## MUNICIPAL CORPORATION OF GREATER MUMBAI Name Of Work : FOR ROAD WORKS AND BEAUTIFICATION Gateway of India

	MAIN SUMMARY	
		IR4
SR.No.	DESCRIPTION OF ITEM	AMOUNT
1	ROAD WORKS AND BEAUTIFICATION AND GARDENNING WORK	14,23,01,645.99
2	Electrical	2,18,61,608.00
	TOTAL AMOUNT	16,41,63,254.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
		FOR ROAD WORKS AND BEAUTIF	ICATION			
1	R2-CS-EW-3	Excavation for foundation, substructures, basements, tanks, sumps, walls, chambers, manholes, trenches, poles, pits & general building works in soft/disintegrated rock, sandstone, stiff clay, gravel, cobblestone, hardlaterite, water bound macadam, wet mix macadam, asphalt mix carpet of any type, pitching, soling, paths and hardcore, lime concrete, plain cement concrete, stone masonry and all types of brick/block masonry below ground level, rock boulders, etc. for depths/lifts upto 1.5M measured from the ground level, including dressing/trimming the sides, leveling of bottoms, manual dewatering, removing rank vegetation, back filling in layers not more than 200 mm thickness, watering, consolidating, compacting to achieve not less then 97% Modified Proctor density conforming to relevant IS, stacking in measurable heaps for future use within owners space or disposing within an initial lead of 150 m as directed, loading, unloading, leveling excluding shoring, strutting etc. complete as directed by Engineer-in-Charge. Note:	6,167.00	₹ 500.00	cu. mtr.	₹3,083,500.00
2	R2-RW-2-23	Providing and laying sub-base made up of metal obtained from rock having AIV of not more than 40% (metal varying in size from 90 mm to 45 mm) and compacting the same to 7.5 to10 cm thick & to the satisfaction of the engineer, laid complete in one layer to the required level and camber, rolling with 10/12 tonnes roller, interstices being filled in with stone dust, watering, rolling and/ making the layer water bound as per prevailing MCGM specifications for Roadworks Clause no.220. (VOLUMETRIC MEASUREMENTS TO BE RECORED BY LEVELS ONLY)	3,246.00	₹ 2,110.00	cu. mtr.	₹ 6,849,060.00
3	R2-CS-RF-7-B-FAIR	Leak-proof Shuttering for Encasement: Providing, fabricating & fixing the leak-proof shuttering made with marine plywood / M.S. sheets with proper supports at all locations for all shapes etc., for encasement & deshuttering the same after specified period or next day of placing the microconcrete / concrete. Providing & applying approved oil on all surfaces of formwork coming in contact with concrete as per specification. Walls (any thickness) including attached butteresses, retaining wall, shear wall, diaphragm wall etc.	3,691.00	₹ 558.00	sq. mtr.	₹ 2,059,578.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
4	R2-RW-10-32	Providing and laying Dry Lean Concrete base including providing coarse and fine aggregate to the specified gradation using minimum cement content 150kg/cum of concrete with OPC43 grade cement,mixing of concrete as per approved design mix using mechanised batch mix plant of appropriate capacity,transportingandlayingwithselfpropelledpav erwithelectronicsensordeviceandcompactingwithvibr atoryrollerofminimum80-100KN static weight to give desired compacted densityandaveragecompressivestrength of 10MPa at7days and curing with liquid curing compound and sprinkling waterandcoveringwithmoisthesianclothorpondingof waterfor7daysincludingprovidingconstructionjoints, i ncludingallmaterial,labour,machinery with all leads and lifts etc.complete as specified and as directed by the Engineer. B) Laying by paver with electronic sensor device	128	₹4,481.00	Cum	₹573,568.00
5	R2-RW-10-56	Extra over to use sleep form paver to lay Pavement Quality Concrete as per Morth specifications & as directed by the Engineer. NOTE: THIS ITEM SHOULD BE OPERATED ONLY AFTER SPECIFIC SANCTION OF DIR (E.S.& P.)	102	₹ 391.00	Cum	₹ 40,038.40
6	R2-RW-10-51	Providing and fixing of Water Dished Channel size:600x300x80mm, M-40 grade manufactured in vacuum wet press technology plant with excellent finish and sharp edges inclusive of excavation in any soil except rock, laying of leveling course of M-15 grade RMC 100mm thick to required slope (inclusive of form work) jointing in 1:2C:M. prop.flush to concrete surfaces as directed (Watertables shall be procured from MCGM registered agencies).	250.00	₹799.00	Rmt	₹ 199,750.00
7	FAIR RATE ITEM	Providing and laying the stone pavement Grey basalt natural stone flooring of 400mm x 400mm x 150mm thickness (ie 16'' x 16'' x 6'' thick) with exposed surface (natural quarry texture) machine cut (smooth) and sides Sawn (smooth) Thickness Tolerance: +/- 5mm. Length/Width Tolerance: +/- 5mm.using cement mortar bedding minimum 75 thick in CM(1:6), including machine cut (smooth) and sides Sawn (smooth) in straight lines and right angles, facets and shape as directed, carting to the site and including all lifts and leads to the point of placing, to correct line and level in joints as directed and as shown in drawing, including curing the same for 4 days, etc complete.	774.34	₹ 13,517.00	Sqm	₹ 10,466,686.20

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
8	FAIR RATE ITEM	Providing and fixing all sides 30mm <b>Basalt natural</b> stone Cladding size 600 x 1200mm 38m radius Edge to be perpendicular to the circumference both edges as specified below of approved quality, pattern, colour and thickness for cladding machine cutting, leveling, smooth cement plastering along the sides to match the existing surface in cement mortar1 :3, filling the joints with neat cement or pigment mixed with cement, cutting for as directed, cleaning, finishing, curing etc complete as directed by Engineer In Charge	325.49	₹7,589.00	Sqm	₹2,470,136.02
		Basalt for kerb				
9	FAIR RATE ITEM	Providing and fixing basalt Kerb stone size and shape (900x450x200)mm including cement mortar bedding of 25mm thk. In 1:3 proportion, cement float, levelling, smooth cement fixing in block with white washing etc. complete Kerb Edges to be cut to match road profile curve	144.00	₹16,261.00	RMT	₹2,341,584.00
10	FAIR RATE ITEM	Providing and fixing basalt Kerb stone size and shape (900x300x200)mm including cement mortar bedding of 25mm thk. In 1:3 proportion, cement float, levelling, smooth cement fixing in block with white washing etc. complete Kerb Edges to be cut to match road profile curve	821.59	₹ 15,871.00	RMT	₹ 13,039,454.89
11	R2-RW-10-60	Providing and fixing of the precast kerb stone of height 325mm, base width 165mm, top width 115mm in M20 grade RMC supplied through MCGM approved plant or concrete mixed with use of weigh batch mixers as detailed in drawing u/No.Dy.Ch.E./Rds/93 /E.S. of 17 / 8 / 2005 , excavation in any soil except rock, laying a levelling course of M15 grade RMC 100mm thick, to required slope (inclusive of form work) jointing in C.M.1:2 proportion flush to concrete surface, painting exposed surface with one coat of primer and two coats of 1st grade road marking paint in the yellow/ white/ black or any shade as directed. (Kerbstones shall be procured from MCGM registered agencies).	224	₹ 605.00	RMT	₹ 135,447.40
12	R2-CS-CW-6-B	Providing precast cement concrete Jali of Nominal Mix 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement: 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.	11.00	₹ 1,736.00	Sqm	₹ 19,096.00
13	R2-CS-EW-26	Providing & Laying dry stone Rubble Soling with average 230 mm size hard stone set in regular lines, handpacked and interstices thoroughly filled with small chips including filling in with good quality murum brought from outside,compacting with iron rammers, watering, sand spreading 12mm thk. layer of grit on top etc complete as directed by Engineer In Charge. (Note: The rate includes the royalty and other taxes if any)	1,620.41	₹2,231.00	Cum	₹ 3,615,128.26

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
14	R2-CS-CW-1-b	Nominal Mix of 1:2:4 (1 cement OPC: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	583.24	₹ 6,821.00	cu. mtr.	₹ 3,978,280.04
15	R2-CS-CW-18	Designing, providing and laying in any position, without usage of vibrator, ready mixed design mix Self Compacting Cement Concrete (SCC) of required grade for Form Finished reinforced cement concrete work in super structure at all floor levels, using cement & fly ash, content as required including transportation of concrete through transit mixer to site of laying for all leads, all floor levels, pumping of concrete to site of laying but excluding the cost of centering, shuttering, including admixtures conforming to IS 9103 as per designed proportions to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. The Mix design as per particular specifications shall be got approved by Engineer-in-Charge before execution of the item. The rate shall include cost of all specified materials and operations , but exclude the cost of centering, shuttering and reinforcement which shall be paid under relevant item.	302.00	₹9,266.00	cu. mtr.	₹2,798,332.00
	R2-CS-CW-22-a	M-30 Grade SCC				
16	R2-CS-CW-35-c	Providing and fixing in position Steel bars reinforcement of various diameters for R.C.C. pile, pile caps, footings,raft,retaining wall,shear wall, lift wall,foundations, slabs, beams, columns, canopies,staircases, newels, chajjas, lintels, pardies,coping, fins, arches, etc. as per detailed designs,drawings and bar bending schedules,including straightening, cutting, bending, hooking the bars, binding with wires or tack welding, supporting as required etc. all complete at all levels. Thermo-Mechanically Treated steel bars. (Fe 500 D)	36.00	₹76,770.00	metric tonne	₹ 2,763,720.00
17	R2-SWD-176-A	Providing & Fixing 1.20m X 0.60m clear internal size of M.S. Galvanised hinged type grating and frame (weighing minimum 130 kg) of grade HD20, with minimum 75 microns zinc coating by hot dipped galvanising the MS grating and frame as per IS 2629. (The contractor shall furnish the certificate of galvanising from the Galvaniser.) incuding testing ,inspection of material sample and finished product as per IS standards and as per Standard Specification no SP-SWD-3 and as per standard drawing , etc complete as specified & as directed by Engineer in Charge	16.00	₹17,084.00	each	₹ 273,344.00
18	R2-RW-7-32	Providing and placing in position, levelling, fixing M 25 Grade R.C.C. pre-cast frame of size 1150 x 1150 x 150 mm and cover (2 Nos) of size 1000mm x 500mm x 75mm in line, level over storm water drain as per design procured from approved manufacturer etc. complete	1,237.00	₹ 2,896.00	set	₹ 3,582,352.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
19	R2-RW-4-03	Removing existing kerb stones, cleaning off old mortar, carting away up to a distance of 2 K.M. and stacking the same as directed by the Engineer.	210.00	₹ 32.00	running mtr.	₹ 6,720.00
20	R2-RW-1-13	Levelling, watering & rolling by vibratory roller weighing not less than 10 tonnes & preparing the ground to the required grade & camber etc. complete as specified and as directed by the Engineer as per prevailing MCGM specifications for Roadworks.	4,848.00	₹ 9.83	sq. mtr.	₹ 47,655.84
21	R2-RW-2-21	Providing & laying, spreading & compacting specified crushed stone in granular subbase course including premixing the material in mechanical mixer (pugmill or approved type), spreading of mixed material in uniform layer of 100 mm to 75mm (compacted thickness each) with motor grader or paver on prepared murum surface & compacting with 10 tonne vibratory roller to achieve desired density including all material ,labour ,machinery ,lighing barricating to all lifts & lead maintenance of diversion etc. complete (metal gradation from 75 mm to 75 mm micron as per MCGM Road Specifications clause no.210).	65.00	₹ 2,547.00	cu. mtr.	₹165,555.00
22	R2-CS-MW-4	Brick work with common burnt clay modular bricks of class designation 3.5 and above in superstructure above plinth level upto floor five level in all shapes and sizes in :				
	R2-CS-MW-4-a	Cement mortar 1:3 (1 cement : 3 coarse sand)	30.00	₹ 7,153.00	Cum	₹ 214,590.00
23	R2-RW-2-20	Providing & laying, spreading & compacting graded crushed stone agreegate to wet mix macadam satisfaction including premixing the material with water to OMC in mechanical mix (pugmill) carriage of mix material by tipper to site laying in uniform layer of 75 mm to 100 mm (compacted thickness each) with sensor paver finisheron prepared subbase & compacting with vibratory roller (10tonne) to achieve desired density including lighing, guarding barricating & maintenance of diversion etc. as directed by the Engineer, (Rebate for not using sensor paver should be taken, (metal gradation from 53 mm to 75 mm micron as per MCGM Road Specifications clause no.240).	33.00	₹ 2,937.00	cu. mtr.	₹96,921.00
24	FAIR ITEM RATE	Removing, Stacking and <b>Re-installing of Existing</b> <b>Basalt cobble stone 150mm thick</b> pavement in 1:6 CM on cushion of sand 20mm thick on 10cm thick M10 CC Bedding including filling in joints with 1:2 CM & Cement pointing & curing etc. complete.	1,738.00	₹ 2,776.00	sq. mtr.	₹ 4,824,688.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
25	R2-RW-7-29	Excavation and dismantling of structures on roadway, shifting and relocating of essential utilities, street poles, signals road sign boards including taking necessary permission from the service providers/authorities including payment of necessary deposits and supervision charges, shifting charges etc.complete as directed by Engineer-in- charge. a) Street Poles	50.00	₹ 1,229.00	nos.	₹ 61,450.00
26	R2-RW-7-08	Breaking & removing existing cement concrete slab over culvert copping etc., by any means etc. complete as directed	128.00	₹ 1,315.00	Cum	₹ 168,320.00
		Breaking of concrete Road				
27	R2-SE-5-9-c	Providing, Laying and Jointing 250mm dia (OD) HDPE pipes of PE-80 grade and PN-6 class with butt joints etc.complete as specified and directed	189.00	₹ 2,232.00	running mtr.	₹ 421,848.00
28	R2-RW-10-11	Cutting of construction & dummy joints of M-35 C.C. & above slab by mechanical means with in 10to16hrs. Of casting of bay / slab as directed. A)transverse dummy joints 100mm deep/1/3 thickness of concrete pavement &6mm wide.	396.00	₹ 59.00	running mtr.	₹ 23,364.00
29	R2-RW-10-13	Providing & fixing in position premoulded Asphalt filler 12mm thick confirming to I.S. 1838 of 1983 for placing of the expansion joint, around manholes & water entrances, etc put to the required depth & 25 mm below the camber,etc. complete as directed	40.00	₹ 352.00	sq. mtr.	₹ 14,080.00
30	R2-RW-10-14	Providing & placing 5mm thick thermocole in dummy & construction joint simmediately after cutting of joints & removing the same before dressing of dummy & construction joints etc. complete , as directed.	40.00	₹76.00	sq. mtr.	₹ 3,040.00
31	R2-RW-10-15	Providing & fixing high density polythene pipe of approved quality to fit around the dowel bars of 32 mm dia at the end of expansion joints, fully greased inside, cotton waste the pipe around the dowel bars & the pipe duly capped at the end as directed. (H.D.P.pipe shall be 30cm in length)	210.00	₹31.00	nos.	₹ 6,510.00
32	R2-RW-10-16	Providing & fixing in position mild steel tie bars of 12 mm dia 55 cm long & 45 cm C/C whenever directed including handling, wrapping with paper for half length, fixing, straightening, wastage etc. complete in all respect as directed.	1.00	₹63,226.00	metric tonnes	₹63,226.00
33	R2-RW-10-17	Providing & fixing in position M.S. dowel bars of 32mm dia 55 cm long & 30 cm C/C whenever directed including handling, fixing, etc. complete(no extra payment will be made for applying bitumen & grease to dowel bars).	1.00	₹ 62,904.00	metric tonnes	₹ 62,904.00
34	R2-RW-10-19	Providing & constructing cement vatas in CM (1:10) at 0.6m *0.6m c/c/admeasuring 0.09m at bottom,0.04m at top & 0.075m deep & maintaining the same throughout 14 days curing & removing the same thereafter as directed.	42.00	₹ 78.00	sq. mtr.	₹3,276.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
35	R2-RW-10-23	Dressing of M35 & above new C.C. pavement, dummy, transverse, longitudinal & expansion joints with hot rubberised sealing compound confirming to IS1834 -1984 after proper cleaning with compressed air, applying required primer & providing a layer of lime powder over hot sealing compound etc. complete as directed. A) Sealing 6 mm wide dummy/transverse joints with a depth of 100mm/ 1/3rd thickness of concrete pavement.	396.00	₹92.00	running mtr.	₹ 36,432.00
36	R2-RT-16-32	Providing and applying hot applied thermoplastic road marking material with glass beads extremely high skid resistance 2.5mm thick with primer coat ( tack coat) on asphalt road surface. All labour materials with special aggregates etc, as specified in B.S. part-I & II 1989 and carrying out the marking on any road on center line and other lane marking continuous for intermittent 10cm or 15cm width and also pedestrian crossings stripes as well as spraying further quality of glass beads of type II uniformly into a mono layer on to the hot paint line in quick succession of the paint spraying operation @ 250gms per sq.mt. area as directed and as per B.S./M.O.S.T. specification in White /Yellow colour.	555.00	₹727.00	sq. mtr.	₹ 403,485.00
37	R2-RT-16-34	Supplying / fixing of Two Way Raised Pavement Markers made of polycarbonate moulded body and reflective panels with micro prismatic lens capable of providing total internal reflection of the light entering the lens face and shall support a load of 13635 kg tested in accordance to ASTM D 4280 Type H and complying to Specifications of Category A of MORTH Circular No RW/NH/33023/10 -97 – DO III Dt 11.06. 1997 . The minimum reflective area of 13 SqCm on NOS side and the slope to the base shall be 35 +/- 5 degree. Fixing will be without nails but by using epoxy resin based adhesive as per manufacturer's recommendation including site clearance etc and NOS 427 complete as directed by the engineer.'	2,100.00	₹ 427.00	nos.	₹896,700.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
38	R2-RT-16-18	Direction Board – Providing, Fabricating, Erecting on site Direction Board (of type 3SA2) (small-2) As per the design incorporated in the catalogue of street Furniture published by M.C.G.M., Vertical pole shall be ISMC-350. Signage plaque (box) shall be of size 1200mm x 2400mm made of ISMC 100mm and bracing of MS angle 50mm x 50mm x 6mm, covered with 3 mm aluminum sheet / F.R.P. Sheet on both sides, the box assembly; shall be fixed to the vertical pole. The box shall be pasted with HIGH INTENSITY GRADE retro reflective base sheets on both sides conforming to I.R.C. 67 CODE. Letters or signages to be pasted on this box shall also be of HIGH INTENSITY GRADE (up to 50% of basic area) conforming to I.R.C. 67 CODE. The reflectivity of sheet shall have guarantee of 7 years. The reflection count shall not be less than 90% of its original reflection after 7 years. The vertical poles shall be provided with 20 mm dia 6 nos. hold fasts embedded in 1:2:4 CC foundation of size 1500 mm x 1500mm as shown in drawing (3F-A1.1).	0.00	₹37,751.00	nos.	₹ 0.00
		The assembly shall be treated with RustIcide solution of approved company and applied with Polyurethane primer and Paint to resist rusting of material (the treatment shall be given as per				
39	R2-SWD-57	Providing 12 mm thick cement plaster in cement mortar 1:2 including neat cement rendering with approved water proofing compound (with a proportion as specified by the manufacturer per bag of cement) as specified & as directed by Engineer in Charge.	188.00	₹271.00	sq. mtr.	₹ 50,948.00
40	R2-CS-PN-5	Providing and applying first single coat of approved primer and two coats of acrylic plastic emulsion paint of an approved make and colour as per manufacturers specifications to any surface, at all height and locations as directed including scaffolding, cleaning and preparing surfaces for painting by any approved means etc. complete as directed by Engineer-in-charge.	156.00	₹126.00	sq. mtr.	₹ 19,656.00
41	R2-CS-FL-44	Providing and fixing all sides polished natural stone as specified below of approved quality, pattern, colour and thickness for door and window frames / architraves including preparing the surface and levelling in the desired line, machine cutting, jointing in approved adhesives, leveling, smooth cement plastering along the sides to match the existing surface in cement mortar, filling the joints with pigment mixed with cement, cleaning, finishing, curing etc complete as directed by Engineer In Charge.	14.00	₹744.00	Rmt	₹10,416.00
	R2-CS-FL-44-c	With Lakha Red granite				

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
42	R2-CS-AW-01	Providing and fixing in position two track aluminum window of extruded modular and anodized aluminum sections of approved make and of size 61.85 mm x 45.5 mm x 1.3 mm thk (wt 1.055 kg/Rm) for bottom, 61.85 mm x 31.75 mm x 1.3 mm thk. (wt 0.659 kg/Rm) for top & sides, mounted on anodized aluminum rectangular frame of size 63mm x 38mm x 2.0mm(1.054). The shutter comprising of bearing bottom and top of size 40mm x 18 mm x 1.25 mm thk (wt. 0.417 Kg/Rm) Interlocking section of size 40mm x 26,7 mm x 1.10 mm thk. (Wt. 0469 kg./Rm) and hand sides of 40mm x 18mm x 1.25 mm thk (wt. 0.417kg/Rm) with 5 mm thick plain / frosted / tinted glass fixed in shutter including approved quality neoprene gasket, fixtures, fastenings and accessories like PVC rollers, PVC weep holes, locks, handles etc. complete as directed by Engineer In Charge. (Note: anodic film must not be less than 15 microns i.e. AC- 15 as per IS, the anodizing must be scaleted by keeping the anodized section in boiling de-anodized water for a period of one hour)	6.00	₹5,266.00	Sqm	₹31,596.00
43	R2-CS-FL-04	Providing and laying rough natural stone tiles 25 mm to 30 mm thick of an approved quality and size for paving / flooring including cement mortar bedding of 25 mm thick in 1:4 proportion, cement float, pointing in cement mortar 1:3, cutting, dressing, leveling, jointing, pointing, curing, finishing etc complete as directed by Engineer In Charge.				
	R2-CS-FL-04-e	Provisional Qty	18.00	₹ 2,445.00	SQM	₹ 44,010.00
44	R2-CS-RW-09-d	Colour Coated Galvalume/zincalume Crimp Curve up to 900mm wide	20.00	₹ 471.00	Rmt	₹ 9,420.00
45	R2-CS-RW-16	Providing and fixing UV resistant selffit UPVC pipes of approved make for Rainwater downtakes confirming to IS 13592:1992 Type A suitable for 4kg/sqcm pressure for following pipe diameters including rain water receiving recess with pvc plug bend necessary fittings such as offsets shoes, fixing the pipes on wall with clips filling the joints with solvent/cement and necessary scafolding etc. complete as directed by Engineer In Charge.				
	R2-CS-RW-16-b	100mm dia	10.00	₹ 406.00	Rmt	₹ 4,060.00
46	R2-CS-WW-17	Providing and fixing superior quality factory made phenol bonded solid core single leaf flush commercial door shutter of thickness as mentioned below and of approved make conforming to IS: 2202 (Part I, II) with 12mm thk. teak wood lipping all around, 3mm thk. commercial veneer on external face with three coats of french polish and 150mm x 60 mm or 125 mm x 75 mm C.P. teak wood frame with glazed fanlight with 4mm thk. glass including bright finished or black enameled mild steel butt hinges, approved fixtures, fastening, hooks, eyes, screws and painting the frame and interior side with one coat of primer, putty and two coats of synthetic enamel paint of approved make and colour etc. complete as directed by Engineer in charge.	5.00	₹7,032.00	Sq.M.	₹ 35,160.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
	R2-CS-WW-17-c	35mm thick shutter	• •			
47	R2-RW-10-28	Supply & filling Sand Metal, GRAVELLY SAND, corresponded to CLASS II/ CLASS III GRADING of TABLE 100.1 of MCGM road specifications for roadworks in trenches upto required depth & watering, ramming etc. complete as directed.	349.72	₹ 1,905.00	cu. mtr.	₹666,218.51
48	R2-SWD-36	Cutting down completely RCC slab, walls, beams , columns, arches, piles, pile caps of any thickness and or size of any height / depth by any means below or above ground level including cutting down steel reinforcement, removing and stacking them properly as directed etc.complete, as specified & as directed by Engineer in Charge.	231.39	₹ 1,588.00	cu. mtr.	₹ 367,448.16
49	R2-RW-10-18	Providing & laying water proof paper of 40 GSM including overlap (to be not less than 10cm) etc. complete as specified as directed.	558.00	₹ 11.00	sq. mtr.	₹ 6,138.00
50	R2-CS-FL-78	Providing and laying 20-25mm average thick granite stone laid with knife edge joints over c.m. bedding of 1:6, for flooring/ skirting/ dado, with cement float and grout of same colour of the stone. The granite flooring shall be mirror polished. Basic rate to be considered @ Rs.2000/- per sq.m. for cut size.	100.42	₹4,259.00	SqM	₹ 427,688.78
51	R2-CS-FL-01	Providing and laying polished natural stone as specified below (Machine cut) of an approved quality and size for paving /flooring in plain and/or diamond /approved pattern including cement mortar bedding of 25 mm thick in 1:4 proportion, cement float, machine cutting, dressing, leveling, jointing, filling the joints with neat cement slurry or with required pigment, machine polishing at site, curing, finishing, etc complete as directed by Engineer In Charge.	333.42	₹ 1,187.00	SqM	₹ 395,774.29
	R2-CS-FL-01-a	25 to 30 mm thk. Shahbad stone of size 0.6m x 0.6m				
52	FAIR RATE ITEM	Supplying and fixing of Extraa clear Toughened glass 3'x8' panel with CP finish (12 mm + Sentry + 19mm) fixed in in-situ stone sleeves (excluding stone sleeve cost) with necessary fixtures and required coating complete in all aspects in silicon packing	78.00	₹ 110,840.00	Nos	₹8,645,520.00
53	FAIR RATE ITEM	Cutting of 1/2"holes	156.00	₹ 259.00	NOS	₹ 40,404.00
54	FAIR RATE ITEM	Cutting of 1" holes	156.00	₹ 432.00	NOS	₹ 67,392.00
55	R2-RW-7-04	Demolishing existing masonry ,structures ,(above&belowG.L.) & carting away serviceable materials toward chowky & stacking the same separately, as directed.(Actual Volume of the masonry will be paid.)	336.00	₹708.00	cum	₹ 237,888.00
56	R2-CS-PS-168	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				

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57	R2-CS-PS-168-b	150 mm dia. R.C.C. pipe	10.00	₹ 473.00	Rmt	₹ 4,730.00
58	R2-CS-PS-168-c	250 mm dia. R.C.C. pipe	10.00	₹813.00	Rmt	₹ 8,130.00
59	R2-CS-PS-168-d	300 mm dia. R.C.C. pipe	10.00	₹866.00	Rmt	₹ 8,660.00
60	R2-CS-PS-168-e	450 mm dia. R.C.C. pipe	10.00	₹ 1,197.00	Rmt	₹ 11,970.00
61	R2-CS-PS-168-f	500 mm dia. R.C.C. pipe	10.00	₹ 1,536.00	Rmt	₹ 15,360.00
62	R2-CS-PS-168-g	600 mm dia. R.C.C. pipe	250.00	₹ 1,808.00	Rmt	₹ 452,000.00
63	R2-CS-PS-168-M	900 mm dia. R.C.C. pipe	12.00	₹ 3,140.00	Rmt	₹ 37,680.00
64	R2-RW-6-05	Raising or lowering rectangular manholes to the required level upto 30cm including all materials, formwork ,brickwork and with 16cm thick M-15 cement concrete coping under frame & cover of manhole including curing etc. complete, as specified and as directed.	10.00	₹ 2,297.00	Each	₹22,970.00
65	R2-CS-PS-197	P/F R.C.C. cover on inspection chamber of size 90 cm x 45 cm. and 50 mm. thick, etc., directed.	10.00	₹ 1,856.00	Each	₹ 18,560.00
66	SSR 21-22 Item No. 6.12	Road Marking with Hot Applied Thermoplastic Compound with Reflectorizing Glass Bead son Bituminous Surface-Providing and laying of hot applied thermoplastic compound 2.5mm thick including reflectorizing glassbeads @250gms per sqm area ,thickness of 2.5mm 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.	163.00	₹ 666.00	Square Meter	₹ 108,558.00
67	FAIR MARKET RATE	Providing and applying Cold plastic paint two component rolled on surfacing material solvent free,high build two pack seamless,tough,skid resistant,material with has property of attaining 2.00mm thickness in single coat application white(or as required colour )based on gla ss and colour retaining acralic cross linking resin system for loured road surfacing including surface cleaning and cost of all material etc. complete. (All-inclusive on bitumen or concrete surface) work shall carried out as per IRC 3 5-2015 clause 2.2) based on following design pattern.	365.50	₹1,321.00	SQM	₹ 482,825.50

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
68	R2-CS-CW-7	Providing and laying in position ready mixed design mix M-20 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying and the cost of centering, shuttering, finishing and excluding reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.The Mix design as per particular specfications shall be got approved by Engineer-in-Charge before execution of the item.The rate shall include cost of all specified materials and operations at all levels and heights, including the cost of centering, shuttering and and excluding reinforcement which shall be paid under relevant item.(Note :- Cement content considered in this item is @ 300 kg/cum as per IS 456 table showing minimum cement content. No extra will be paid nor any amount will recovered on account of variation of cement in mix design as per specifications for controlled concrete). All works				
	R2-CS-CW-7-a	Foundations, footings, bases of columns	43.51	₹7,515.00	CUM	₹ 326,977.65
69	R2-CS-CW-7-c	Slabs, Suspended floors, roofs, landings, balconies, canopy and access platform	165.73	₹11,790.00	CUM	₹ 1,953,968.49
70	R2-CS-CW-7-e	Columns, Pillars, Piers, Posts and Struts.	1.80	₹ 11,184.00	CUM	₹ 20,115.54
71	R2-CS-CW-17	Extra and over for providing richer RMC of M-30 grade cement concrete instead of M20 (Note :- Cement content considered in this item is @ 340 kg/cum as per IS 456 table showing minimum cement content.)	1.80	₹532.00	CUM	₹ 956.86
72	R2-RW-3-06	Removing, cleaning off old mortor & carting away blue stone pavement upto a distance of 3 Km. & stacking the same neatly as directed. Dismantling of Existing Paver Blocks	2,375.28	₹41.00	SQM	₹ 97,386.48
73	FAIR RATE ITEM SSR 21-22 Item No 33.68	Providing&fixing in position 30 mm thick machine cut, mirrorpolished, 1st quality granite cladding such as black galaxy or approved equivalent for waterbody installed in approved pattern and design of size 600 x 1200mm/600 x 2100 and as directed including backingcoat of 1:3 cement plaster of required thickness with stainless steelfasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with with matching pigments. The rate toinclude all curing, polishing at all lift and levels.	1,159.08	₹8,564.00	SQM	₹9,926,361.12

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
74	FAIR RATE ITEM SSR 21-22 Item No 33.68	Providing&fixing in position 30mm thick machine cut, mirrorpolished, 1st quality granite cladding such as black galaxy Size 600 x 2100mm or approved equivalent for waterbody installed in approved pattern and design of size 600 x 1200mm and as directed including backingcoat of 1:3 cement plaster of required thickness with stainless steelfasteners cleats etc. The joint between the granite slabs to be filled white cement mixed with with matching pigments. The rate toinclude all curing, polishing at all lift and levels. Outer face to be watercut, to be matched with the curve of 40m radius. Leather Finish	370.95	₹9,324.00	SQM	₹ 3,458,737.80
75	R2-ME-6-2-ac	Submersible Pump set of 7.5 H.P. three phase electric motor Discharge: 510 lpm at 20 m head to 240 lpm at 62m head Pump body: Cast Iron, Impeller: Noryl, Shaft SS410 Pump delivery diameter 50 mm.	4.00	₹61,331.00	NOS	₹245,324.00
76	R2-CS-PS-225-b	Providing, fixing and testing heavy quality gun metal or brass ball valve with screwed ends 20kgm class on GI or copper pipe lines(Leader/ZOLOTO make) 20 mm (3/4") dia.	46.00	₹ 678.00	NOS	₹31,188.00
77	R2-CS-PS-86	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.	2,917.00	₹ 405.00	RMT	₹ 1,181,385.00
	R2-CS-PS-86-b	20 mm nominal outer dia Pipes				
78	R2-ME-6-2-af	Submersible Pump set of: 7.5 H.P. three phase electric motor Discharge: 1200 lpm at 21 m head to 240 lpm at 60 m head Pump body: Cast Iron, Impeller: Noryl, Shaft SS410 Pump delivery diameter 100 mm.	5.00	₹61,331.00	NOS	₹306,655.00
79	R2-CS-PS-85	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.	50.00	₹810.00	Rmt	₹ 40,500.00
	R2-CS-PS-85-f	50 mm nominal outer dia Pipes				
80	R2-CS-PS-225-f	Providing, fixing and testing heavy quality gun metal or brass ball valve with screwed ends 20kgm class on GI or copper pipe lines (Leader/ZOLOTO make) 50 mm (2") dia.	12.00	₹ 2,906.00	Nos	₹ 34,872.00
81	FAIR RATE ITEM	SS316L 16 Gauge thick Header line Diversolution tank for distribution of Glass water fall- SS316L-4''x 3' x 4 nos with coupling and welding	9.00	₹ 31,255.00	Nos	₹ 281,295.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
82	FAIR RATE ITEM	Providing and fixing reinforced cement concrete tree grating of size 90 cm x 90 cm x 15mm with frame etc. complete. Heavy duty (225 Kilogram)	10.00	₹ 1,995.00	Nos	₹ 19,950.00
		Glass water fall, 70 meter without glass				
83	FAIR RATE ITEM	Supply, Installation and Testing Single jet glass nozzles 1/4 "BSP Make (Balaji or equivalent) (Brass) - 1 nozzle per inch - 36 nozzles per glass - 36 x 78(number of glass)	2,808.00	₹200.00	NOS	₹ 561,600.00
84	FAIR RATE ITEM	Supply, Installation and Testing SS316L Header Line 25MM - 16 Gauge pipes with Drillings and Taping. 900MM length	78.00	₹ 20,562.00	NOS	₹ 1,603,836.00
85	FAIR RATE ITEM	Supply, Installation and Testing SS 316 L Wire mesh with 100mm dia x300mm depth suction to pump (filter)	9.00	₹ 13,566.00	NOS	₹ 122,094.00
86	FAIR RATE ITEM	Supply, Installation and Testing Skimmer SS 316 L at the top of submersible pump 316 with wire mesh 3'x25"x4'	9.00	₹ 45,486.00	NOS	₹ 409,374.00
87	FAIR RATE ITEM	Supply, Installation and Testing Mist Nozzles 1/2" (brass) - Make Balaji or equivalent	462.00	₹ 1,929.00	NOS	₹891,198.00
88	FAIR RATE ITEM	Supply, Installation and Testing SS316 L Header Line 50MM Pipe 16 Gauge with 1/2 inch coupling weld on it- nozzle every 6"	23.00	₹ 55,860.00	NOS	₹ 1,284,780.00
89	FAIR RATE ITEM	Supply, Installation and Testing SS316 L Header Line Diversolution tank for distribution of mist fountain	5.00	₹ 31,255.00	NOS	₹ 156,275.00
90	FAIR RATE ITEM	Supply, Installation and Testing SS316L - Nut Bolt with washer for Foundation of pump -16mm - 4 for each pump	80.00	₹ 599.00	NOS	₹ 47,920.00
91	FAIR RATE ITEM	Supply, Installation and Testing SS316L -pipe 16 Gauge for mist fountain - 50MM dia	90.00	₹ 5,187.00	RMT	₹ 466,830.00
92	FAIR RATE ITEM	Supply, Installation and Testing SS316L -pipe 16 Gauge for mist fountain - 100MM dia	70.00	₹ 11,106.00	RMT	₹777,420.00
93	FAIR RATE ITEM	SS 316L Flange-2mm thick - 300mm wide with expansion joint approx. every 10'	70.00	₹ 3,990.00	RMT	₹279,300.00
94	FAIR RATE ITEM	SS 316 L angle 1"x4" 4mm thk runner 12" width with 2holes-2mm dia for glass patch fitting - attached with steel plate - 32mm wide- 4mm thk - all welding joints- grinded and buffed	312.00	₹ 8,778.00	NOS	₹ 2,738,736.00
95	FAIR RATE ITEM	SS 316L Plate - 4mm thk- with 1"angle fold @edge. Plate to have 20 no(20mm dia)+1 no(28mm dia) cutouts	312.00	₹ 1,995.00	NOS	₹ 622,440.00
96	FAIR RATE ITEM	SS 316L Flange- 150 x 90mm - 2mm thick - Allen key fixed with expansion joint approx. every 10'	140.00	₹ 2,394.00	RMT	₹ 335,160.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
97	FAIR RATE ITEM	Providing, detailing, and fabricating as per specifications, transporting to site and erecting Manual Retractable Gate / Ornamental Entrance Gates Width of gate: 6000 mm Height of gate:2400 mm (FROM GROUND LEVEL) Opening direction: left/right ( only one sided operated MATERIAL OF GATE : 2.0 MM HOLLOW TUBES(SS 304) SQUARE OR ROUND Seizor channel type :- collapsible mechanism Distance between pol to pol :- 420mm ,Main bottom rollers: double set inner outer dual boll baring hassle free wheels,(SKF/Bosch) 40 mm*40 mm groove customized wheel especially in house, developed with ball-bearing for smooth operation and long life operation,Guide wheel: nylon wheel mounted on both side of CHANNEL ARM. Wheels: especially designed wheels Polyurethane(made by casting aluminum and special rubber, 2000000 times tested without abrasion Anti- wind hooks: prevent the gate overturn by strong wind. Surface finish FOR MASTER CONTROLLER	2.00	₹ 383,700.00	NOS	₹ 767,400.00
		HOUSING : SS 304 18 GUAGE sheet complete as directed by Engineer In Charge.				
98	GW-1-6-B-3	Excavation for Trees (Transplantation)				
		Excavation for Transplanting Trees on Hard surface: Excavating the ground in the Concrete/ masonry/ asphalt/ hard rock for transplanting the tree to the desired location, with required machinery. Tree to be lifted with roots & replaced in fresh soil. Making trench at suitable distance away from the stem based on age of the plant in a circular fashion to a sufficient depth to remove the ball of earth & applying fungicide on cut portion.				
		Tree Girth upto 0.6 M or more	10.00	₹815.00	NOS	₹ 8,150.00
99	GW-1-7	Soil Restoration (Excavation and Storage) Existing Topsoil to be excavated for restoration to a depth of 200 mm (not more than 400 mm) and separated from subsoil debris and stones larger than 50 mm diameter to be stockpiled to a height of 400 mm in designated area. Stockpiled topsoil to be protected from erosion during storage by installing earthern berms/solid walls/temporary grass plantation/covering with mulch/ plastic sheets. Stockpiled topsoil to be protected with sand bags/solid walled enclosures (2 feet high) on all sides for containment.Appropriate drainage channels to be dug around the storage area to prevent flooding of the top soil storage area as instructed by engineer incharge.	286.43	₹83.00	SqM	₹ 23,773.69
100	GW-2-5-A	Plantation: Shrubs				

Image: Planting Shrubbery on Soft/Hard surface: Pliting Red Hill Earth & Gow Dung Maurue in the excavated area mixing in 2:1 proportion, watering, and planting after every watering before planting the shrub, leveling, providing and planting ransport and industing apper specified variety and sizes, planting agenetic distances, maintaining for 1 month after completion of plantation and replacement of casualtics till 1 month. Filling good garden soil mix with manure (Fine Dessing Develong, Metering, Maintance Planting Shrubs (Labour, transport and unloading) (Excluding cost of plant)     109.9.4     ₹ 409.94     \$ 166,050.80       101     GW-2.8.A     Plantation These on Soft/Hard surface (Individual); Filling Trees on Soft/Hard surface (Individual); Filling in 2:11 proportion, watering eost of plant)     10.00     ₹ 519.00     Nos     ₹ 519.00       101     GW-2.8.A     Plantation in the excavated pits in the excavated pits in the excavated pits in the excavated pits in the group intex with distances. Achieving finished grade level. Flanting the arecord high of 2° and minimum height of 10 above missibel level appendix of specified variety, at desired distances. Achieving finished grade level. Flanting the appendix proparation of frec basis, whereing & maintaining for 1 month after completion of plantation and replacement of casualtics till 1 month.     10.00     ₹ 519.00     Nos     ₹ 21.482.25       102     GW-2.11     Sold Restoration (Plantation and replacement of casualtics till 1 month.     286.43     ₹ 75.00     SpM     ₹ 21.482.25       103     GW-4.1-3     GARDEN EQUIPMEN	Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
Planting Trees on Soft/Hard surface (Individual): Filling of Red Hill Earth, Cow Dung Manure & good earth from excaveted pit in the excavated pits mixing in 2:1:1 proportion, watering & providing well grown trees with minimum average girth of 2" and minimum height of 10' above finished level after plantation of specified variety, at desired location & at specified distances. Achieving finished grade level. Planting the tree with appropriate anchoring, leveling the top soil surface as specified after plantation, staking to balance the tree. Including transport to the site & planting, preparation of tree basin, watering & maintaining for 1 month after completion of plantation and replacement of casualties till 1 month.   10.00   ₹ 519.00   NOS   ₹ 5,190.00     102   GW-2-11   Soil Restoration (Plantation in Storage) Providing and planting good quality lawn suckers of Cynodon dactylon with necessary bed preparation over the restored soil bedes on site and apply water to the mix for the period of two weeks, sowing the lawn suckers at 75mm c/c in stagered fashion wherever required, rolling the surface to have a uniform level to avoid water stagnancy and then maintaining the same till well established until the site is ready for soil reuse.   286.43   ₹ 75.00   SqM   ₹ 21,482.25     103   GW-4-1-4   LDPFE extension tube 8 mn. minimum thickness 1 mm.   500.00   ₹ 9.00   Mtr   ₹ 9,00.00     104   GW-4-1-f   LDPFE extension tube 8 mn. minimum thickness 1 mm.   500.00   ₹ 9.00   Mtr   ₹ 4,500.00		b	Hill Earth & Cow Dung Manure in the excavated area mixing in 2:1 proportion, watering, weeding after every watering before planting the shrub, leveling, providing and planting well grown, healthy, bushy shrubs including transport and unloading as per specified variety and sizes, planting at desired location and specified distances, maintaining for 1 month after completion of plantation and replacement of casualties till 1 month. Filling good garden soil mix with manure (Fine Dressing),Leveling,Weeding,Maintenance,Planting Shrubs (Labour, transport and unloading) (Excluding	409.94	₹ 409.94	SqM	₹ 168,050.80
Filling of Red Hill Earth, Cow Dung Manure & good earth from excaveted pit in the excavated pits mixing in 2:1:1 proportion, watering & providing well grown trees with minimum average girth of 2" and minimum height of 10" above finished level after plantation of specified variety , at desired location & at specified location & at specified after plantation, staking to balance the tree. Including transport to the site & planting , preparation of tree basin, watering & maintaining for 1 month after completion of plantation and replacement of casualite still 1 month.10.00₹ 519.00NOS₹ 5,190.00102GW-2-11Soil Restoration (Plantation in Storage) Providing and planting good quality lawn suckers of Cynodon dactylon with necessary bed preparation over the restored soil beds on site and apply water to the mix for the period of two weeks, sowing the lawn suckers at 75mm c/c in staggered fashion whereever required, rolling the sarface to have a uniform level to avoid water stagnancy and the maintaining the same till well established until the site is ready for soil reuse.286.43₹ 75.00SqM₹ 21,482.25103GW-4-1-4LLDPE extension tube 8 mm, minimum thickness 1 mm.500.00₹ 18.00Mtr₹ 9,000.00105GW 4-1-4'LLDPE extension tube 8 mm, minimum thickness 1 mm.500.00₹ 9,00Mtr₹ 4,500.00	101	GW-2-8-A	Plantation: Trees				
Providing and planting good quality lawn suckers of Cynodon dactylon with necessary bed preparation over the restored soil beds on site and apply water to the mix for the period of two weeks, sowing the lawn suckers at 75mm c/c in staggered fashion whereever required, rolling the surface to have a uniform level to avoid water stagnancy and then maintaining the same till well established until the site is ready for soil reuse.   286.43   ₹ 75.00   SqM   ₹ 21,482.25     GARDEN EQUIPMENT AND Accessories		a	Filling of Red Hill Earth, Cow Dung Manure & good earth from excaveted pit in the excavated pits mixing in 2:1:1 proportion, watering & providing well grown trees with minimum average girth of 2" and minimum height of 10' above finished level after plantation of specified variety , at desired location & at specified distances. Achieving finished grade level. Planting the tree with appropriate anchoring, leveling the top soil surface as specified after plantation, staking to balance the tree. Including transport to the site & planting , preparation of tree basin, watering & maintaining for 1 month after completion of plantation and	10.00	₹519.00	NOS	₹ 5,190.00
Cynodon dactylon with necessary bed preparation over the restored soil beds on site and apply water to the mix for the period of two weeks, sowing the lawn suckers at 75mm c/c in staggered fashion whereever required, rolling the surface to have a uniform level to avoid water stagnancy and then maintaining the same till well established until the site is ready for soil reuse.   286.43   ₹ 75.00   SqM   ₹ 21,482.25     GARDEN EQUIPMENT AND Accessories	102	GW-2-11	Soil Restoration (Plantation in Storage)				
103   GW-4-1-a   Poly Tube 16 mm.RD. CL III as per IS:12786   500.00   ₹ 18.00   Mtr   ₹ 9,000.00     104   GW-4-1-f   LLDPE extension tube 8 mm. minimum thickness 1 mm.   500.00   ₹ 9.00   Mtr   ₹ 4,500.00     105   CW 4.2 b   In line DRIP Line 16mm. 2 lph.to 4 lph. 30 cms.class   500.00   ₹ 25.00   Mtr   ₹ 12.500.00			Cynodon dactylon with necessary bed preparation over the restored soil beds on site and apply water to the mix for the period of two weeks, sowing the lawn suckers at 75mm c/c in staggered fashion whereever required, rolling the surface to have a uniform level to avoid water stagnancy and then maintaining the same till well established until the site is ready for soil	286.43	₹75.00	SqM	₹ 21,482.25
104   GW-4-1-f   LLDPE extension tube 8 mm. minimum thickness 1 mm.   500.00   ₹ 9.00   Mtr   ₹ 4,500.00     105   GW 4.2 b   In line DRIP Line 16mm. 2 lph.to 4 lph. 30 cms.class   500.00   ₹ 25.00   Mtr   ₹ 12.500.00			-				
104 GW-4-1-f mm. 500.00 ₹ 9.00 Mtr ₹ 4,500.00   105 CW 4.2 b In line DRIP Line 16mm. 2 lph.to 4 lph. 30 cms.class 500.00 ₹ 25.00 Mtr ₹ 12.500.00	103	GW-4-1-a	Poly Tube 16 mm.RD. CL III as per IS:12786	500.00	₹ 18.00	Mtr	₹ 9,000.00
	104	GW-4-1-f		500.00	₹ 9.00	Mtr	₹ 4,500.00
	105	GW-4-2-b		500.00	₹ 25.00	Mtr	₹ 12,500.00
106     GW-4-2-d     Dripper 4 lph./8 lph. Regulated. IS:13487     1,000.00     ₹ 4.00     NOS     ₹ 4,000.00	106	GW-4-2-d	Dripper 4 lph./8 lph. Regulated. IS:13487	1,000.00	₹ 4.00	NOS	₹ 4,000.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
107	GW-4-3-a	Foggers 4 way assembly with low/high LPD -20 to 30 Lph.	25.00	₹163.00	NOS	₹ 4,075.00
108	GW-4-5-a	Foam Bubble/ Geyser jet fitted on universal ball joint	1.00	₹ 5,914.00	NOS	₹ 5,914.00
109	GW-4-5-b	SS 304 Framed mesh cover	1.00	₹ 16,936.00	NOS	₹ 16,936.00
110	GW-4-5-c	Monobloc Submersible Pump	1.00	₹ 66,128.00	NOS	₹ 66,128.00
111	GW-4-5-d	IP 68 TYPE Plrogramable submersible Lights	1.00	₹ 30,579.00	NOS	₹ 30,579.00
112	GW-4-5-e	Fabricated MS powder coated control panel	1.00	₹ 25,404.00	NOS	₹ 25,404.00
113	GW-4-5-f	Necessary G.I / PVC plumbing pipes, fittings , valves	1.00	₹ 50,809.00	SET	₹ 50,809.00
114	GW-4-5-g	Necessary electrical cabling	1.00	₹ 42,340.00	NOS	₹ 42,340.00
115	GW-4-5-h	Spot Light	40.00	₹ 1,882.00	NOS	₹ 75,280.00
116	GW-4-6-h	40mm. Compression joiner	20.00	₹ 209.00	NOS	₹ 4,180.00
117	GW-4-6-i	40mm. Compression tee	20.00	₹ 315.00	NOS	₹ 6,300.00
118	GW-4-6-j	40mm. Compression end	20.00	₹ 146.00	NOS	₹ 2,920.00
119	GW-4-6-l	Screen filter Y type 2.5" metal - 40 Cumh. IS:12785	1.00	₹ 10,459.00	NOS	₹ 10,459.00
120	GW-4-6-n	Pressure gauge 2" gly. Filled	2.00	₹ 567.00	NOS	₹ 1,134.00
121	GW-4-7-j	Media filter as above with full automation 3" horizontal IS:14606	1.00	₹ 122,925.00	NOS	₹ 122,925.00
122	GW-4-8-b	Control valve made of rigid pvc. compound compact double union type with nitrile rubber o ring, ptfe seat ring, solvent weld - 75 mm.	5.00	₹ 7,229.00	NOS	₹ 36,145.00
123	GW-4-8-h	4" pop up Plastic Rotor : heavy duty commercial grade for parks & garden , 1" female inlet, exposed dia- 2", discharge rate - 1.59 to 6.4 cumh. radius of coverage 16 to 21 mtrs. recommended pressure 3 kg./sq.cm to 6.9 kg./sq.cm., nozzle trajectory - 25 deg. small exposed heavy duty rubber cover, four elbow swing joints & check valve	20.00	₹ 3,468.00	NOS	₹ 69,360.00
124	GW-4-8-j	Plastic Spray pop up 2" to 4" riser & 3 mtrs. to 9mtrs. multi stream nozzle: heavy	20.00	₹ 1,277.00	NOS	₹ 25,540.00
125	GW-4-9-c	UPVC. Pipe:ISI marked - IS 4985 50 mm. 6 kgf.	150.00	₹ 76.00	Mtr	₹ 11,400.00
126	GW-4-9-g	UPVC. Pipe:ISI marked - IS 4985 63 mm. 8 kgf.	150.00	₹ 159.00	Mtr	₹ 23,850.00
127	GW-4-10-a	Elbow 50 mm	25.00	₹ 39.00	NOS	₹ 975.00
128	GW-4-10-b	Elbow 63 mm	25.00	₹ 66.00	NOS	₹ 1,650.00
129	GW-4-10-f	Tee 50 mm	25.00	₹ 52.00	NOS	₹ 1,300.00
130	GW-4-10-g	Tee 63 mm	25.00	₹ 90.00	NOS	₹ 2,250.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
131	GW-4-10-k	End cap 50 mm	25.00	₹ 27.00	NOS	₹ 675.00
132	GW-4-10-l	End cap 63 mm	25.00	₹ 32.00	NOS	₹800.00
133	GW-4-10-0	Coupler 50 mm.	25.00	₹ 48.00	NOS	₹ 1,200.00
134	GW-4-10-p	Coupler 63 mm.	25.00	₹ 92.00	NOS	₹ 2,300.00
135	GW-4-10-v	Reducer 75x 63 mm.	25.00	₹ 91.00	NOS	₹ 2,275.00
136	GW-4-10-w	Reducer 63x50 mm.	25.00	₹ 52.00	NOS	₹ 1,300.00
137	GW-4-10-x	Service saddle 50 mm.	24.00	₹ 68.00	NOS	₹ 1,632.00
138	GW-4-10-y	Service saddle 63 mm.	25.00	₹ 92.00	NOS	₹ 2,300.00
139	GW-4-10-ae	GW-4-10-ae Tail piece with flange 63 mm. 10 kgf.	10.00	₹271.00	NOS	₹ 2,710.00
140	GW-5-73	Heliconia humilis Red / Oranger flowers 9"to12"	2,054.00	₹ 75.00	NOS	₹ 154,050.00
141	GW-5-80	Ixora chinensis	5,000.00	₹ 35.00	NOS	₹ 175,000.00
142	GW-5-84	Ixora Duffi	2,581.00	₹ 40.00	NOS	₹ 103,240.00
143	GW-5-226	Lagerstomia throlie (Tamhan)	10.00	₹ 23.00	NOS	₹230.00
144	GW-5-227	Lagerstomia falsereginie (Tamhan)	10.00	₹ 23.00	NOS	₹230.00
145	GW-5-202	Plumeria alba	5.00	₹ 1,750.00	NOS	₹ 8,750.00
146	GW-5-313	Bottlepalm	5.00	₹ 1,044.00	NOS	₹ 5,220.00
147	GW-5-322	Foxtail palm	10.00	₹ 2,350.00	NOS	₹ 23,500.00
148	GW-5-340	Citronella Sp.	300.00	₹ 25.00	NOS	₹ 7,500.00
149	GW-5-350	Supply of lorry with 4 labours for transporting of 10 Cu. M. capacity for 1 shift.	30.00	₹ 2,000.00	Shift	₹ 60,000.00
150	GW-5-355	Supply of Cocopit	3,000.00	₹ 10.00	Kg	₹ 30,000.00
151	GW-5-356	Supply of Vermicompost.	2,635.00	₹ 8.00	Kg	₹ 21,080.00
152	Ce6-09-005-fa-482	Plumber	0.00	₹ 300.00	DAY	₹ 0.00
153	ws3-09-t-2.228	unskilled labour	0.00	₹ 400.00	DAY	₹ 0.00
154	R2-CS-PS-126	Providing and placing on terrace (at all floor levels) polyethylene <b>water storage tank</b> , ISI : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	40,000.00	₹ 4.00	Litre	₹ 160,000.00
155	R2-CS-PS-92	Fixing water meter and stop cock in G.I. pipe line including cutting and threading the pipe and making long screws etc. complete (cost of water meter and stop cock to be paid separately).	2.00	₹ 478.00	each	₹956.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
156	R2-CS-FL-50	Providing and fixing 20mm to 25 mm thk. polished jet black <b>granite stone</b> plaque for <b>inauguration</b> of approved quality including preparing the surface and levelling in the desired line, cement float, machine cutting, leveling, jointing, filling the joints with neat cement, finishing, curing etc complete as directed by Engineer In Charge.	8.00	₹ 3,636.00	Sqm	₹ 29,088.00
157	R2-CS-FL-51	<b>Engraving the letters</b> of sizes specified below in golden or any other approved colour on granite stone etc. complete as directed by Engineer In Charge.				
	R2-CS-FL-51-a	Letters upto 30mm in any language as directed.	500.00	₹ 33.00	No.	₹ 16,500.00
	R2-CS-FL-51-b	Letters above 30mm and upto 50mm in any language as directed.	500.00	₹ 39.00	No.	₹ 19,500.00
	R2-CS-FL-51-c	Border line upto 12mm thk.	25.00	₹ 224.00	Rmt	₹ 5,600.00
158	R2 -RT -16 -24	Providing, Fabricating, Erecting on site Cautionary Boards as per Cautionary Sign Drawing No C2, Vertical poles shall be Hot dip galvanised pipe of 65 NB, 3mm Wall thickness. Signage plaque (box) shall be of size 900mm triangle. The box shall be pasted with MICRO PRISMATIC GRADE retro reflective base sheets on both sides conforming to Type XI standards of I.R.C. 67 2012 CODE. Letters or borders to be pasted on this box using transparent electro cuttable film/Screen Printing. The reflectivity of sheet shall have warranty of10years. The reflection count shall not be less than 80% of its original reflection after10years. The vertical pipe shall be fixed to the ground by means of properly designed foundation of size 600mmx600mmx600mm below ground & 450mm x 450mm x200mm above ground. Complete as per the specification and directed by the Engineer In Charge.	4.00	₹ 10,903.00	NOS	₹ 43,612.00
159	R2 -RT -16 -22	Providing, Fabricating, Erecting on site Direction Board as per figure no RT-16 -22, Vertical poles shall be made of ISMC of 150x75hot dip galvanised post, Signage plaque (box) shall be of size 1200mm x 2400mm made of hot dip galvanised ISMC 75mm x 40mm & bracing of 50x6mm hot dip galvanised channel. The sign board box shall be covered with4 mm aluminum composite panel on both sides of the box assembly & shall be fixed to the vertical pole. The box shall be pasted with MICRO PRISMATIC GRADE retro reflective base sheets on both sides conforming to Type XI standards of I.R.C. 67 2012 CODE. Letters or borders to be pasted using electro cuttable film. The reflectivity of sheet shall have guarantee of10years. The reflection count shall not be less than 80% of its original reflection after10years. The vertical poles shall be fixed to the ground by means of properly designed foundation of size 750mm x 750mm x 900mm. Complete as per specification and direction by the Engineer.	2.00	₹ 64,067.00	NOS	₹ 128,134.00
		FLOORING SYSTEM				

	TEM RATE	Designing , Detailing and supervising customised cast in situ FMGPROFLOOR® Hi-Crete Decortative High performance or Equivalent and Durable concrete pavement system .FMGPROFLOOR® Hi-Crete Decorative concrete Pavement system is a Performance based system for outdorr pavement such as Heritage Roads, Podium Entrance etc . FMGPROFLOOR® Hi-Crete Decorative concrete Pavement system or Equivalent provides 10-15 % more durable concrete Pavement as compared to conventional concrete pavement systems with required Slope for water movement , confirming to international and Local Standards viz IRC 58 , IRC 15 and IRC SP 76. FMGPROFLOOR® Hi-Crete Decorative concrete Pavement or Equivalentsystem provides a Dustfree and Densified pavement surface considering exposure and refurbishement conditions . FMGPROFLOOR® Hi-Crete Decorative concrete Pavement system or Equivalent is conceptualised and developed by FMG® based on proven international practices and experience, applied in India with local research and actual test results of concrete available at project site. FMGPROFLOOR® Hi-Crete Decorative concrete or Equivalent	3,710.00	93.00	SQM	₹ 345,030.00
161 FAIR IT		composite based on residual strength, custom designed for serviceability of a concrete pavment casted using Mechanical Screed Machine such as Laserscreed /				
161 FAIR IT		Trussscreed as approved by FMG .FMGPROFLOOR® Hi- Crete Decorative concrete Pavement system or Equivalent provides hassle free vehicle movement , FMGPROFLOOR® Hi-Crete Decorative concrete Pavement or Equivalent system increases the life of concrete pavement 10-15 % and reduces the maintenance cost by 20-30 %.				
	TEM RATE	Surface Preparation Surface preparation should be done by scarifying , milling machines to achieve required CSP , Surface profile for exisitng pavement and Decorative concrete thickness. JCB and other means should not be used to create a rough surface . Cementitious Polymer modified Bonding Agent Hi - Crete Bond Coat - 2K should be applied on scarified surface	3,710.00	₹ 333.00	SQM	₹ 1,235,430.00
162 FAIR IT	TEM RATE	Providing and laying in position design mix pure cement concrete of above mentioned grade with cement content of 380 -400 kg per cum for above mentioned Slab thickness . Concrete should have W/C Ratio .47 to .55 slump of 120-150 MM, Retention window upto 4 hours based on site conditions, finishibility window of up to 6 Hours, Specifically designed or adopted for Serviceability parameters and durable concrete flooring performance viz Shrinkage and curling as recommended by FMG Design office and FMG QA/QC engineer at site. Concrete should pass all necessary requirements of IS 456 and ICI TC 09 ,including the cost of material, concrete admixtures in recommended proportions as per design mix and IS 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability, and as defined in Term of Reference , all in good quality Grade 1 complying with IS 3812, wet curing, etc. complete as recommended and under supervision of FMG and as directed by PMC. CONCRETE Thickness ( MM ) 150mm,Grade of concrete ( Mpa)	584.33	₹ 9,709.00	СИМ	₹5,673,211.43

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
163	R2-RW-6-05	Raisingorloweringrectangularmanholestotherequiredlev elupto30cmincludingallmaterials,formwork,brickworka ndwith16cmthickM-15 cement concrete coping underframe & coverofmanholeincluding curing etc. complete, as specified and as directed.	20.00	₹ 2,297.00	Each	₹ 45,940.00
164	FAIR ITEM RATE	<b>DECORATIVE FINISH- Main Road</b> Providing and casting for stamping the freshly laid new integrally coloured concrete using ColorFlo SG Granular Pigment manufactured by Solomon Colors USA @ 2% dosage of cement weight of M-60 grade concrete(cement concrete without fly ash) including fixing necessary formwork, finishing the surface and re-coloring the concrete top using Hicrete Dura Hard Colour Hardener @ 4.5 Kg per Sqmt & refinishing the surface accurately to the required level & slope etc & subsequently, applying Hicrete PRA (Powder Release Agent) @ 0.13 kg per Sqmt over entire surface area and stamping it using approved Stamp pattern. Cleaning, washing area using Hicrete Super Blue agent for removal of powder release and then antiquing it on top with approved colour using Hicrete Colour Wash (Antiquing Agent). Sealing the entire area with 3 coats of stamped concrete using Hicrete Gloss Sealer-AC (Concrete Sealer). Before final coat Hicrete Anti-Slip Granules are to be broadcasted over the entire surface to get antiskid property.	1,850.00	₹ 5,686.00	SQM	₹ 10,519,100.00
		<b>DECORATIVE FINISH- Borders on Main Road</b> Providing and casting for stamping the freshly laid new				
165	FAIR ITEM RATE	integrally coloured concrete using ColorFlo SG Granular Pigment manufactured by Solomon Colors USA @ 1% dosage of cement weight of M-60 grade concrete(cement concrete without fly ash) including fixing necessary formwork, finishing the surface and re-coloring the concrete top using Hicrete Dura Hard Colour Hardener @ 4.5 Kg per Sqmt & refinishing the surface accurately to the required level & slope etc. & subsequently, applying Hicrete Dura Hard Colour Hardener @ 3.5 Kg per Sqmt and Hicrete PRA (Powder Release Agent) @ 0.13 kg per Sqmt and stamping it using Stamp pattern and special concrete Dimension Stencils in approved pattern / design. The entire border Seamless Textured Pattern should be stained in lighter shade & the Stencilled Patterns are then should be highlighted using special Acid Stain / Enviro Stains Manufactured By Renewcrete Inc. USA including necessary and appropriate surface cleaning and preparing. Sealing the entire area with 3 coast of stamped concrete using Hicrete Gloss Sealer-AC (Concrete Sealer). Before final coat Hicrete Anti-Slip Granules are to be broadcasted over the entire surface to get antiskid property.	270.00	₹ 6,134.00	SQM	₹ 1,656,180.00
		Before final coat Hicrete Anti-Slip Granules are to be broadcasted over the entire surface to get antiskid property. DECORATIVE FINISH- Juction Area				

Sr.	Schedule Item No.	Description	Total	Rate	Per	Amount
<b>No.</b>	FAIR ITEM RATE	Providing and casting the new integrally coloured concrete using ColorFlo SG Granular Pigment manufactured by Solomon Colors USA @ 1% dosage of cement weight of M-60 grade concrete(cement concrete without fly ash) including fixing necessary formwork, finishing the surface and re-coloring the concrete top using Hicrete Dura Hard Colour Hardener @ 4.5 Kg per Sqmt and finishing the surface with power floats. After sufficient curing of concrete (7-10 days) the desired and approved geometrical pattern / design is marked and engraved on the flat concrete surface using special engraving tools by Engrave – A – Crete USA. The entire area should be stained in desired shade & the special Patterns then should be highlighted using special Acid Stain / Enviro Stains Manufactured By Renewcrete Inc. USA. Sealing the entire area with 3 coats of stamped concrete using Hicrete Gloss Sealer-AC (Concrete Sealer). Before final coat Hicrete Anti-Slip Granules are to be broadcasted over the entire surface to get antiskid property.	<b>Quantity</b> 1,597.31	₹ 7,033.00	SQM	₹ 11,233,881.23
		Before final coat Hicrete Anti-Slip Granules are to be broadcasted over the entire surface to get antiskid property.				
		STRUTURAL REINFORCEMENT -FMGPROFLOOR® MIX or Equivalent				
167	FAIR ITEM RATE	Providing ready to use factory mixed and prepacked FMGPROFLOOR® Mix customised for prevailing concrete mix design and exposure conditons to provide a fctm,fl Value of .5 N/mm <sup>2</sup> and f R,3m value of 0.3 N/MM <sup>2</sup> as per EN 14651. FMGPROFLOOR@Mix Doasges are carefully custom designed by FMG design office and QA/QC Labs by actual testing of Mechanical, chemical properties of concrete, aggregate & admixtures available at project site. # Refer Notes below	584.33	₹ 1,995.00	СИМ	₹ 1,165,728.38
		CURING OF CONCRETE				
168	R2-RW-10-19	Providing & constructing cement vatasinc /m1:10 at 0.6mx0.6mc/cad measuring 0.09 matbottom ,0.04 mattop & 0.075m deep & maintaining the same throughout 14days curing & removing the same thereafter, as directed. LOAD TRANSFER AND JOINTS	3,710.00	₹ 78.00	SQM	₹ 289,380.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
169	FAIR ITEM RATE	CONTROL JOINTS / SAW CUT JOINTS Cutting of grooves in concrete pavement ,within 18-48 hours of placing of concrete, size of cut 5 mm, depth of cut 1/3 of concrete layer thickness with saw cutting machine , labour, protection of floor/ pavement during cutting, cleaning of joints as per approved drawings, Priming and sealing of joints with Fosroc Colpor 200 cold applied, two-part elastomeric sealant conforming to B.S. 5212 with shore hardnees 18-22 and Movement accomodation factor in butt Joints ( BS 6093 ) 25 %.Sealing of joints to be taken up after 28 days casting/ after ensuring full depth of joint is open. Rate shall include cleaning of joints, providing and inserting closed cell polyethylene foam backer rod in grooves, painting contact surface of the joints with primer using mechanical means, tools and tackles, fixing of masking tape and removing after application of sealant etc. as per and under supervision of QC Engineer in charge / approved designated agency and as directed by PMC.	2,226.00	₹271.00	MTR	₹ 603,246.00
170	FAIR ITEM RATE	ISOLATION JOINTS Providing and laying in position crosslinked closed cell polymer based expansion joint Filler Board (Duraboard HD 100 of Supreme or equivalent) for Isolation Joints in floor, for full depth of concrete, by using non bituminous , non-staining, non-deteriorating, non absorbent, Alkali resistant, High performance, 10mm thick or as specifed in floor design - Duraboard HD 100 of Supreme or approved equivalent make, having minimum density of 100 +/-5 Kg /m3 (ASTM D 3575) , Compression deflection & recovery % without weathering 94% min deflection, Min. water absorption 0.080 Kg/m2 (ASTM D 3575), Non Staining with less than 1% water absorption for 48 Hours (ASTM D 3575) complete as per the directions of PMC at specified locations. Rate to include fixing of compressible board or sheet and sealing top 12 mm depth of the joints with polyurethane sealant. Providing 25 mm wide isolation joints in the floor for full depth of the concrete including fixing compressible board or sheet and sealing top 12 mm depth of the joints with polyurethane sealant. Joints to be installed as per under supervision of/QC Engineer in charge/approved designated agency and as directed by PMC.	550.00	₹466.00	MTR	₹ 256,300.00
171	FAIR ITEM RATE	Construction / Expansion Joint Cutting of grooves in concrete floor/ pavement after 15- 20 days after it has automatically opened ,size of cut 5 mm, depth of cut 1/3 of concrete layer thickness (but not more than 50mm) with saw cutting machine , labour, protection of floor/ pavement during cutting, cleaning of joints as per approved drawings, Priming and sealing of joints with Polyurethane Sealant conforming to B.S. 5212 of approved make applied in expansion/ contraction/ construction joints. Sealing of joints to be taken up after 28 days casting/ after ensuring full depth of joint is open. Rate shall include cleaning of joints, providing and inserting closed cell polyethylene foam backer rod in grooves, painting contact surface of the joints with primer using mechanical means, tools and tackles, fixing of masking tape and removing after application of sealant etc. as per and under supervision of QC Engineer in charge / approved designated agency and as directed by PMC.	900.00	₹ 342.00	MTR	₹ 307,800.00

Sr. No.	Schedule Item No.	Description	Total Quantity	Rate	Per	Amount
172	R2-CS-EW-10	Dewatering the excavated trenches/pits, pools of water, well works by using pumps and other devices including disposing off water to safe distance as directed by Engineer-in-charge including cost of machinery, labour, fuel, pipe and it's accessories etc. complete. Note : This item will be operated/executed with the prior specific sanction of the Head of department.	500.00	₹75.00	HP/Hr.	₹ 37,500.00
		PROPOSED ESTIMATED COST FOR THE SUBJECTED ROAD WORK : -				14,23,01,645.99

Sr. No.	Schedule Item No.	Description	Quantity	Rate	Units	Amount
	ERA 1	Street Light Panel: Supply, Installation, testing and commissioning of LT panel IP- 67 outdoor type,floor mounted Panels shall be suitable for 415 V, 3 phase, 4 wire, 50Hz Supply system. With 3 phase energy meter and 63A TPN MCB as	0.00	₹166,250.00	NOS	₹0.00
	ERA 2	Supply ,Installation Testing , Commissioning of Double Arm Lamp Post with 50 W LED light fixture of IP65, 4730 System Lumens, 4000k LED including constant current driver with short circuit and overvltage protection and surge protection upto 4KV, with Antique Decorative arthitectural 5 meter Cast Iron pole, Primered and PU painted factory Finished. The column must have a hinged flush door at the bottom with proper strengthening to the cutout of the door opening. A junction/ looping box with 32 Amps heavy duty connector shall be built in to the pole and with provision of SP MCB, provided with a base plate and one set (4 Nos.) of SS J-bolts, of reputed make subjected to approval of sample by engineer in charge and with other required accesories. Exclusive of MCB and 3c 2.5 sq mm wire from MCB to Fitting	43.00	₹214,610.00	NOS	₹9,228,230.0(
	ERA 3	Supply ,Installation Testing , Commissioning of Electrical Bollard Lamp Post with 12 W LED light fixture of IP65, 4730 System Lumens, 4000k LED including constant current driver with short circuit and overvitage protection and surge protection upto 4KV, with Antique Decorative arthitectural 1 meter bollard of Cast Iron, Primered and PU painted factory Finished. The column must have a hinged flush door at the bottom with proper strengthening to the cutout of the door opening. A junction/ looping box with 32 Amps heavy duty connector shall be built in to the pole and with provision of SP MCB, provided with a base plate and one set (4 Nos.) of SS J-bolts, of reputed make subjected to approval of sample by engineer in charge and with other required accesories. Exclusive of MCB and 3c 2.5 sq mm wire from MCB to Fitting	40.00	₹21,014.00	NOS	₹840,560.00
	R2-ME-10-8-c	Reinforced polymer Composite poles (GRP Poles)- Design, engineering, manufacture, testing at factory, packing & forwarding, delivery to site, unloading and handling at site, assembly, installation, testing and commissioning of GRP Poles (Glass reinforced Polymer) street lighting poles. Providing & erecting 5 m high galvanized CONICAL pole with foundation bolts having bottom dia. From 125 to 145 mm, top dia. from 65 to 75 mm on provided foundation as per specification	5.00	₹42,298.00	NOS	₹211,490.00
	R2-ME-10-9-b	Double Arm Bracket of 1000mm length	5.00	₹12,665.00	NOS	₹63,325.00
	R2-ME-4-29-a	SITC of LED Post top Lantern/ Handi type-	10.00	₹9,343.00	NOS	₹ 93,430.00
	R2-ME-4-34-f	LED flexible strip light 2 wire min of 4.8W	50.00	₹ 962.00	NOS	₹ 48,100.00
	R2-ME-10-9-c	Embeded Junction Box with 4way connector suitable for cable upto 3Cx16 Sq.mm cable	96.00	₹8,036.00	NOS	₹771,456.00
	R2-ME-2-3-s	1.1 kV grade stranded Cu conductor, XLPE insulated, extruded PVC inner and FRLS outer sheathed, galvanised steel round or strip armoured cables (SP-ME-TS- 6)	1,648.00	₹556.00	MTRS	₹916,288.00
		4C x 10 Sq.mm				
	R2-ME-2-3-f	1.1 kV grade stranded Cu conductor, XLPE insulated, extruded PVC inner and FRLS outer sheathed, galvanised steel round or strip armoured cables (SP-ME-TS- 6) 3C x 2.5 Sq.mm	4,479.00	₹131.00	MTRS	₹ 586,749.00
	R2-ME-2-1-v	1.1 kV grade stranded Al conductor, XLPE insulated, extruded PVC inner and FRLS outer sheathed, galvanised steel round or strip armoured cables	360.00	₹ 379.00	MTRS	₹136,440.00
	R2-ME-2-9	3.5C x 50 Sq.mm Excavating the trenches and refilling the same after the cable is laid in approved manner (Size of trench: 750 mm deep, 600 mm wide) in concrete/ masonary / asphalt. 1 Cu. Mtr. = 2.2 RMT. And reinstatement.	317.00	₹ 500.00	CU MTRS	₹ 158,500.00

Sr. No.	Schedule Item No.	Description	Quantity	Rate	Units	Amount
	R2-ME-2-12-s	Cable end terminations for LV, XLPE/PVC insulated,PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands,stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. iscellaneous items like cable lugs, G.I nut - bolts and G.I washers, consumables and other hardware materials as required to make the installation complete, are in the scope.All G.I Nut, bolt and washers shall be HDGI with 80 micron.One set of termination includes gland, lugs for cable core & accessories 4C x 10 Sq.mm	192.00	₹199.00	SET	₹ 38,208.00
	R2-ME-2-12-g	Cable end terminations for LV, XLPE/PVC insulated,PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands,stripping of cable insulation, supply and fixing of tinned plated copper lugs for copper cables for all phases and crimping the same to the conductor for the following cables. iscellaneous items like cable lugs, G.I nut - bolts and G.I washers , consumables and other hardware materials as required to make the installation complete, are in the scope.All G.I Nut, bolt and washers shall be HDGI with 80 micron.One set of termination includes gland, lugs for cable core & accessories 3C x 2.5 Sq.mm	342.00	₹113.00	SET	₹ 38,646.00
	R2-ME-2-11-u	Cable end terminations for LV, XLPE/PVC insulated, PVC sheathed, armoured/ unarmoured cables including supply and fixing of Double compression cable glands, stripping of cable insulation, supply and fixing of aluminium lugs for aluminium cables for all phases and crimping the same to the conductor for the following cables. Miscellaneous items like cable lugs, GJ nut - bolts and GJ washers , consumables and other hardware materials as required to make the installation complete, are in the scope. All GJ Nut, bolt and washers shall be HDGI with 80 micron. One set of termination includes gland, lugs for cable core & accessories 3.5C x 50 Sq.mm	6.00	₹296.00	SET	₹1,776.00
	R2-ME-2-19-b	Supply and laying of Heavy duty RCC Hume pipe for road crossing, below plinth beam of following size as diameter. 150mm Dia.	100.00	₹611.00	MTRS	₹61,100.00
	R2-ME-2-22-d	Supply & Laying of double wall corrugated ( DWC) pipes of HDPE for underground cable protection as per IS 14930 Part II. With necessary connecting socket/couplings, tees of some material at required depth up to 900 mm below road ground surface. backfilling of with light ramming is included in the scope. 90 mm OD / 76 mm I.D.	2,548.00	₹382.00	RMTRS	₹973,336.00
	FAIR ITEM	Supply, Installation Testing, Commissioning of Focused lights of 10 W LED light fixture of IP65, 4730 System Lumens, 4000k LED including constant current driver with short circuit and overvitage protection and surge protection upto 4KV, of reputed make subjected to approval of sample by engineer in charge and with other required accesories. Exclusive of MCB and 3c 2.5 sq mm wire from MCB to Fitting	27.00	₹7,049.00	NOS	₹ 190,323.00
	R2-ME-7-1-b	Earthing station with 100mm Dia., 13mm thick, 3000 mm long GI pipe (Class B or better) earth pit as per IS 3043. The earth pit shall be provided with watering pipe (Class B) with wire messed funnel, 25x3 GI strip / 2X8SWG G.I. wire up to chamber ( wire or strip size as per fault level), disconnecting links with 600 x 600 mm (clear) RCC chamber & heavy duty 3mm thick CI chequered plate cover with hinge & stainless steel bolts. Bentonite/ Charcoal & Salt shall be provided for earth pits. Excavation, back filling, removal of excess soil is included in the scope	18.00	₹18,793.00	NOS	₹338,274.00

Sr. No.	Schedule Item No.	Description	Quantity	Rate	Units	Amount
NO.	R2-ME-7-4-f	Supply & installation of Earth conductor of the following sizes to be cleated on wall / columns with nuts & bolts or laid in cable tray / buried in ground including cutting, drilling, tapping, jointing by welding, connecting to equipments, painting to welded portion by black bitumen paint and with all necesary GI hardware & accessories to complete the work	120.00	₹97.00	MTRS	₹11,640.00
	R2-ME-7-4-k	25 x 6mm GI Supply & installation of Earth conductor of the following sizes to be cleated on wall / columns with nuts & bolts or laid in cable tray / buried in ground including cutting, drilling, tapping, jointing by welding, connecting to equipments, painting to welded portion by black bitumen paint and with all necesary GI hardware & accessories to complete the work	2,548.00	₹125.00	MTRS	₹318,500.00
	R2-ME-3-20-a	Bare Copper Conductor size 8 SWG Point wiring by using FRLSH insulated copper conductors (alongwith same size of FRLSH insulated copper conductor for earthing & 3 plate ceiling rose) : PVC conduit concealed with modular switches & FRLSH wires. Light /Fan / Ex. fan Points Concealed Manner with Modular switches & FRLSH wires	6.00	₹881.00	each pt	₹ 5,286.00
	R2-ME-3-20-c	5A/6A - 3/5 Half Plug Concealed Manner with Modular	2.00	₹277.00	each pt	₹ 554.00
	R2-ME-3-15-b	switches & FRLSH wires Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSH insulated copper conductor wire in surface/ recessed medium class PVC conduit as required 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire in 20mm	100.00	₹155.00	mtrs	₹15,500.00
	R2-ME-3-15-c	Conduit Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLSH insulated copper conductor wire in surface/ recessed medium class PVC conduit as required 2 X 4 sq. mm + 1 X 4 sq. mm earth wire in 25mm Conduit	100.00	₹ 224.00	MTRS	₹22,400.00
	R2-ME-1-15-b	IP43&30 SPN, TPN,Vertical TPN Distribution board with metal door of various sizes on wall/ Column/ floor mounting, with detachable gland plate, terminal connectors and other required hardware & fasteners. DB shall be designed with provision for FP MCB/ Isolator/ RCCB / RCBO as incomer & SP / TP MCB as outgoing as per requirement. (Cost of the DBs will be without MCB, MCCB). DB shall be as per IS 8623- 1 & 3 / IEC 61439- 1 & 3. IP43 12 Way SPN DB (4 + 8Way)	1.00	₹ 2,955.00	NOS	₹ 2,955.00
	R2-ME-1-17-a	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required. 6A SP MCB	126.00	₹ 335.00	NOS	₹42,210.00
	R2-ME-1-17-b	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required.	2.00	₹ 335.00	NOS	₹670.00
		10A SP MCB				
	R2-ME-1-17-b	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required. 16A/20A SP MCB	6.00	₹ 335.00	NOS	₹2,010.00
	R2-ME-1-17-v	Unit rate of 240V/415V, 'C' Curve, 10kA, Miniature circuit breaker suitable for DB mounting complete with connection, testing & commissioning etc. as required. 32A 4P MCB	1.00	₹2,193.00	NOS	₹2,193.00
	R2-ME-4-34-b	SITC of Tubelight fixtures 2X 18W	4.00	₹1,076.00	NOS	₹4,304.00
				1,070,000		. 1,50 1100

Sr. No.	Schedule Item No.	Description	Quantity	Rate	Units	Amount
	R2-ME-9-2-c	Split type Air Conditioning fitted with Hermetically sealed Rotary Compressors operating on Refrigerant R-407c/ R- 410A Non CFC / R-134a environment friendly refrigerant, suitable for wall /ceiling mounting Conforming to IS (Except power Consumption Norms) suitable for operation on 230 V +/- 10% n 50 Hz, single phase AC supply capable of performing 1) Cooling 2) Dehumidifying 3) Air circulating 4) Filtering. Nominal Capacity 2.0 TR (6050 Kcal / Hr. (1 indoor unit of 2.0 TR & 1 outdoor unit of 2.0 TR ) including MS stand and	2.00	₹62,328.00	NOS	₹124,656.00
	ERA 5	Bracket for indoor and outdoor unit Supply, Installation, Testing and Comissioing of Under Water Projector Light, NHL-145,8-10W,LED,RGB, IP 68, The housing completely made of stainless steel.Protection screen in tempered glass with high impact resistance(IK 08). Suitable for water jet pipe-G 3/4" taper. Precise structure and multi-protection silicon rubber seal guarantees the fixture IP68 rated. height– 180mm, Dia 145mm, Weight - 1.2Kgs.Power LED Module with high efficacy LED's, DC 24V. External Electronic Power Supply for LED Module,which offers Protection against Short Circuit, Over- Voltage,Over- Current & inbuil surge protection. Light fixture should be standard DMX512 protocol compatible, the DMX decoder function should be invidually addressable & should be able to operate with any standard DMX512 equipment.Lens should offer atleast 4beam angles 15°/30°/45°/60° as approved by engineer incharge. Estimated LED Lifetime is 50,000 hours minimum, Minimum Light fixture Lumen output is 250Lumens @ full power. of reputed make as approved by engineer in charge	50.00	₹97,750.00	nos	₹4,887,500.00
	ERA 6	Supply, Installation, Testing and Comissioing of 2 Universe (1024 Channels) DMX controller with following features & specifications: S.I.T.C. and programming of DMX system, can be programmed through PC, android, Mac, iphone, DMX stand alone controller, upto 2 x DMX512 universes (1024 channels), RDM Compatibility, USB and Ethernet connectivity for programming/ control, including remote and programming apps for android and iphone, cloud compatibility, 12 V power input, output controller DMX512, 8+3 contact ports, 12 V power in battery holder , micro SD memory card including all acsessories as applicable	1.00	₹ 690,000.00	nos	₹ 690,000.00
	ERA 7	Supply, Installation, Testing and Comissioing of 6 port DMX Splitter (Din rail mountable) with following features and specifications DMX signal splitter enables branching in complex DMX installations.DMX Splitter is manufactured in a housing adapted for mounting on standard DIN 35mm rails. Specification - Power Supply-DC12-24V,DMX Channels512,Nos. of DMX Inout-1 & output-6,Optical Isolation of DMX Lines,Built-in Terminatior,breakdown voltage of the isolation>1000V,current consumption- <500mA, with all assesories as required	1.00	₹172,499.00	nos	₹172,499.00
	ERA 8	Supply, Installation, Testing and Comissioing of DMX cable	2,500.00	₹345.00	mtrs	₹862,500.00