superplastisizer at 3lts conforming to IS 9103- 1999 reaffirmed 2008, (Coarse and fine aggregate conforming to IS:383) mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. MORTH Specification No.602. - - with M40 @ 420 Kg/cum Cement, C.A, 0.67 cum, F.A. 0.44 cum & as per the directions of Engineer Incharge of work.	Cum	8220.48	7,166.00

16	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803& as per the directions of Engineer Incharge of work.	Sqm	7284.90	512.00
17	Reinforced cement concrete M-15 Grade kilometre stone of standard design as per IRC:8-1980, fixing in position including painting and printing etc complete as per specifications including additional M-15 concrete pedestal of 0.2mt. height above G.L. MORTH Specification No. 804 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Nos.	22.00	2,083.00
18	Reinforced cement concrete M-15 Grade Hectometer stone of standard design as per IRC:26-1980, fixing in position including painting and printing etc complete as per specifications. including additional M-15 concrete pedestal of 0.2mt. height above G.L. MORTH Specification No. 804 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Nos.	105.00	620.00
19	Boundry Pillar:- Reinforced cement concrete M-15 grade boundry pillars of standard design as per IRC:25-1967, fixed in position including finishing and lettering but excluding painting complete as per specifications.MORTH Specification No. 806, including all lead & lift and as per the directions of Engineer Incharge of work.	Nos	105.00	422.00
20	Providing and fixing RCC name board of size 1.35xk0.60x0.04 mtrs fixed in reinforced cement concrete poles of size 0.10x0.10x2.60mtrs in cement concrete M 20 proportion using 20mm and down size graded metal machine mixed with 10mm dia main steel bars and 8mm dia stirpes as shown in drawing. The board shall be provided with 12mm thick cement plaster in cement mortar 1:3 on both the sides. The poles shall be embedded in the ground for a depth of 0.5 mtrs with cement concrete M 10 proportion. The board shall be fixed as per the drawing and at the place indicated by the Engineering charge of the work. The cost includes excavation, cost of all materials, cost of steel, centering, transportation charges, fixing charges etc., The work shall be carried out as per the detailed specifications, drawings ,including all lead & lift and as per the directions of Engineer Incharge of work.	Nos.	4.00	4,950.00
21	Road Delineators: Supply and Installation of Vertical Delineators having wide angle cube corner micro prismatic non metallic reflective sheeting confirming to Type XI of IRC 67:2012 with white and Red Colour combination having minimum of retroreflective exposed area of 125 Sq CM on Top Slots & 35 Sq CM on Bottom Slots and no edges shall be exposed for tampering. This tubular delinator shall have a core and shell construction, shell shall be made of tough, high impact resistant, injection molded, thermoplastic outer body & the inner core shall consist of power coated or painted Mild Steel of minimum thickness 1.0 mm & core-shell structure shall be of height not less than 800 mm above the ground and width not less than 80mm. The metallic core of the delineator shall extend 300mm beyond the shell length from bottom for installaing in the ground. The extended portion of the metallic core having suitable slots to be fixed in M20 grade cement Concrete of Size 300x300x400 MM with suitable anchoring rods for enhancing the grip as per IRC 79 Specifications & including all lead & lift and as per the directions of Engineer Incharge of work.	Nos.	22.00	2,075.00

22	<p>Road Studs: Supply and Installation of Moulded Shank Raised Pavement Markers made of polycarbonate and ABS (Acrylonitrile Butadiene Styrene) moulded body and reflective pannels with micro prismatic lens capable of providing total internal reflection of light entering the lens face and small support of load of 16000 Kg tested in accordance to specifications of Category A of MORTH Circular No RW/NH33023/10-97-DO III dt. 11.06.1997. The height, width, length shall not exceed 50mm, 100mm, 102 mm and with a minimum reflective area of 13Sqcm on each side and the slope to the base shall be 35 degree. The strength of detachment of the integrated cylindrical shanks, (of diameter not less than 19 mm and height not less than 30mm) from the body is to be a minimum value of 500kg. 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 manufacturer's recommendations and complete as directed by the engineer with 2 years warrenty for the reflectivity from the original manufacturer is mandatory along with necessary test certifications from the certified laboratory shall be submitted with seal and signature in originals,including all lead & lift and as per the directions of Engineer Incharge of work.</p>	Nos	10461.00	339.00
23	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimun 0.30 thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.900 mm Equilateral Triangle-Type XI &including all lead & lift and as per the directions of Engineer Incharge of work</p>	Nos.	10.00	5,185.00
24	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimun 0.30 thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.600 mm Equilateral Triangle-Type XI ,including all lead & lift and as per the directions of Engineer Incharge of work</p>	Nos.	8.00	4,166.00

25	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.600 mm Circle- Type XI & as per the directions of Engineer Incharge of work.</p>	Nos.	6.00	4,732.00
26	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.600mm x 800 mm - Type XI & as per the directions of Engineer Incharge of work.</p>	Nos.	10.00	5,486.00
27	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.600mm x 450- Type XI ,including all lead & lift and as per the directions of Engineer Incharge of work.</p>	Nos.	10.00	4,109.00

28	<p>Retro-Reflectorised Traffic Signs - Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to 600 MM Circle type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 mm thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier.900 mm Octagon Stop Board-Type XI ,including all lead & lift and as per the directions of Engineer Incharge of work</p>	Nos.	6.00	7,564.00
29	<p>Direction and Place Identification Signs upto 0.9 sqm Size Board:- Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 mm thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier,including all lead & lift and as per the directions of Engineer Incharge of work.</p>	Sqm	20.00	8,104.00
30	<p>Direction and Place Identification Signs with size more than 0.9 sqm Size Board:- Manufacturing, supply and installation of retro- reflectorised cautionary, mandatory and informatory signboards made out of cube corner micro prismatic grade sheeting confirming to type XI standards of IRC :67:2012 specifications & fixed over 4 mm thick aluminium composite panel sheet having minimum 0.30 mm thick aluminium skin on both sides & fixed over a support frame of 25x25x3 mm MS angle and mounted on 75mm dia OR 75x75x6mm Mild steel angle of total height 2.70m with clear height of not less than 2.10 m from the ground level to the bottom of the sign board & 60 cm below ground level. The sign post should be painted with one coat of red oxide paint and white colour with brands of 30 cm height alternatively firmly fixed to the ground by means of foundation with M20 grade cement concrete of 45 cm x45 cm x 60 cm including cost & conveyance of all materials, equipment, machinery & labour with all leads and lifts, loading charges necessary for satisfactory completion of the work as directed by engineer in charge. 10 years warranty for retro reflective sheeting from the original sheeting manufacturer as per clause 6.9 in IRC 2012 & a certified copy of three years outdoor exposure report from an independent test lab for the product offered shall be obtained from the supplier ,including all lead & lift and as per the directions of Engineer Incharge of work.</p>	Sqm	10.00	13,902.00

31	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. II. By Mechanical Means :A. Cement Concrete Grade M-15 & M-20.MORTH Specification No. 202,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	1708.33	429.00
32	Excavation for Structures. Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom, backfilling the excavation earth to the extent required and utilising the remaining earth locally for road work complete as per specifications.B. Mechanical Means (i) Depth upto 3 m. MORTH Specification No. 304 ,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	22581.80	48.00
33	Removal of Unserviceable Soil with Disposal Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301 ,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	22581.80	37.00
34	Plain cement concrete M10 mix with crushed stone aggregate 40 m nominal size mechanically mixed, placed in foundation and compacted by vibration including curing complete as per specifications MORTH Specification No. 408 ,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	783.06	4,434.00
35	Design mix M20 with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplasticiser @3lts conforming to IS9103-1999 Reaffirmed-2008 - i) Upto 5 m height ,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	2232.85	6,571.00
36	TMT/MS Bar Reinforcement Supplying, fitting and placing TMT bar reinforcement in sub-structure complete as per drawing and Technical Specifications complete as per specifications MORTH Specification No.1600 & 2200 - TMT Bars Fe 500 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Tonne	254.89	70,124.00
37	Brick masonry work in 1:3 in sub-structure complete excluding pointing and plastering, as per drawing and Technical Specifications complete MORTH Specification No. 1300 & 2200 as per specifications ,including all lead & lift and as per the directions of Engineer Incharge of work.	cum	69.83	11,828.00
38	Plastering with cement mortar (1:3) on brick work in substructure as per Technical Specifications, complete as per specifications MORTH Specification No. 1300 & 2200 ,including all lead & lift and as per the directions of Engineer Incharge of work.	sqm	310.50	136.00
39	Providing floating coat of cement to plastering and finishing smooth, including cost of materials, labour, curing complete as per Specifications ,including all lead & lift and as per the directions of Engineer Incharge of work.	sqm	4419.30	19.00
40	Supplying Unplasticised PVC pipes conforming to IS 15328:2003 with latest amendments ended with integral sockets with ISI mark and conveying to worksite, rolling and lowering into trenches, laying true to line and level and perfect linking at joints, testing and commissioning, including loading and unloading at both destinations and cuts of pipes wherever necessary including jointing of UPVC pipes (with cost of elastomeric sealing rings) and specials (excluding cost of specials) with jointing of approved type,with all labour, with all lead & lift including encasing the pipe around to a depth of not less than 15cms with soft gravel or selected earth available from the excavation etc. complete and giving necessary hydraulic test to the required pressure as per ISS (contractor will make his own arrangements for procuring water for testing) .Supply and Fixing - 110 mm dia Pipe ,including all lead & lift and as per the directions of Engineer Incharge of work.	m	917.70	302.00

41	Providing and laying in position precast Reinforced cement concrete slab of 100 mm thick made out with M25 grade reinforced cement concrete with 20 mm and down size graded granite metal coarse aggregate at 0.7 cum and fine aggregate at 0.47 cum and 340 kg OPC cement and super plastisizer at 3 per cum including providing 8mm dia TMT bar both top and bottom at 100 mm c/c in both directions and slabs in standard steel mould (width of slab should not exceed 60cm) including cost of transportation of all materials to work spot, loading and unloading, curing and handling charges etc complete ,including all lead & lift and as per the directions of Engineer Incharge of work.	sqm	5478.40	1,602.00
42	Providing and fixing of Precast RCC Grating with frame 500 x 450 mm with horizontal gratings including all lead & lift and as per the directions of Engineer Incharge of work.	Nos	690.00	806.00
43	Providing and fixing of MS Grating -260*260 mm (Vertical) ,including all lead & lift and as per the directions of Engineer Incharge of work.	each	230.00	89.00
44	Plain / Reinforced cement concrete in sub-structure complete as per drawing and Technical Specifications complete as per specifications MORTH Specification No.1500,1700 & 2200 M15 with OPC cement @ 240kgs, with 40mm and down size graded granite metal coarse aggregates @0.63cum and fine aggregates @ 0.42cum a) upto 5mtr height, including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	226.53	6,238.00
45	Providing and Laying Reinforced cement concrete pipe NP4 prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications.MORTH Specification No. 2900- 1200 mm dia , including all lead & lift and as per the directions of Engineer Incharge of work.	m	225.00	11,247.00
46	Providing and Laying Reinforced cement concrete pipe NP4 prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cleaned sieved approved Sand cement mortar 1:2 including curing cost of all materials labours, loadings, unloading, lead, lift, transporting etc complete Using NP4-900 mm Dia including all lead & lift and as per the directions of Engineer Incharge of work.	m	117.00	7,090.00
47	Providing and Laying Reinforced cement concrete pipe NP4 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 - 1000 mm dia , including all lead & lift and as per the directions of Engineer Incharge of work.	m	360.00	10,256.00
48	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregates @ 0.459cum, machine mixed,concrete laid in layers not exceeding 15 cms. thick, well compacted, for coping. Including cost of all materials, labour, HOM of machinery, curing complete as per specifications ,including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	462.35	5,293.00
49	Providing and laying Non Pressure NP-4 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc.complete work. 600 mm Dia ,including all lead & lift and as per the directions of Engineer Incharge of work.	m	27.00	2,883.70
50	Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification MORTH Specification No. 2504 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	217.00	1,453.00
51	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 MORTH Specification No. 2504 ,including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	426.2134	1,375.00

52	Providing and laying in position design mix M30 with OPC cement @ 360kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregates @ 0.46cum, with superplastisiser @3lts conforming to IS9103-1999 Reaffirmed- 2008 - i) Upto 5m height ,including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	1126.76	6,991.00
53	Providing weep holes in Brick masonry / Plain / Reinforced concrete abutment, wing wall / return wall with 100 mm dia AC pipe, extending through the full width of the structure with slope of 1V :20H towards drawing face. Complete as per drawing and Technical Specifications complete as per specifications MORTH Specification No.2706 & 2200 ,including all lead & lift and as per the directions of Engineer Incharge of work.	m	126.00	168.00
54	Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 30 mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications,including all lead & lift and as per the directions of Engineer Incharge of work.	Sqm	13353.60	878.00
55	Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M-20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 400.8 complete as per specifications. B. Using Concrete Batching and Mixing Plant MORTH Specification No.408, including all lead & lift and as per the directions of Engineer Incharge of work.	m	15065.60	330.00
56	Cast-in-Situ Cement Concrete M 20 Kerb with Channel. Construction of cement concrete kerb with channel with top and bottom width 115 and 165 mm respectively, 250 mm high in M-20 grade PCC on M-10 grade foundation 150 mm thick, kerb channel laid with kerb laying machine, foundation concrete laid manually, all complete as per Clause 400.8 complete as per specifications. A. Using Concrete Mixer MORTH Specification No.408, including all lead & lift and as per the directions of Engineer Incharge of work.	m	15065.60	738.00
57	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, I with materials, labour complete as per specification ,including all lead & lift and as per the directions of Engineer Incharge of work.	Sqm	3629.440	60.00
58	Construction of Median and island with Soil taken from Borrow Areas. Construction of Median and island above road level with approved material deposited from borrowpits, spread, sloped and compacted as per Clause 400.7 complete as per specifications. MORTH Specification No. 407 including all lead & lift and as per the directions of Engineer Incharge of work.	Cum	8080.64	197.00
59	Planting and maintenance of permanent hedges Planting permanent hedges including digging of trenches Planting permanent hedges including digging of trenches, 60 cm wide and 45 cm deep, refilling the excavated earth mixed with farmyard manure, supplied at the rate of 4.65 cum per 100 metres and supplying and planting hedge plants at 30 cm apart including cost of all labour, material, lead and lift, hire charges of machineries, transportation etc. complete including all lead & lift and as per the directions of Engineer Incharge of work.	Rmt	6848.00	194.00
60	Planting and maintenance of permanent hedges (b) Maintenance of hedge for one year including watering manure checks, pesticides, cost of all material, labour, lead, lift hire charges of machineries, transportation etc, complete including all lead & lift and as per the directions of Engineer Incharge of work.	Rmt	6848.00	134.00
61	Planting and maintenance of Flowering Plants and Shurbs Planting amd maintenance of flowering plants and shrubs in central verge including watering, spreading manure, spraying pesticides, cost of all material, labour lead, lift, hire charges of machineries, transportation etc. complete and as per the directions of Engineer Incharge of work- AT Centre Verge	Km	3.424	58,800.00

62	Maintenance of flowering plants and shrubs in central verge for one year including watering, spreading manure, pesticide treatment, replacing damaged plat shrubs, including cost of all labour, material, lead, lift, hire charges of machineries, transportation etc, complete & as per the directions of Engineer Incharge of work. AT Centre Verge	Km	3.424	139,000.00
63	Planting of Trees and their maintenance for One Year Planting of trees by the road side (Avenue Trees) in 0.60 m dia holes, 1 mter deep dug in ground, mixing the soil with decayed farm yard/sludge mannure, planting the saplings, backfilling the trench, watering, fixing the tree guard and maintaining the plants for one year including watering, spreading manure, pesticide treatment replacing damaged plants shrubs etc. complete including cost of all labour, material, lead, lift, hire charges of machineries, transportation etc. complete & as per the directions of Engineer Incharge of work.	each	700.000	69.00