BILL OF QUANTITY FOR THE WORK:- CONSTRUCTION OF BLOCK LEVEL STADIUM AT BLOCK-PURUSOTTAMPUR, MZ- ANCHULI, GANJAM, ODISHA.

Sl. No.	Description	Quantity	Unit	Rate	Amount
	FOOTBALL FIELD				
	A.CIVIL WORK				
1	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	2891.10	Cum	37.06	107,144.17
2	Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction.	1023.75	Cum	36.11	36,964.61
3	Supply and fixing of geotextile mambrain layer 120 gsm non woven, 100% polyester of thickness 1 to 1.25 mm bonded to the membrane with intermittent touch by heating the membrane by Butane Torch as per manufactures recommendation.1 Ft below the paving tile layer to provide protection to sand not to enter into the lower layer as per the direction of the architect.	8436.00	Sqm	61.53	519,087.97
4	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam specification** including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, laying in uniform layers with paver in subbase/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density as per Clause 406 of MoSRT&H Specifications for Road & Bridge works (4th Revision) all complete as per the direction of Engineer-in-charge.	822.09	Cum	2,346.92	1,929,392.25
5	Supplying, stacking and spreading of good earth at site within initial lead including royalty and carriagetransporting to site, spreading, grading to required slope and compacting to meet requirement.	1023.75	Cum	639.63	654,819.94
6	Supplying, stacking and spreading of root zone sand as per USGA standard at site including royalty and carriage and Laying of root zone sand on the top of aggragate as per desired level	1023.75	Cum	**1,650.00**	1,689,187.50
7	Supply and laying of labour and material for Base preparation of grassing and fertilizer apllication in the required proportion specified or directed by the Officer-in-charge.	6825.00	Sqm	**53.80**	367,185.00
8	Supply & Planting Bermuda grass on site by Planting method directed by engineer in charge. The grass must be weed fee. Rate including all required fertilizer, pesticider & Chemical etc. complete for growing the turf. Spec. No.:- As directed by Engineer in charge. (Including cost of 6 month of Maintenance of football Ground)	6825.00	sqm	**430.40**	2,937,480.00
9	Providing and laying of hot applied thermoplastic paint 2.5 mm thick including reflectorising glass beads @ 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.	91.38	Sqm	263.43	24,072.23
	SUB TOTAL				**8,265,333.66**
B	**SUB SURFACE DRAINAGE**				

10	Providing and laying in trenches DWC perforated pipe @ 100mm dia conforming to IS 16098 (Part-2) with all fitting accessories and jointing, including testing as per specification complete. (Earth work in trenches to be measured and paid fo separately). The cost inclusive of labour, material, fitting and fixing,conveyance, loading and unloading etc. all complete as per the direction of Engineer-in-charge.	1365.00	Rmt	**390.00**	532,350.00
11	Providing and laying in trenches PVC non perforated pipe @160mm dia conforming to IS 4985-2000 with all fitting accessories and jointing, including testing as per specification complete. (Earth work in trenches to be measured and to be paid separately) The cost inclusive of labour, material, fitting and fixing, conveyance, loading and unloading etc all complete as per the direction of Engineer-in-charge.	425.00	Rmt	**440.00**	187,000.00
	SUB TOTAL				719,350.00
C	**DRAINAGE SYSTEM**				
12	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	182.00	CUM	315.40	57,402.80
13	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	60.67	CUM	175.00	10,616.67
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	121.33	CUM	278.80	33,827.73
15	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	19.50	CUM	860.50	16,779.75
16	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	19.50	CUM	6,091.50	118,784.25

17	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				
a	Foundation	26.00	CUM	6,887.60	179,077.60
b	Wall	36.00	CUM	8,703.60	313,329.60
18	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	40.30	QTL	9,595.50	386,698.65
19	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000x450x50mm, reinforced with 8mm dia four nos longitudinal & 9 nos cross sectional T.M.T hoop bars, including providing 50mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50mmx1.6 mm complete, all as per direction of Engineer-in-charge.	260.00	SQM	2,539.90	660,374.00
	TOTAL				1,776,891.05
	CLAY ATHELETIC TRACK				
20	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	1604.37	Cum	37.06	59,458.10
21	Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction.	782.26	Cum	36.11	28,245.02
22	Construction of granular sub-base by providing Close graded Granular subbase Grading-III material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc. complete as per direction of Engineer-in-charge.	782.26	Cum	1,692.90	1,324,283.37
23	Supplying, stacking and spreading of good earth at site within initial lead including royalty and carriage transporting to site, spreading, grading to required slope and compacting to meet requirement.	521.50	Cum	639.63	333,569.51
24	Supplying, stacking, laying and compaction of a consolidated layer, 50 mm thick, of graded material of 4.75 mm to 2.36 mm mixed with cohesive material for stability and grip, etc., as per the direction of the engineer-in-charge.	260.75	Cum	776.60	202,500.34

25	Supplying and fixing of Pre cast kerb stone of size 600mm x 300mm x 150mm of M-30 grade of approved make, design, colour and size made by Block making machine with proper compaction fixed in required pattern etc. complete in all respect conforming to IS 5758:1984 (SOR PG NO-234 SL NO-4)	800.00	each	249.55	199,640.00
26	Providing and lying Plain Cement Concrete of proportion (1:3:6) in foundation & floor using 40 mm & down grade black hard crusher broken granite stone metal, washed and screened sharp sand of approved quality from approved quarry including hoisting, lowering, laying the concrete, ramming, watering and curing etc. complete to required thickness including cost of all materials, conveyance, loading, unloading, royalties, cost of labours, T&P, hire & running charges of concrete mixer, etc. all complete as per the direction of the Engineer -in -charge.	9.20	Cum	6,091.50	56,030.53
	TOTAL COST OF ATHELETIC TRACK (Clay)				**2,203,726.86**
	VOLLEYBALL COURT (Clay)				
27	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	194.40	Cum	37.06	7,204.46
28	Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction.	97.20	Cum	36.11	3,509.61
29	Construction of granular sub-base by providing Close graded Granular subbase Grading-III material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	97.20	Cum	1,692.90	164,549.88
30	Supplying, stacking and spreading of good earth at site within initial lead including royalty and carriage transporting to site, spreading, grading to required slope and compacting to meet requirement.	64.80	Cum	639.63	41,447.94
31	Supplying, stacking, laying and compaction of a consolidated layer, 50 mm thick, of graded material of 4.75 mm to 2.36 mm mixed with cohesive material for stability and grip, etc., as per the direction of the engineer-in-charge.	32.40	Cum	776.60	25,161.84
	TOTAL COST OF VOLLEYBALL COURT (Clay)				**241,873.73**
	BOQ KABADDI COURT/ KHO KHO (Clay)				
32	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	430.50	Cum	37.06	15,954.33
33	Loosening, leveling and Compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in Table 300-2 for embankment construction.	215.25	Cum	36.11	7,772.05
34	Construction of granular sub-base by providing Close graded Granular subbase Grading-III material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	197.70	Cum	1,692.90	334,686.33

35	Supplying , stacking and spreading of good earth at site within initial lead including royalty and carriagetransporting to site, spreading, grading to required slope and compacting to meet requirement.	131.80	Cum	639.63	84,303.07
36	Supplying, stacking, laying and compaction of a consolidated layer, 50 mm thick, of graded material of 4.75 mm to 2.36 mm mixed with cohesive material for stability and grip, etc., as per the direction of the engineer-in-charge.	65.90	Cum	776.60	51,177.94
	TOTAL COST OF KABADDI COURT/ KHO KHO (Clay)				**493,893.72**
	CIVIL WORKS OF COMMON FACILITY CENTER				
37	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	356.66	CUM	315.40	112,489.30
38	Cuttings in disitegrated rock not requiring blasting to be removed by pick axes, crow bars and depositing materials within the 50m initial lead and 1.5m initial, ncluding rough dressing as per the department,including stacking and specification of the department,including stacking the useful materials separately as ordered.	89.16	CUM	726.20	64,750.90
39	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	148.61	CUM	175.00	26,006.75
40	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	297.21	CUM	278.80	82,862.15
41	Providing, mixing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables at the rate of 7.5liters per sqm on vertical surface and 5.0liters per sqm on horizontal surface, 50% of the emulsion to be filled in the holes made in treanches at 150mm centre to centre (or as directed directed by the manufacture) etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour taxes etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	201.31	SQM	100.00	20,131.00
42	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	403.43	CUM	860.50	347,151.52
43	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	77.82	CUM	6,091.50	474,040.53

44	Brick work in foundation and plinth with flyash bricks of size 25cmx 12cmx 8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. and as per direction of Engineer-in-charge.	32.18	CUM	5,721.30	184,111.43
45	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				0.00
a	Ground Floor				0.00
i	Foundation	98.11	CUM	6,887.60	675,742.44
ii	Plinth Beam	25.14	CUM	7,765.10	195,214.61
iii	Column	22.21	CUM	16,347.00	363,066.87
iv	Lintel	3.85	CUM	14,638.10	56,356.69
v	Roof Slab	50.05	CUM	14,253.10	713,367.66
vi	Roof Beam	19.56	CUM	16,347.00	319,747.32
vii	Staircase	5.08	CUM	16,203.80	82,315.30
viii	Chajja	30.19	SQM	1,274.80	38,486.21
b	First Floor				0.00
i	Column	4.97	CUM	18,323.60	91,068.29
ii	Lintel	0.30	CUM	16,293.20	4,887.96
iii	Roof Slab	3.84	CUM	15,835.90	60,809.86
iv	Beam &	2.42	CUM	18,323.60	44,343.11
v	Chajja	2.01	SQM	1,453.30	2,921.13
46	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)				
a	Ground Floor	292.06	QTL	9,595.50	2,802,461.73
b	First Floor	17.92	QTL	9,630.00	172,569.60
47	Brick work in superstructure with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. complete as per direction of Engineer-in-charge.				
a	Ground Floor	94.95	CUM	5,754.70	546,408.77
b	First Floor	21.45	CUM	6,151.00	131,938.95

48	Half Brick work in superstructure with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:4) with best quality bricks having crushing strength not less than 75 Kg/cm2 imersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) with provision of stiffner (2 nos of 8 m.m dia M.S. Round Reinforcement Bars at each 4th layers, paid separately) includes molding, chamfering, corbelling, complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. complete as per direction of Engineer in charge.				
a	Ground Floor	18.64	CUM	6,807.10	126,884.34
49	18 mm cement plaster in two coats under layer 12 mm thick cement plaster 1:5 (1 cement : 5 coarse sand) finished with top layer 6 mm thick cement plaster 1:6 (1 cement : 6 fine sand). Outside				
a	Ground Floor	391.45	SQM	293.50	114,890.58
b	First Floor	307.30	SQM	300.10	92,220.73
50	Providing 16mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.				
a	Ground Floor	1035.58	SQM	283.60	293,690.49
b	First Floor	38.68	SQM	290.80	11,248.14
51	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary, scraping, cleaning and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty, taxes of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.				
a	Ground Floor	220.10	SQM	219.10	48,223.91
b	First Floor	25.05	SQM	224.70	5,628.74
52	Providing & laying best quality Vitrified floor tile of specified size of thickness 6-10mm of approved make confirming to IS-15622 specifications in floor over 20mm thick cement mortar (1: 4) to proper slope, line and level including cutting to required size and shape, fixing at corners and splays etc. Including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles complete as per the design & drawing with cost of all materials, labour, conveyance T&P etc. All complete as per the direction of Engineer -in-charge.				
	Full body premium grade matt finish vitrified tiles of size 600mmx600mm				
a	Ground Floor	136.81	SQM	1,203.10	164,596.11
b	First Floor	6.98	SQM	1,217.00	8,494.66
53	Providing & laying vitrified tile of specified size in skirting cut from approved make confirming to IS-15622 specifications over 12mm thick cement mortar (1: 3) to proper line and level to a height as per design including cutting to required size and shape, fixing at corners and splays etc. including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles and complete as per the design & drawing with cost of all materials, labour, conveyance, taxes ,royalties,sundries and T&P etc. All complete as per the direction of Engineer -in-charge.				
	Full body premium grade matt finish vitrified tiles of size 600mmx600mm				
a	Ground Floor	20.40	SQM	1,340.30	27,342.12

b	First Floor	0.99	SQM	1,361.20	1,347.59
54	Providing & Fixing tiles 60cm x 60cm special plain / printed full body matt vetrified floor tiles of premium grade having thickness 7mm to 8mm confirming to IS 13755 in floors treads or steps and landing on 25mm thick bed of cement mortar 1:4 (1cement : 4 sand) to proper slope, line and level including cutting to required size and shape, fixing at corners and splays etc. Including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles complete as per the design & drawing with cost of all materials, labour, conveyance T&P etc. All complete as per the direction of Engineer -in-charge. (Toilet)				
	Suede /Rustic finish Vitrified Tile 600x600mm				
a	Ground Floor	121.63	SQM	1,413.60	171,936.17
55	Providing and fixing ceramic glazed wall tiles of specified size of thickness 6-10mm conforming to IS: 15622 specifications of approved make and shade, in skirting and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and finishing the joint with epoxy based water proofing grout to match the shade. All complete as per the direction of Engineer-in-charge (Toilet) (Note- Sample of tiles shall be approved before procurement and use)				
	Ceramic glazed Wall Tile 300 x 600mm				
a	Ground Floor	401.80	SQM	1,002.90	402,965.22
56	Providing and fixing 16-18mm thick granite flooring of approved quality and size in floors, steps, landings, window sill etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing, including cost, conveyance, loading, unloading, royalties and taxes of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.				
a	Ground Floor	25.17	SQM	2,819.80	70,974.37
57	Providing 16-18mm thick and above 0.40 Sqm size granite tile cladding of approved quality, colour and size in walls in all floors at all height on 12mm thick bed of cement mortar of mix (1:3) (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the granite including cost, conveyance, loading, unloading, royalties and taxes of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.				
a	Ground Floor	11.39	SQM	2,970.00	33,828.30
58	Supplying, fitting and fixing of M.S window grills made out of ms flats, pipes, square bar etc (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.				
a	Ground Floor	661.50	KG	90.40	59,799.60
b	First Floor	40.50	KG	90.40	3,661.20

59	Supplying, Fitting and fixing of stainless steel of 304 grade in hand railing using 50mm dia of 2mm thick circular pipe with Balustrade of size 32mmx32mmx2mm @ 0.90mtr C/C and stainless square pipe bracing of size 32mmx32mmx2mm in 3 rows in stair case as per approved design and specification buffing polishing etc with cost conveyance taxes of all materials labour T&P etc required for the complete in all respect.	150.35	KG	298.80	44,924.34
60	Providing and fixing in position wood plastic composite door frame with appropriate length of ETA Approved carbon steel galvanized (minimum 5 microns) double threaded 6.8 grade Polyamide PA 6 grade sleeve HRD C 10 anchor suitable for fastenings both on concrete & masonary/aerated blocks including cost of all materials, labours, T & P etc required for the work. complete in all respect as directed by the Architect/Engineer-in-charge.(Approved By Jaipur Court)				
a	Ground Floor	138.50	MTR	573.52	79,432.52
b	First Floor	5.25	MTR	573.52	3,010.98
61	Supplying, fitting and fixing of 32mm thick flush door shutter with approved quality of 30mm thick BWR block board pasted with 1mm thick sunmica on both side of approved design and quality including cost of all door fittings and fixtures etc. complete all as per direction of Engineer-In- Charge.				
a	Ground Floor	53.03	SQM	10,668.61	565,756.39
b	First Floor	2.21	SQM	10,668.61	23,577.63
62	Single Glazed Aluminum Sliding Windows & Doors (Without Mesh Panel): Providing and fixing vertically anodized System Aluminum Sliding windows of TOSTEM / NCL ALLURO / ALUMIL make suitable for 2.4 KPA wind load with 50mm visible aluminium section width in the centre interlock. All sliders shall come with hurricane bar, concealed water collection chamber, and water drainage system with protection of incoming wind pressure. The system offered must be ride-in system with glass panels moving inside the channel without any external overhung along with a provision track for mesh panel. The extruded aluminium sections should be made from Grade 6063-T5 & vertically anodized with Texguard coating. Corner connection will be Butt joint using Nano gaskets for sealing. All other major Accessories should also be made by the same manufacturer. All Slider doors & windows will be centre locking with integrated Anti-lift in slider panel. Only gaskets should be used in all meeting points instead of Brush Pile. The outer frame Depth will be 72mm +/-3 mm for 2 and a half track & 104mm +/ 3 mm for 3 and a half track. The bottom frame must have concealed water collection chamber. Fixing of bottom frame must use a subframe and no direct grouting will be permitted on bottom frame directly. All glasses will be upto 6 mm clear toughened. The system should qualify Airtightness ASTM E283: 10.7m3/h.mn2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa System should have a 10-year warranty on properties, functionality and design, within restrictions defined by technical specifications of anodizing				
A	GROUND FLOOR	21.78	SQM	8,500.00	185,130.00
B	FIRST FLOOR	1.62	SQM	8,500.00	13,770.00

63	Aluminum Fixed / Top hung Ventilators: Providing and fixing vertically anodized System Aluminum top hung windows of TOSTEM / NCL ALLURO/ALUMIL make using easy clean hinges with provision of fixed part having cut outs on glass for exhaust provision if size permits, suitable for 2.4 KPA windload. System must allow 90 degrees opening of glass panel to facilitate easy external cleaning. The extruded aluminium sections should be made from Grade 6063-T5 & Anodized with Texguard coating. Corner connection will be Butt joint with using Nano gaskets for sealing. All other major Accessories should also be made by the same manufacturer. Only gaskets should be used in all meeting points instead of Brush Pile. The outer frame Depth will be 72 mm +/-3 mm. Fixing of bottom frame must use a subframe and no direct grouting will be permitted on bottom frame directly. All glasses will be upto 6 mm frosted toughened. The system should qualify Airtightness ASTM E283: 10.7m3/h.m2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa, Wind load resistance ASTM E330: 2400 Pa				
a	Fixed / Top hung Ventilator	4.68	SQM	8,500.00	39,780.00
64	Glazed Aluminum openable doors With Door Closer: Providing and fixing lockable openable system Aluminum works for openable doors applications of TOSTEM / NCL ALLURO / ALUMIL make. The extruded aluminium sections should be made from Grade 6063-T5 & Anodized with Texguard coating. All profiles should be Non insulated Profiles. Corner connection will be Butt joint with Screw using Nano gaskets for sealing. All other major accessories should also be made by the same manufacturer. All panels will have no visible hinge or connecting hardware and shall not be connected on any side of the outer frame. The outer frame Depth will be 72mm. All materials which are used should be corrosion-resistant. Glass to be used is 8 mm toughened. The system should qualify Airtightness ASTM E283: 10.7m3/h.m2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa, System should have a 10-year warranty on properties, functionality and design, within restrictions defined by technical specifications of anodizing & 1 year warranty on wearing parts.	9.60	SQM	12,058.00	115,756.80
65	Aluminum Fixed Curtain Glazing:- Providing and fixing Anodized System Aluminum curtain glazing, suitable for 2.4 KPA wind load. The extruded aluminium sections should be made from Grade 6063-T5 & Anodized with Tex guard coating. Corner connection will be Butt joint with using Nano gaskets for sealing. There shall be no visible joineries in any intermediate section. All other major Accessories should also be made by the same manufacturer. The outer frame Depth will be 100 +/-5 mm with minimum transom / mullion size of 100 mm x 70 mm or 200 x 70 for height exceeding 3000 mm. All glasses will be 22 mm DGU Ref Toughened ST-146 and to be fixed from outside only. The system should allow glass thickness up to 12 mm. The system should qualify Airtightness ASTM E283: 10.7m3/h.m2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa, Wind load resistance ASTM E330: 2400 Pa.	50.01	SQM	11,766.00	588,417.66
66	Providing and fixing of vertical alluminium fin louvers Providing and fixing of Exterior, The linear profiles (50x100mm) section are mounted into groove filler using 4x25mm screw, the groove filler along with baffels will be fastened with subframe of .8mm thickness using M5 bolts and nuts, the total assemble consisting of subframe, groove filler and baffels will be directly anchored in the wall using M6 anchors completed by including all cost of labour,T & P,hiring charges of drilling & cutting machine etc.all complete including cost, Conveyance, royalty, taxes of all materials, labour T&P etc, complete as per direction of Engineer-in-charge.	30.00	SQM	5,840.00	175,200.00

67	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties, taxes of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.				0.00
a	Ground Floor	269.01	SQM	396.50	106,662.47
68	Terrace Water Proofing: Cleaning all the surface area to remove loose patrical such as mortar dust etc, with wire bruch and air blower complete in all respect like repairing of crack by polymer modified cementitious mortar as per the direction of Engineering In charge. Providing & Applying two component, cementitious acrylic polymer based high performance waterproofing coating AquaArm 2C-P/Equivalent manufactured and supplied by MYK Arment /Equivalent at a coverage of 0.5 m2/kg in 2 coats at approx 1.2mm DFT. Coverage may vary depending upon the surface. The waterproofing scope shall include supply of geotextile of 120 GSM. polymer modified cementitious mortar as per the direction of Engineering In charge.	269.01	SQM	422.91	113,767.02
69	Wet area Water Proofing: Providing and applying Single component AquaArm Saniflex/Equivalent synthetic rubber based coating with a coverage of 1.2 kg /m2 over primer surface for 0.8mm DFT in two coats .The coating shall be taken upto 300mm from finished floor level on the vertical walls. The coating shall have an elongation of a minimum of 86% when tested as per ASTM D 412 and tensile strength of 1.05 N/mm2.Thorough surface preparation by mechanical means to level and plain the surface of walls and floors of the toilet areas. All cracks and crevices to filled and made good to receive waterproofing coating treatment The coating shall cover all the floor area of the wet area (toilet) and be applied over on to the vertical walls upto tap point/shower point height above the floor in two or more coats to achieve required thickness.The rate includes coving/ bore packing wherever neccessary. Work shall be carried out by manufacturer's authorised applicator as per manufacturer's methodology.	120.00	SQM	380.03	45,603.60
70	Finishing inside wall surface with cement based wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials taxes, labour T & P etc. complete as per direction of Engineer-in-charge. **(In side)**				
a	Ground Floor	1235.28	SQM	88.80	109,692.86
b	First Floor	62.74	SQM	90.80	5,696.79
71	Finishing outside wall surface with cement based wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials taxes, labour T & P etc complete as per direction of Engineer-in-charge. **(Out Side)**				
a	Ground Floor	391.45	SQM	88.80	34,760.76
b	First Floor	307.30	SQM	92.10	28,302.33
72	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.				
a	Ground Floor	1235.28	SQM	195.70	241,744.30
b	First Floor	62.74	SQM	200.00	12,548.00

73	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance and taxes of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.				
a	Ground Floor	391.45	SQM	187.80	73,514.31
b	First Floor	307.30	SQM	195.00	59,923.50
74	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirmming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading, and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.				
a	Ground Floor	13.23	SQM	271.50	3,591.95
b	First Floor	0.81	SQM	278.50	225.59
75	Providing one coat of Textured finish of approved make, quality and shade over the wall surface of the building over a coat of primer of approved make including cost of material, brushes, all labour, taxes, loading, unloading, scaffolding, T&P etc. as required for the work as per the direction of Engineer-in-charge. (colour & shade to be approved before procurment & use)	698.75	SQM	153.77	107,446.79
76	Providing & fixing Greenlam of Sturdo Lockers unit 4 tier self-supporting 9mm (Shutter,Shelves & Skirting), 3mm (Back & Center Partations) and 6mm (Sides) thick compact laminates made out of, urea free, thermosetting phenolic resins treated Kraft papers as core material and Amino plastic resin treated decor papers on the finish surface, conforming to latest and applicable IS: 2046-1995, EN 438:2016 and NEMA LD3-2005 quality standards with Antivirus, Antibacterial and Antifungal properties (conforming to ISO 21702:2019, JIS Z2801:2010 and ASTM G21-2015 standards respectively) to fulfil the applicable requirements of indoor air quality certifications for Greenguard-Gold standards. This also includes providing and fixing in position necessary hardware made out of Aluminium alloy grade 6063- T6 available in Charcoal black or natural anodized Finish hardwares as per manufacturer's specifications & Architects instructions like (1) Mid and corner extrusion made up of aluminium alloy grade 6063-T6 available in Charcoal black and Natural Anodized Finish (2) SS grade 316 Key Lock (Standrad) & Numeric Lock (Optional) in Charcoal black Color. (3) SS grade 316 Hinge available in Charcoal black Color powder Coating/ SS brush finish (4) Black sound buffer rubber Profile. (5) SS grade 316 thread Cut Screws for Fixing Top and Bottom Plate. Top,Bottom, Shelves and Skirting are made of 9mm thick compact laminates, Side, Intermediate and Back walls are constructed of 3mm and 6 mm compact laminates. All screws will of 316 Grade in stainless steel with satin finish. All panles are supported by 9mm thick compact skirting with 80mm height.				0.00
	Lockers with standard external dimension of is 300mm (Door width)/465mm (Depth)/1800mm (Overall Height)	1150.00	Sqm	420.00	482,998.16
	TOTAL				12,512,217.06
	INTERNAL PH WORKS OF FACILITY BLOCK				

77	Supplying all materials, labours, T&P for fitting and fixing white glazed vitreous china floor mounted European coupled water closet of Jaquar make having cat no CNS-WHT-755S220SPPZ or equivalent type of approved make including supply of matching P/S trap to the floor with wooden plug and chromium plated screws including jointing the trap with soil pipe in cement mortar (1:1) etc all complete including cost of WC pan, PVC seat cover with CP brass hinges and rubber buffers etc all complete including cost, taxes and conveyance as per specification including polishing etc all complete as per PH specification and direction of Engineer-in-charge.	5.00	NOS	11,270.30	56,351.50
78	Supplying all material, labour T&P and fixtures for providing and fixing of white glazed vitreous chinaware under counter wash hand basin of approved size of Jaquar make having cat no CNS-WHT-705 or equivalent type of approved make with bottle trap of Jaquar cat no ALD 769L250x190 with CP waste coupling nut of Jaquar make having cat no ALD 709 and 15mm x 450mm PVC connection pipe of Jaquar make having cat no ALD 803AB with MS bracket with wooden plugs CP screws including cost of cement, sand, labour, T&P etc. complete including testing cost, conveyance, royalty and taxes of all materials etc. complete as per PH specification and direction of Engineer-in-charge.	15.00	NOS	6,660.70	99,910.50
79	Supplying and fixing urinal of Jaquar make having cat no URS-WHT-13261H or equivalent type of approved make including all fittings like 450mm long connection pipe of Jaquar make having cat no ALD 803B, waste pipe etc of approved make etc complete as per PH specification and direction of the Engineer-in-charge.	5.00	NOS	4,820.60	24,103.00
80	Supplying and fixing urinal Partitions of Jaquar make having cat no 1810-uc/1110uc (JSE-CHR-810UC450X) or equivalent type of approved make including all fittings like curved Shaped urininal partitions height- 900mm & width 450mm 8mm/10mm thick glass with frosted glass of approved make etc complete as per PH specification and direction of the Engineer-in-charge.	5.00	NOS	4,661.02	23,305.08
81	Supplying all materials, labour, T&P and fixing standard sized 15mm dia Angular Stop cock of Jaquar Cat. No.-FLP 5053PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	25.00	NOS	1,172.90	29,322.50
82	Supplying all materials, labour, T&P and fixing standard sized 15mm dia pillar cock of Jaquar Cat. No.-FLP 5011PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	15.00	NOS	1,862.00	27,930.00
83	Supplying all materials, labour, T&P and fixing two way Bib cock of Jaquar Cat. No.-FLP 5041N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	5.00	NOS	2,110.30	10,551.50
84	Supplying all materials, labour, T&P and fixing health faucet of Jaquar Cat. No.-ALD 563 or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	5.00	NOS	1,175.20	5,876.00
85	Supplying all materials, labour, T&P and fixing standard sized CP towel rail - 24" of Jaquar Cat. No.-ACN-1111SM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	12.00	NOS	1,663.80	19,965.60

86	Supplying all materials, labour, T&P and fixing standard sized CP towel ring square of Jaquar Cat. No.-ACN-1121N or equivalent etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	14.00	NOS	1,623.30	22,726.20
87	Supplying all materials, labour, T&P and fixing standard sized liquid soap dispenser of Jaquar Cat. No.-ACN 1135N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	14.00	NOS	1,649.90	23,098.60
88	Providing and fixing C.P. Glass shelf 600mm long of Jaquar Cat. No.-ACN-1171N or equivalent type of approved make fixed to wall including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	4.00	NOS	1,705.60	6,822.40
89	Supplying all materials, labour, T&P and fixing standard sized CP toilet paper holder of Jaquar cat. No.-ACN1153S or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	5.00	NOS	1,460.20	7,301.00
90	Supplying all materials, labour, T&P and fixing standard sized CP robe hook of Jaquar Cat. No.-ACN 1191N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	4.00	NOS	549.50	2,198.00
91	Providing all materials, labour,T&P and fittings and fixing of urinal valve auto closing system with built in control cock Jaquar Cat. No.-PRS 077 or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	5.00	NOS	2,575.50	12,877.50
92	Supplying all materials, labor T&P for fitting and fixing in all floors' fixed type glass mirror of size 600mm x 450mm best INDIAN make of 5.5 mm thickness with supply of 13mm thick asbestos backing and wooden plugs C. P. Brass screw including cost, conveyance, royalty, taxes of all materials complete as per P.H. specification and direction of Engineering-in-charge.	12.00	NOS	2,159.60	25,915.20
93	Supplying all materials, labour, T&P and fixing standard sized Wall Mixer of Jaquar Cat. No.-FLP 5273PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	8.00	NOS	6,350.50	50,804.00
94	Supplying all materials, labour, T&P and fixing of round shape CP overhead shower of Jaquar Cat. No.-OHS 1789 with arm SHA 477 or equivalent etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	8.00	NOS	3,978.00	31,824.00
95	Supplying all materials, labour, T&P and fixing standard sized CP Soap case of Jaquar Cat. No.-ACN-1131N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	12.00	NOS	985.50	11,826.00
96	Providing and fixing Floor drain in polished chrome with hole of Kohler make having cat no K-7275IN-CP for floor/nahani trap etc complete as per PH specification and direction of the engineer in charge	6.00	NOS	1,714.20	10,285.20
97	Providing and fixing circular type stainless steel grating with hole for floor /nahani trap etc complete as per PH specification and direction of the engineer in charge	33.00	NOS	123.20	4,065.60

98	Supply all materials, labour, T&P and providing fitting & fixing (Aqua guard) pure Chill 80 PSS UV of size 750x570x1350 mm height with water storage capacity 120 liters along with 2 nos of fancets 1 for cold water and 1 for normal water including a flow of 1.5 ltr per minute etc. all complete as per approved drawing, specification and direction of the EIC.	1.00	NOS	87,838.40	87,838.40
99	Supplying all materials, labours, T&P and fitting and fixing of the following size of CPVC pipe SDR11 confirming to IS 15778 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance and taxes of all materials all complete as per PH specification and direction of Engineer-in-charge. (Concealed)				
a	15 mm dia	16.00	RM	238.60	3,817.60
b	20 mm dia	60.00	RM	308.90	18,534.00
c	25 mm dia	20.00	RM	410.40	8,208.00
d	32 mm dia	15.00	RM	588.60	8,829.00
100	Supplying all materials, labours, T&P and fitting and fixing of the following size of UPVC pipe S-80 confirming to IS 13592 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance of all materials all complete as per PH specification and direction of Engineer-in-charge.(Non Concealed)				
a	40mm dia	60.00	RM	446.50	26,790.00
b	50mm dia	50.00	RM	540.90	27,045.00
101	Supplying all materials, labour, T&P, fitting and fixing UPVC SWR pipes & fittings of approved make confirming to IS-13592, both below and above ground level / floor and on walls including supply of bobbins, nains, screws, wooden cleats, pipe clips as per requirement, including earth work in excavation and fitting, including cuting walls and floor and making good the damages with cement concrete (1:2:4) with hard granite chips, incluidng scaffolding wherever necessary all complete as per the PH specification and direction of the Engineer-in-charge.				
a	75mm dia	30.00	RM	365.40	10,962.00
b	110mm dia	200.00	RM	524.40	104,880.00
102	Supplying all materials, labour, T&P, fitting and fixing of UPVC SWR fittings of approved make with requisite testing etc complete as per PH specification and direction of Engineer-in-charge.				
a	110mm dia Single Junction with door	8.00	NOS	353.60	2,828.80
b	110mm dia Double Junction with door	2.00	NOS	423.60	847.20
c	110mm dia Cowl	10.00	NOS	58.70	587.00
d	110mm dia Plain Bend	24.00	NOS	207.60	4,982.40
e	110mm dia SWR Door Bend	12.00	NOS	251.10	3,013.20
f	125mm x 110mm Gulley Trap	8.00	NOS	1,147.40	9,179.20
g	110mm dia Tee with door	12.00	NOS	316.30	3,795.60
h	110mm dia Single Junction without door	12.00	NOS	433.90	5,206.80
i	110mm dia Socket plug	12.00	NOS	178.60	2,143.20
j	110mm dia Pipe clip	40.00	NOS	82.50	3,300.00
k	110mm dia Coupler	12.00	NOS	130.10	1,561.20
l	75mm dia Plain Bend	10.00	NOS	311.10	3,111.00
103	Supplying all materials, labour, T&P, fitting & fixing of different size UPVC Ball Valve of approved make including supply of all necessary jointing materials such as red lead paint, yarns etc. including cost, conveyance of all materials, T&P etc. all complete as per P.H. specification and direction of the Engineer-in-charge.				

a	25mm Dia	4.00	NOS	736.40	2,945.60
b	32mm Dia	4.00	NOS	1,487.50	5,950.00
c	40mm Dia	2.00	NOS	1,954.30	3,908.60
d	50mm Dia	2.00	NOS	3,191.00	6,382.00
104	Supplying all materials, labour, T&P and fitting and fixing of UPVC NRV valve of 50mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	4.00	NOS	3,474.30	13,897.20
105	Supplying all materials, labour, T&P and fitting and fixing of double air valve of 50mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	4.00	NOS	9,537.10	38,148.40
106	Supplying all materials,labours,T&P for cutting holes through existing brickwork including making good the damages in cement mortar (1:4) for taking GI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	20.00	NOS	65.30	1,306.00
107	Supplying all materials,labours,T&P for cutting holes through existing RCC floors & roofs including making good the damages for taking GI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	4.00	NOS	224.10	896.40
108	Supplying all materials,labours,T&P for cutting grooves in pucca floors and walls for taking GI/PVC pipes and making good the damages as per direction of Engineer-in-charge.	110.00	MTR	226.40	24,904.00
109	Supplying all materials,labours,T&P for cutting holes through existing brickwork including making good the damages in cement mortar (1:4) for taking SWR/HCI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	12.00	NOS	254.60	3,055.20
110	Supplying all materials, labour, T&P and fittings and fixing of 2000 ltr capasity Poly Propelene white double layer water storage Tank of approved make confirming to IS 12701-1996 including cutting holes through the tank and fixing mild steel tubes and fittings and providing extra sockets and jam nuts, fixing ball valve etc including hoisting upto terrace level and placing the tank to the required position etc all complete as per PH specification and direction of Engineer-in-charge. (To provided with brick masonary guard walls which will be paid separately)	1.00	NOS	28,848.90	28,848.90
111	Supplyng all materials, labour, T&P for construction of brick masonary Gulley trap chamber of size 250mm x 250 mm with CI gulley trap, by flyash brick masonry in CM (1:4), CP (1:3) with 150mm x 150mm CI grating including labour and materials for fitting and fixing 100mm dia square mouth UPVC gully trap with supply of all jointing materials and encasing the gully trap with a block of CC (1:3:6) with 20mm & 10mm size hard stone metal all complete with providing and fixing of 250mm x 250mm precast RCC cover slab including cost, conveyance, taxes of all materials to site complete as per the PH specification and direction of Engineer-in-charge.	8.00	NOS	2,644.90	21,159.20
112	Supplying all materials, labour, T&P and fixing grab bar of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.				
a	Grab Bar Vertical swing,white (JAQUAR -WAC-WHT-860800/Equivalent)	1.00	NOS	8,396.30	8,396.30
b	Grab Bar 692 mm long,white (JAQUAR -WAC-WHT-BR0600/Equivalent)	3.00	NOS	3,179.40	9,538.20
	TOTAL				1,013,854.98
	COMMON FACILITY CENTER (Electrical)				

113	Recessed wirring to light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor of ISI marked with 20 mm dia HMS FRLS PVC conduit ISI marked 6A **modular** type (**flame retradant type**) switch ISI marked and ceiling rose ISI marked of modular type G.I box with metallic cover plate (both side) (**flame retradant type**) of suitable size, modular box with 1.5 sq. Mm FRLS PVC insulated single core multistandard copper conductor as earth wire including all accessories and connection as per direction of Engineer -in -Charge. All the switches & sockets should be warrantied for a replacement period of 2 years against defects with ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free after sales service within warranty period for acceptance of materials. NB:All the electrical,,ELV drawings, Technical Data Sheets & make will be approved by Electrical IN CHARGE prior to execution of the work				
a	Single light controlled by one 6A switch or first point **GROUP-A**	15.00	Nos	775.00	11,625.00
b	Single light controlled by one 6A switch or first point **GROUP-B**	25.00	Nos	923.00	23,075.00
c	Single light controlled by one 6A switch or first point **GROUP-C**	50.00	Nos	1,133.00	56,650.00
114	subsequent point of group controlWiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.	15.00	Nos	666.00	9,990.00
115	Supplying,fixing of 6A Plug on the separate board with complete fitting by 01 no of 6A switch & socket(modular type)((flame retradant type)) with suitable size modular box & cover(falme retradant type) including supplying of all required accessories of ISI marked as approved as per direction of engg-in-charge.. .(Maximum 02 nos point in one circuit).All the switches & sockets should be warrantied for a period of 2 years against manufacturing defects against which ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free aftersales service within warranty period for acceptance of materials.	15.00	Nos	363.00	5,445.00
116	Supply and fixing of ISI marked modular type 2nos 6Amp socket with switch on suitable size of metal box and modular cover in front on surface or recess including all conection as per direction of E.I.C. All the switches & sockets should be warrantied for a replacement period of 2 years against defects with ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free after sales service within warranty period for acceptance of materials.	15.00	Nos	551.00	8,265.00
117	Supplying,fixing of 1x16A Plug on the separate board with complete fitting by 01 no of 16A switch & socket(modular type)((flame retradant type)) with suitable size modular box & cover(flame retradant type) including supplying of all required accessories of ISI marked as approved as per direction of engg-in-charge.. (For equipement power)All the switches & sockets should be warrantied for a replacement period of 2 years against defects with ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free aftersales service within warranty period for acceptance of materials.	5.00	Nos	463.00	2,315.00

118	Wiring for **circuits and submain** with following number & sizes of FRLSH PVC insulated 1100 volt grade multistranded copper conductor wire run inside nonmetallic PVC rigid conduit recessed in ceiling/ column/ walls of building including supply of all materials such as wires, conduit, junction box & pull box / duly clamped to wall /ceiling or cable tray as suitable etc complete with making good the damages caused as required and as per direction of Engineer-in-charge .				
119	2 nos single core 1.5 sq. mm copper wire for phase and neutral and 01 no of single core 1.5 sq. mm copper wire for earth continuty conductor. In 20 mm dia non metallic heavy duty conduit (LDB to LSB/LIGHT CKT)(2X1.5+1X1.5)	387.00	Mtr	184.00	71,208.00
120	2 nos single core 2.5 sq. mm copper wire for phase and neutral and 01 no of single core 2.5 sq. mm copper wire for earth continuty conductor in 20 mm dia non metallic heavy duty conduit.(BDB to LSB/LIGHT CKT/5A PLUG/UPS POINT) (2X2.5+1X1.5)	300.00	Mtr	221.00	66,300.00
121	2 nos single core 4 sq. mm copper wire for phase and neutral and 01 no of single core 2.5 sq. mm copper wire for earth continuty conductor in 20 mm dia non metallic heavy duty conduit .(PDB to PSB/ POWER POINT/AC POINT) (2X4+1X1.5)	220.00	Mtr	273.00	60,060.00
122	4 nos single core 10 sq. mm copper wire for phase and neutral and 02 nos of single core 4 sq. mm copper wire for earth continuty conductor in 32 mm dia non metallic heavy duty conduit.(PANEL TO LBDB) (4X10+2X4)	100.00	Mtr	856.00	85,600.00
123	Supply, delivery, installation & testing of Modular G.I. box 18 SWG Sheet ISI marked with Modular base & cover for 2 moudle telephone socket outlet.	2.00	Nos.	376.00	752.00
124	Supply, delivery, installation & testing of Modular G.I. box 18 SWG Sheet ISI marked with Modular base & cover for 2 moudle tv socket outlet.	2.00	Nos.	385.00	770.00
125	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	13.00	Nos.	262.00	3,406.00
126	Wiring to Telephone Socket Outlet from Junction Box with 0.5 mm^2 Four Pair Copper Conductor Telephone Wire run inside prelaid PVC Conduit complete including termination, testing etc complete as required and as per Direction of Engineer-In-Charge.	150.00	Mtrs.	32.00	4,800.00
127	Supply, delivery, installation and testing of TV Antenna Wires RG6 in PVC Pipe and making good the damages caused complete as required and as per Direction of Engineer-In-Charge.	178.00	Mtrs.	26.00	4,628.00
128	Supply, delivery, installation & testing of AC boards consisting of 1 No 20-A DP Modular switch with indicator and 1 No 16A Moular socket in indivisual Modular G.I Box making good the damages caused complete as required and as per direction of Engineer-in-charge.	5.00	Nos	907.00	4,535.00
129	Supplying and fixing of following sizes of medium class PVC conduit along with data,telephone,television etc..accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
a	20 MM	90.00	Mtr	97.00	8,730.00
b	25 MM	102.00	Mtr	112.00	11,424.00
	FITTING & FIXTURE				
133	Supplying, installation, of exhaust fan of heavy duty 380 mm sweep 1400 rpm with louvers of exhaust fan in the existing wall, including fixing & conntection .as required as per direction of Engg.-in-Charge. Replacement Warranty will be 2 years.	16.00	Nos.	2,838.00	45,408.00

134	Supplying, installation, testing and commssioning of 1200 mm sweep white/milky colour BLDC **copper winding** ceiling fan with aluminium blades having wattage not more than 28W and air delivery ≥215m3/min including wiring the down rod of standard length (upto 30 cm) with 1.5 sq mm PVC insulated, copper conductor, single core cable etc. as required as per direction of Engg.-in-Charge,Replacement Warranty will be 4 years.	10.00	Nos.	3,783.00	37,830.00
135	SITC of energy efficient LED tube light fittings with decorative alluminium batten and LED tube light having power rating not more than 20 watt and lumen output not less than 2200 lumen complete with electronic driver and all other accessories with diffuser having 2 years warranty i/c connection etc as required as per direction of Engg.-in-Charge. The luminaire should be Replacement Warranty will be 2 years .	15.00	Nos.	1,116.00	16,740.00
136	SITC of Sleek LED 10 watt mirror light fitting with extruded polycarbonate housing,High optically efficient diffuser,above wash basin complete with all accessoriesetc. directly on wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required as per direction of Engg.-in-Charge. The luminaire should be Replacement Warranty will be 2 years	5.00	Nos.	791.00	3,955.00
137	Supplying an fixing of recess/surface mounted 2'x2' 36 W(595mmx595mmx70mm) square shaped LED with lumen efficacy not less than 130lm/W, CRI not less than 80, CCT of 5700-6500 degree K, THD less than 10%,internal surge protection of 3 KV, complete with Non integrated isolated electronic driver (protects the output /secondary side from any disturbance on the input / primary side ensuring safe operation)and all other accessories suitable for operation on140- 270 V, 50 Hz ,L70 @50,000 burning hrs (5 years warranty) as required as per direction of Engg.-in-Charge . The luminaire must be Replacement Warranty will be 5years.	12.00	NOS	4,798.00	57,576.00
138	Supplying and fixing of Energy efficient surface /recess mounted square /round shape 18 W LED luminaire of dimension of consists of white powder coated , die-cast Alluminium housing with high quality frosted diffuser for glare-free uniform lighting distribution with wattage not more than 18 watt and lumen output of 1800 lumens, , CRI not less than 80,CCT of 6000 degree K,THD less than 10%, with electronic driver, internal surge protection of 3 KV , L70 B50: 50000 hrs and all other accessories suitable for operation on 220 V to 240 V supply as required as per direction of Engg.-in-Charge. .The luminaire should be Replacement Warranty will be 2 years	36.00	Nos.	1,407.00	50,652.00
139	Supplying ,installation & fixing of 10-11W(BOLLARD), High efficient LED with extruded Aluminium housing with PC diffuser.CRI>70, IP65, CCT - 6500K, Ambient temp-0 to 45DegC, Driver efficiency>80%,THD<25%, Powerfactor>0.9, Surge protection-4 kV, Multistage Isolated Constant Current-Constant Voltage driver and Safety Extra Low Voltage Safe level<60V DC as per IEC standard. Luminaire efficacy ≥ (90 lm/W). including with foundation as per the Drawing for inspection as required & as per direction of Engg.-in-Charge.	5.00	Nos.	6,790.00	33,950.00
140	Supply delivery, installation, testing & commissioning of following types of Pure polyester UV resistant powder coated,die cast aluminium housing with polycarbonet clear diffuser post topincluding 30/35 watt LED lamp with Driver for outdoor installtionas per IEC standard. landscape area complete etc.as required and as per the direction of E.I.C. . The luminaire should be Replacement Warranty will be 2 years .	6.00	Nos.	3,500.00	21,000.00

141	Supplying and installation of AC Point having 16-20A DP MCB, C series with enclosure, Schneider/Siemens/Legrand/ABB of suitable size as required as per direction of Engg.-in-Charge .All the Components should be warrantied for a replacement period of 1 year against defects with ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free aftersales service within warranty period for acceptance of materials.	3.00	Nos	2,250.00	6,750.00
142	Supply,installation, testing and commissioning of Air Cooled HI Wall split type Air conditioners complete with Indoor unit (IDU), Out door unit (ODU), i/c R-32/R-410/ R-407 Green Refrigerant, wireless Remote control, suitable for working between 180-260V with low & high voltage cut off and50 hz ,1 phase AC Supply capable of performing cooling, dehumidification, air circulation of following capacity with Scroll /rotary compressor. The system shall be able to deliver 100% of the rated capacity upto 42 Degree Celsius. Min 5 year Original Equipment Manufacturer (OEM) warranty both compressor and Printed Circuit Board (PCB). Must comply : Electrical cable IS694 or IS 9968 temperature sensing control IS/ International Electro technical Commission (IEC) 60730, hermetic compressor IS 10617, heat exchanger IS 11329, capacitor IS 2993 and motor IS 12615. Complete as per IS :1391 Part II 2023. The system shall be able to operate up to 50 Degree C (out door ambient temperature). The indoor outdoor must be Blue Fin coated. The unit price included with 3mtr Copper piping with insulation, drain Pipe and copper Power cable. The indoor should have 4 way swing . **In case, the distance between ODU and IDU exceeds 3 mtr, then only the item of copper pipe shall be executed without any joint and equivalent mtr shall be deducted from the copper pipe item.** 1.5 TR with 5 Star BEE Rating	3.00	Nos	48,314.00	144,942.00
143	Supply,installation of hard/soft ISI marked copper refrigerant piping of size 5/8 inch and 1/4 inch for suction and liquid line with 3 corex4 sqmm FRLS Copper control cable alongwith 25 mm weather proof closed cell nitrile insulation ,complete with fitting of bends and other nesessary material to complete the job.	12.00	Mtr	838.00	10,056.00
144	Supply,installation & fabrication of MS base frame for outdoor unit and other nesessary material to complete the job.	3.00	Nos	1,800.00	5,400.00
	DISTRUBUTION				
145	Supplying and fixing of following mentioned way, three pole/single pole and neutral, sheet steel,double door MCB distribution board, 415 volts/240 volts shall be as per IEC 61439-3,integrated door earthing system offering additional safety to the user,High quality polyurethane Gasket,the box and cover shall be fabricated to withstand IK09,the DB should be properly pre-treated with 7 tank process and duly powder coated, phosphatized with powder coated finish, on surface/recess, complete with terminal blocks,with suitable size FR PVC insulated copper conducter up to terminal blocks, tinned copper busbar, neutral busbar, earth bar, din bar. as per direction of Engg.-in-Charge. The Distribution boards should be Replacement Warranty will be 3 years				
146	4 Way Way TPN MCB DB 7 segment Horizontal Type as per IEC 61439-3 with configuration ofsuitable for Flush mounting and Surface mounting with Copper Bus Bar for each phase, with neutral Bus bar, Earth Bar & Cable ties for cable management, prefitted masking sheet, IP43-IK09 with metal door Warranty on DB is 3 years	2.00	Nos	8,218.00	16,436.00
147	Supplying and fixing 6 amps to 32 amps rating, 240 volts, C series, single poles MCB of make or any other equivallent A catagories reputed make ISI marked as approved in the existing MCB DB complete with connections.	24.00	Nos	210.00	5,040.00

148	Supplying and fixing 63 Amps rating, C series,10KA breaking capacity,4P, 415 volts, MCB . in the existing MCB DB complete with connections, testing and commissioning etc. as required as per direction of Engg.-in-Charge. .. The MCB should be Replacement Warranty will be 3 years..	2.00	Nos	2,163.00	4,326.00
149	Supplying and fixing 40 Amps rating,C series,10KA breaking capacity, 2P, 415 volts, RCCB 30mA . in the existing MCB DB complete with connections, testing and commissioning etc. as required as per direction of Engg.-in-Charge. . The RCCB should be Replacement Warranty will be 1 year	6.00	Nos	3,466.00	20,796.00
	EARTHING:				
150	Earthing with copper earth plate 600 mm x 600mm x 3.15 mm thick ISI marked including accessories and providing masonary with cover plate having loccking arrangement and watering pipe etc (with charcoal and salt) as required and as per direction of Engineer-in-charge.	1.00	Nos	11,781.00	11,781.00
151	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing as required and as per direction of Engineer-in-charge..	20.00	Mtr	127.00	2,540.00
152	Supply and laying 25mm x 5 mm copper strip on surface or in recess for connections etc. as required.	15.00	Mtr	998.00	14,970.00
	PANEL				
153	S/I/T&Commissioning of LT indoor floor mounted CPRI Tested cubical type Main panel made out by 2mm CRCA steel sheet duly derusted & painted by simens grey powder cote paint is designed as G.A drawing.as per direction of Engg.-in-Charge. Warrentee period of replacement of panel & accessories must be 1 year & compelete test certificate must be submitted along with panel board including component list. 80X10MM Separate Aluminium Earth bus bar should be installed.All the incomers shall have 65 kA 3P+N type 1+2 SPD with 63 A 4P MCB, C series, 10 kA..				
154	In commer--01 number of 160 Amps MCCB 25 KA , 01 number of 160 Amps 4P onload type Changeover with both source ON/OFF indication Busbar- 04 numbers of 200 Amps 50kA Electrolytic AL busbar duly sleeved by color coaded PVC sleeve & supported by suitable size DMC insulator. Out going- (ii) 03 nos 63A 4P MCB 10kA,C series , 03 nos 63A DP MCB 10kA,C seriesLIGHT BDB AC IDU BDB/LIGHT BDB, 03 nos 63A 4P MCCB 25kA Instrument- (i) 3 numbers phase indicating lamp for R,Y,B inndication for both the source with 2A SP MCB,C,10KA. (ii) 01 set of 3 ph digital type Voltmeter(Make-Siemens/Schneider/ABB/Secure).(iii)01 set of 3 ph digital type Ammeter(0-200)A with CTs 160/5A 3 nos class 1 type	1.00	NO	120,500.00	120,500.00
155	Supplying of one number PVC insulated armoured and PVC sheathed XLPE property **AL. conductor** power cable of 1.1 KV grade of following size cables as per direction of Engg.-in-Charge.				
a	3.5core x 50 sq mm	95.00	mtr	701.00	66,595.00
156	Supplying and making end termination with brass double compression gland and aluminium lugs for following mentioned size cable.as per direction of Engg.-in-Charge.				
a	3.5 core x50 sq mm	1.00	Nos	275.00	275.00
	Supplying of following Materials				
157	Supply installation of 33kV 3mm thick Class-C Rubber Mat as per IS-15652 and complete as per direction of Eng-in-charge.(Size-10mx1m)	12.00	Sqmtr.	780.00	9,360.00
158	Danger Board.	1.00	Set	189.00	189.00
159	Supply and fixing of shock treatement charts duly laminated along with separate colour single line diagram laminated, to be fixed in Electrical control panel room.	1.00	sets.	800.00	800.00

160	Providing and fixing carbon-di-oxide type fire extinguishers consisting of welded M.S cylindrical body, squeeze lever dischange valve fitted with pressure indicating gauge internal discharge tube, 30cms long high pressure discharge hose, discharge nozzle, suspension bracket, conforming to IS : 2878 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge. .4.5 kg capacity	1.00	Nos	7,700.00	7,700.00
161	Providing and fixing ABC type fire extinguishers consisting of welded M.S cylindrical body, squeeze lever dischange valve fitted with pressure indicating gauge internal discharge tube, 30cms long high pressure discharge hose, discharge nozzle, suspension bracket, conforming to IS finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.6 kg capacity	2.00	Nos	3,264.00	6,528.00
	CCTV & DATA NETWORK				
162	Supply Installation Testing & Commissioning of 5mp Dome Camera Image sensor1/2.8", 5MP Low Illumination Progressive Scan CMOS Sensor, Effective Pixels2560(H)x1920(V), Min. Illumination, Color: 0.001Lux @ (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR, S/N Ratio ≥58dB (AGC OFF), IR Distance30Mtr, Shutter Speed(1/5 sec ~ 1/100,000 sec Adjustable), WDR Up to 120 dB, TWDR (Off/ Low/ Middle/ High), Output PAL/NTSC adjustable, Lens-3.6mm, Streaming CapabilityQuad Streams, Resolution-5 MP, Streams "Mainstream: 5MP (2560X1920)@25/30fps With H.265, Sub Stream: 1080P (1920X1080)@25/30fps With H.265, Third Stream: VGA(640x480)@10fps With H.265, Fourth Stream: VGA(640x480)@10fps With H.265" Frame Rate 1~ 30fps, Exposure Mode Off, High Light correction, Backlight Correction, Range (1-10), BLC Mode-1-10 configurable Levels, Digital Zoom25X, ROI Support 4 Zone, Analytics, Electronic Fence (Entry, Exits & Loitering Detection), Line Crossing Detection, Motion Detection, Temper Detection, CompressionG.711U/A, Audio Bit Rate 8 – 64 Kbps, Network Port-RJ45 10M, 100M Network Self Adjustable, ProtocolTCP/IP, IPv4, IPv6, SSL, TLS, UDP, HTTP/HTTPS, HTTP-Base64, HTTP-Digest, DHCP, DNS, RTP, RTSPS, ICMP, RTCP, NTP, SMTP, IGMP, Multicast, System CompatibilityONVIF Profile S, G & T, Max. User Access-20 Users, Security Features "Authorized username and password, HTTPS with password, HTTPS digest authentication, Watermark, RTSPS, AES 256 encryption, SHA256 and RSA2048, OTP, Signed Firmware, Firmware Anti-rollback, TEE (Trusted Execution Environment), TRNG, User Authentication, and encrypted firmware, Hardware Secure Boot", ANR Support, SD Card SupportedUpto 1 TB, Operating Conditions -40 °C ~ 70 °C, Humidity 95%, Ingress Protection IP67 &	1.00		15,495.00	15,495.00

163	Supply Installation Testing & Commissioning of 5mp Bullet Camera Image sensor 1/2.8", 5MP Low Illumination Progressive Scan CMOS Sensor, Effective Pixels 2560(H)x1920(V), Min. Illumination Color:0.001Lux @ (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR, S/N Ratio ≥58dB (AGC OFF, IR Distance30Mtr Shutter Speed(1/5 sec ~ 1/100,000 sec Adjustable) WDR Up to 120 dB, Lens Type 3.6mm, Streaming Capability Quad Streams, Resolution 5MP, Streams"Mainstream: 5MP (2560X1920)@25/30fps With H.265, Sub Stream: 1080P (1920X1080)@25/30fps With H.265, Third Stream: VGA(640x480)@10fps With H.265, Fourth Stream: VGA(640x480)@10fps With H.265", Frame Rate1~ 30fps, White BalanceAuto, Manual, Warm light, Natural light, Incandescent lamp, fluorescent lamp, Locked WB, Gain ControlLow, MID-Low, MID, MID- HIGH, High, Motion DetectionYes, Temper DetectionYes, Compression G.711U/A, Audio Bit Rate 8 – 64 Kbps, Network Port RJ45 10M, 100M Network Self Adjustable, Protocol TCP/IP, IPv4, IPv6, SSL, TLS, UDP, HTTP/HTTPS, HTTP-Base64, HTTP-Digest, DHCP, DNS, RTP, RTSPS, RTCP, ICMP, NTP, SMTP, IGMP, Multicast, System Compatibility ONVIF Profile S, G & T, Max. User Access 20 Users, General Function User Authentication, Watermark, IP address filtering, Security Features"Authorized username and password, HTTPS with password, HTTPS digest authentication, Watermark, RTSPS, AES 256 encryption, SHA256 and RSA2048, OTP, Signed Firmware, Firmware Anti-rollback, TEE (Trusted Execution Environment), TRNG, User Authentication, and encrypted firmware, Hardware Secure Boot" ANR Support, SD Card SupportedUp to 1 TB, Operating Conditions-40 °C ~ 70 °C Humidity 95%, Ingress ProtectionIP67 Compliant & IK10, Power Consumption <12W, Certification 3years warranty	4.00	Nos.	22,876.00	91,504.00
164	SITC of 32Ch 4K Network Video Recorder 8 sata , Up to 12 Megapixels resolution recording,Remonte Connection 128, SSynchronous Playback16CH, RAID0, RAID1, RAID5, RAID10. Supported, RS-232, RS-485, Keyboard, Front panel: 2 × USB 2.0, Rear panel: 1 × USB 3.0,ALARM IN/OUT-16/4, Incoming bandwidth-320Mbps or 200Mbps (when RAID is enabled),2HDMI/2VGA. /STQC compliant	1.00	Nos.	54,902.00	54,902.00
165	Supply, Installation,Testing & Commisioning of Surveliance 10 TB HDD	1.00	Nos	21,016.00	21,016.00
166	SITC of 55" UHD IPS Commercial Digital Display for Small Size Discussion & Chambers: Brightness (440 nits or higher), Dynamic Contrast Ratio (Dynamic MCI (Hz)):1000000:1), 1000000:1, Static (Panel) Contrast Ratio-1200:1, Response Time (G to G)-8 ms, Refresh Rate.-60 Hz, Life span (hrs)-30,000, Speaker (Sound Output):10W + 10W, Speaker System: 2.0 ch, DVB-T2/C Broadcasting System, Commercial Smart UX, webOS version (webOS 6.0), BIS Certification with 3 years onsite warrenty.	1.00	Nos.	91,503.00	91,503.00
167	SITC of 4 pair Cat6 23 awg U/UTP LSZH Cable in the existing surface/ recessed steel/ PVC conduit as required: The 4 pair Unshielded Twisted Pair cable shall be UL Listed,exceeds the requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E , 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted. Rip Cord is must,Insertion Loss of 32.8 db/100m at 250 MHz ,Cable should support operating temperature from -20° to +70°C Cable support Conductor Resistance ≤ 9.38 Ω/100m Max., Cable support Delay Skew: < 45 ns/100m, Operating Voltage: 72V , Impedance: 100 ± 15 Ω @100 MHz. and Propagation Delay @250 MHz : 536 ns/100m, ETL Verified 4 connector channel performance up to 700 MHz , RoHS Compliant.	130.00	Mtr	61.00	7,930.26

168	SITC of Cat6 I/O with Single Face plate: The Outlet shall meet or exceed requirement as per ANSI/TIA 568C.2,ISO/IEC 11801, & EN50173. The information outlet NEXT, PSNEXT, FEXT, ELFEXT, PSELFEXT and return loss should be verified for CAT6 @ 250Mhz & CAT6A @ 500Mhz. The information outlet connector shall be of gold/nickel, thickness of gold > 0.8 µm. The connectors shall be compatible as per IEEE 802.3af standard for POE application. The PVC material of Face plate should complie ABS /UL94-V-O certified.	10.00	Nos	252.00	2,520.00
169	SITC of Cat 6, 24-port loaded, 1U Modular patch Panel Should accommodate Cat6 with Rear Cable Management and Front removable Tooless Information outlet. Should have easy clip management with labels and clear label covers, Made with of Dicast Aluminium Alloy Material and Non Corrosive with Cat6 toolless RJ45 x 24 ports with color code front panel with patch cord locking.	1.00	Nos	4,473.00	4,473.00
170	SITC of Cat6 UTP 24 AWG Patch Cord Patch cord: 6 UTP Patch Cords are Factory Tested for Better Quality and Suitable for the High Speed Data Transmission. Complies to the Standard ANSI/TIA/EIA-568-C.2 Standard. Supports Data Networks Speeds Up to 10/100-Base-T and 1000-Base-T. Available In LSZH Jacket- Reduced Toxic Gasses Emitted During Combustion , RJ45, 8P8C, 2 FORK 50µ'' Gold Plated Contacts , 100% Factory Tested , Transparent Boot Cable Assemblies. **(1 mtr length)**	10.00	Nos	126.00	1,260.00
171	SITC of Cat6 UTP 24 AWG Patch Cord Patch cord: 6 UTP Patch Cords are Factory Tested for Better Quality and Suitable for the High Speed Data Transmission. Complies to the Standard ANSI/TIA/EIA-568-C.2 Standard. Supports Data Networks Speeds Up to 10/100-Base-T and 1000-Base-T. Available In LSZH Jacket- Reduced Toxic Gasses Emitted During Combustion , RJ45, 8P8C, 2 FORK 50µ'' Gold Plated Contacts , 100% Factory Tested , Transparent Boot Cable Assemblies. **(3 mtr length)**	10.00	Nos	189.00	1,890.00
172	SITC of 6 core Single mode OS2 Unitube Armoured Optical fiber cable through existing conduit: The Fiber should be OS2 Single Mode Optical Fiber Cable of Size 9/125µm. Outdoor Corrugated Steel tape Central loose tube. (Standard Approved: ISO 11801 2nd edition/ EN 50173-1:2002 / IEC 60794-1/IEC 60793-2-50 class B1.3 / EN 60793-2-50: class B1.3 / ITU Recommendation G.652.D - the oder ITU designations A, B and C are also fulfilled / OS1/ISO/IEC 24702:2006, cat. OS2; also OS1 requirements are fulfilled/IEEE 802.3 - 2002 incl. 802.3ae) Jacket.	80.00	Mtr	35.19	2,814.88
173	SITC of Rack mount Draw Type Loaded 6 port LIU available in Standard 19" ,Dimensions (mm) : 430 X 220 X 1U , Cold Rolled Steel as Raw Material , Consist of Top Cover and Bottom Panel , Easy to Assemble and Dissemble , Three Types of Input Holes Cable Entry Through Water Proof Cable Clamp , 12 Duplex SC or LC Adapter Interface , Splice 24 Fibers at Most with 1 Tray ,Adaptor, SM, Duplex SC, PC Type ,Pigtail, Support the TIA/EIA Telecommunication Wiring Standards. Compact Design , Telcordia GR-326-Core .	1.00	Nos	4,681.00	4,681.00
174	SITC of OFC Patch Cor, SM (OS2), Duplex LC-SC, LC-LC PC Type, 3M, LSZH Fiber Optic Single Mode OS2 Patch Cords are offered in LSZH Jackets with Corning Fiber,Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss : PC>= 45db, UPC>=50db, APC>=60db.	1.00	Nos	2,301.00	2,301.00
175	SITC of 10G-LX/LH SFP transceiver module,SMF, 1310nm, 9/125 um Single mode Fiber Type up to 20 KM.	1.00	Nos	12,689.00	12,689.00

176	SITC of 24 Port Layer 2 PoE+ Switch having 24 x 10/100/1000 Mbps Ethernet PoE+ ports with 4 x 1/10Gig SFP+ ports ,1 x RJ45 port console port ,Switching Capacity 128 Gbps , Throughput 96 Mpps ,MAC Address 16k , Switch should support IEEE 802.3af (15.4W) & IEEE 802.3at (30W). Total PoE power: 370W or above , Switch should support DHCP server/relay/client, DHCP snooping/option82 , Switch should support Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON , TFTP, FTP, SFTP, NTP, ZTP, SPAN, RSPAN,Switch should support support ICMPv6, DHCPv6, ACLv6 ,IPV6 Telnet ,Temperature 0°C -50°C ,Power Supply AC: 100-240V.	1.00	Nos	73,020.00	73,020.00
	Total				1,549,672.13
	FACILITY BUILDING (MODULAR FURNITURE)				
177	MAIN TABLE - 1500 x 750, ERU - 900W X 450D "# UPBEAT is a Modular desk based system of ht. 750 mm. Cube legs are fabricated by Argo Shield & have a square section. Cube legs are available for work top level 750 mm from base. Wire Management Single Power box with raiser for Manager Modules, Single tables (8+3 Anchor Roma). Soft closing access flap with brush. Metal modesty: Metal modesty is made from 0.8 mm thick CRCA. Metal modesty are mounted on the worktop with the help of the modesty mounting brackets made of 3 mm thick HR Worktop: 25mm thk prelaminated partical board with pvc lipping." Pedestal :Nova pedestal flat metal front, full ht free standing central locking of size 390 mm w x 435 mm d x 646 mm ht 3dr = 2box+1file.	1.00	No	39,082.00	39,082.00
178	Aero Large Seat Depth With Head Rest Enhanced Mesh Back, Enhanced 1D Adjustable Armrests, Knee Tilt Synchro Mechanism with 4 pos lock, Nylon Pedestal	1.00	No	13,125.00	13,125.00
179	Oxbo Visitor Chair CT Mech Upright Position Locking, Fixed PP Arms,	2.00	No	6,763.00	13,526.00
180	KD PLAIN WITH 4 SHELVES 1830H x 900W x 450D	2.00	No	19,323.00	38,646.00
181	4 Drawer Filing Cabinets(VFC) 1320H x 470W x 620D	10.00	No	24,052.00	240,520.00
182	Ingrid Solid Wood Bench 1210L x 440D X 470mm H.	4.00	No	14,275.00	57,100.00
	TOTAL COST OF MODULAR FURNITURE				401,999.00
	GATE COMPLEX (Civil)				
183	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	59.57	CUM	315.40	18,788.38
184	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	19.86	CUM	175.00	3,475.50
185	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	39.72	CUM	278.80	11,073.94

186	Providing, mixing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables at the rate of 7.5liters per sqm on vertical surface and 5.0liters per sqm on horizontal surface, 50% of the emulsion to be filled in the holes made in treanches at 150mm centre to centre (or as directed directed by the manufacture) etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour taxes etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	22.50	SQM	**100.00**	2,250.00
187	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	25.20	CUM	860.50	21,684.60
188	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	7.22	CUM	6,091.50	43,980.63
189	Brick work in foundation and plinth with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. and as per direction of Engineer-in-charge.	4.68	CUM	5,721.30	26,775.68
190	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				
a	Ground Floor				0.00
i	Foundation	19.55	CUM	6,887.60	134,652.58
ii	Plinth Beam	5.60	CUM	7,765.10	43,484.56
iii	Beam & Column	9.48	CUM	16,347.00	154,969.56
iv	Lintel	0.61	CUM	14,638.10	8,929.24
v	Roof Slab	2.43	CUM	14,253.10	34,635.03
vi	Chajja	1.45	SQM	1,274.80	1,848.46
vii	Roof Slab at Double Height	4.88	CUM	22,690.20	110,728.18
b	First Floor				
i	Beam & Column	20.65	CUM	18,323.60	378,382.34
ii	Roof Slab	2.55	CUM	15,835.90	40,381.55

191	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)				
a	Ground Floor	55.57	QTL	9,595.50	533,221.94
b	First Floor	47.98	QTL	9,630.00	462,047.40
192	Brick work in superstructure with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. complete as per direction of Engineer-in-charge.				
a	Ground Floor	11.66	CUM	5,754.70	67,099.80
b	First Floor	4.01	CUM	6,151.00	24,665.51
193	Half Brick work in superstructure with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:4) with best quality bricks having crushing strength not less than 75 Kg/cm2 imersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) with provision of stiffner (2 nos of 8 m.m dia M.S. Round Reinforcement Bars at each 4th layers, paid separately) includes molding, chamfering, corbelling, complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. complete as per direction of Engineer in charge.	1.14	CUM	6,807.10	7,760.09
194	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.				
a	Ground Floor	59.91	SQM	196.40	11,766.32
195	Providing 16mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.				
a	Ground Floor	94.14	SQM	283.60	26,698.10
b	First Floor	59.61	SQM	290.80	17,334.59
196	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary, scraping, cleaning and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty, taxes of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.				
a	Ground Floor	34.74	SQM	219.10	7,611.53

b	First Floor	174.45	SQM	224.70	39,198.92
197	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:4) finished smooth to inside smooth surface of half brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	20.53	SQM	208.70	4,284.61
198	Providing & laying best quality Vitrified floor tile of specified size of thickness 6-10mm of approved make confirming to IS-15622 specifications in floor over 20mm thick cement mortar (1: 4) to proper slope, line and level including cutting to required size and shape, fixing at corners and splays etc. Including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles complete as per the design & drawing with cost of all materials, labour, conveyance T&P etc. All complete as per the direction of Engineer -in-charge.				
	Full body premium grade matt finish vitrified tiles of size 600mmx600mm				
a	Ground Floor	15.70	SQM	1,203.10	18,888.67
199	Providing & laying vitrified tile of specified size in skirting cut from approved make confirming to IS-15622 specifications over 12mm thick cement mortar (1: 3) to proper line and level to a height as per design including cutting to required size and shape, fixing at corners and splays etc. including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles and complete as per the design & drawing with cost of all materials, labour, conveyance, taxes ,royalties,sundries and T&P etc. All complete as per the direction of Engineer -in-charge.				
	Full body premium grade matt finish vitrified tiles of size 600mmx600mm				
a	Ground Floor	3.00	SQM	1,340.30	4,020.90
200	Providing & Fixing tiles 60cm x 60cm special plain / printed full body matt vetrified floor tiles of premium grade having thickness 7mm to 8mm confirming to IS 13755 in floors treads or steps and landing on 25mm thick bed of cement mortar 1:4 (1cement : 4 sand)to proper slope, line and level including cutting to required size and shape, fixing at corners and splays etc. Including finishing the joints with epoxy based water proofing grout to match the color and shade of tiles complete as per the design & drawing with cost of all materials, labour, conveyance T&P etc. All complete as per the direction of Engineer -in-charge. (Toilet)				
	Suede /Rustic finish Vitrified Tile 600x600mm				
a	Ground Floor	2.25	SQM	1,413.60	3,180.60
201	Providing and fixing ceramic glazed wall tiles of specified size of thickness 6-10mm conforming to IS: 15622 specifications of approved make and shade, in skirting and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and finishing the joint with epoxy based water proofing grout to match the shade. All complete as per the direction of Engineer-in-charge (Toilet) (Note- Sample of tiles shall be approved before procurement and use)				
	Ceramic glazed Wall Tile 300 x 600mm				
a	Ground Floor	11.51	SQM	1,002.90	11,543.38

202	Providing and fixing 16-18mm thick granite flooring of approved quality and size in floors, steps, landings, window sill etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing, including cost, conveyance, loading, unloading, royalties and taxes of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.				
a	Ground Floor	3.29	SQM	2,819.80	9,277.14
203	Providing 16-18mm thick and above 0.40 Sqm size granite tile cladding of approved quality, colour and size in walls in all floors at all height on 12mm thick bed of cement mortar of mix (1:3) (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the granite including cost, conveyance, loading, unloading, royalties and taxes of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.				
	Ground Floor	1.32	SQM	2,970.00	3,920.40
204	Providing edge moulding and groove cutting of required numbers as per drawing and design to 18 mm thick granite stone counters, steps, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per direction of Engineer-in-Charge.	14.15	MTR	281.43	3,982.26
205	Supplying, fitting and fixing of M.S window grills made out of ms flats, pipes, square bar etc (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	130.50	KG	90.40	11,797.20
206	Supplying, fitting and fixing of M.S decorative grill gate made out of ms flats, pipes, square bar etc including brass mouldings (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	1173.06	KG	92.80	108,859.97
207	Providing and fixing in position wood plastic composite door frame with appropriate length of ETA Approved carbon steel galvanized (minimum 5 microns) double threaded 6.8 grade Polyamide PA 6 grade sleeve HRD C 10 anchor suitable for fastenings both on concrete & masonary/aerated blocks including cost of all materials, labours, T & P etc required for the work. complete in all respect as directed by the Architect/Engineer-in-charge.(Approved By Jaipur Court)				
	75mm x 50mm	10.05	MTR	573.52	5,763.88
208	Supplying, fitting and fixing of 32mm thick flush door shutter with approved quality of 30mm thick BWR block board pasted with 1mm thick sunmica on both side of approved design and quality including cost of all door fittings and fixtures etc. complete all as per direction of Engineer-In- Charge.	3.47	SQM	10,668.61	37,020.08

209	Single Glazed Aluminum Sliding Windows & Doors (Without Mesh Panel): Providing and fixing vertically anodized System Aluminum Sliding windows of TOSTEM / NCL ALLURO / ALUMIL make suitable for 2.4 KPA wind load with 50mm visible aluminium section width in the centre interlock. All sliders shall come with hurricane bar, concealed water collection chamber, and water drainage system with protection of incoming wind pressure. The system offered must be ride-in system with glass panels moving inside the channel without any external overhung along with a provision track for mesh panel. The extruded aluminium sections should be made from Grade 6063-T5 & vertically anodized with Texguard coating. Corner connection will be Butt joint using Nano gaskets for sealing. All other major Accessories should also be made by the same manufacturer. All Slider doors & windows will be centre locking with integrated Anti-lift in slider panel. Only gaskets should be used in all meeting points instead of Brush Pile. The outer frame Depth will be 72mm +/-3 mm for 2 and a half track & 104mm +/ 3 mm for 3 and a half track. The bottom frame must have concealed water collection chamber. Fixing of bottom frame must use a subframe and no direct grouting will be permitted on bottom frame directly. All glasses will be upto 6 mm clear toughened. The system should qualify Airtightness ASTM E283: 10.7m3/h.mn2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa System should have a 10-year warranty on properties, functionality and design, within restrictions defined by technical specifications of anodizing				
	GROUND FLOOR	4.86	SQM	11,247.00	54,660.42
210	**Aluminum Fixed / Top hung Ventilators:** **Providing and fixing vertically anodized System Aluminum top hung windows of TOSTEM / NCL ALLURO/ALUMIL make using easy clean hinges with provision of fixed part having cut outs on glass for exhaust provision if size permits, suitable for 2.4 KPA windload. System must allow 90 degrees opening of glass panel to facilitate easy external cleaning. The extruded aluminium sections should be made from Grade 6063-T5 & Anodized with Texguard coating. Corner connection will be Butt joint with using Nano gaskets for sealing. All other major Accessories should also be made by the same manufacturer. Only gaskets should be used in all meeting points instead of Brush Pile. The outer frame Depth will be 72 mm +/-3 mm. Fixing of bottom frame must use a subframe and no direct grouting will be permitted on bottom frame directly. All glasses will be upto 6 mm frosted toughened. The system should qualify Airtightness ASTM E283: 10.7m3/h.m2 at 75Pa of pressure, Water tightness ASTM E300: 240 Pa, Wind load resistance ASTM E330: 2400 Pa**				
a	Fixed / Top hung Ventilator	1.37	SQM	14,519.00	19,927.33
211	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties, taxes of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.				
a	Ground Floor	30.34	SQM	396.50	12,029.81
b	First Floor	50.63	SQM	437.40	22,145.56

212	Terrace Water Proofing:- Cleaning all the surface area to remove loose patrical such as mortar dust etc, with wire bruch and air blower complete in all respect like repairing of crack by polymer modified cementitious mortar as per the direction of Engineering In charge. Providing & Applying two component, cementitious acrylic polymer based high performance waterproofing coating AquaArm 2C-P/Equivalent manufactured and supplied by MYK Arment /Equivalent at a coverage of 0.5 m2/kg in 2 coats at approx 1.2mm DFT. Coverage may vary depending upon the surface. The waterproofing scope shall include supply of geotextile of 120 GSM. polymer modified cementitious mortar as per the direction of Engineering In charge. .	80.96	SQM	422.91	34,238.79
213	Wet area Water Proofing: Providing and applying Single component AquaArm Saniflex/Equivalent synthetic rubber based coating with a coverage of 1.2 kg /m2 over primer surface for 0.8mm DFT in two coats .The coating shall be taken upto 300mm from finished floor level on the vertical walls. The coating shall have an elongation of a minimum of 86% when tested as per ASTM D 412 and tensile strength of 1.05 N/mm2.Thorough surface preparation by mechanical means to level and plain the surface of walls and floors of the toilet areas. All cracks and crevices to filled and made good to receive waterproofing coating treatment The coating shall cover all the floor area of the wet area (toilet) and be applied over on to the vertical walls upto tap point/shower point height above the floor in two or more coats to achieve required thickness.The rate includes coving/ bore packing wherever neccessary. Work shall be carried out by manufacturer's authorised applicator as per manufacturer's methodology.	5.54	SQM	380.03	2,103.47
214	Finishing inside wall surface with cement based wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials taxes, labour T & P etc complete as per direction of Engineer-in-charge.	91.98	SQM	88.80	8,167.82
215	Finishing outside wall surface with cement based wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials taxes, labour T & P etc complete as per direction of Engineer-in-charge.				
a	Ground Floor	92.92	SQM	88.80	8,251.30
b	First Floor	209.09	SQM	92.10	19,257.19
216	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	91.98	SQM	195.70	18,000.49
217	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance and taxes of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.				
a	Ground Floor	92.92	SQM	187.80	17,450.38
b	First Floor	209.09	SQM	195.00	40,772.55
218	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirmming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading, and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	38.74	SQM	271.50	10,517.91

219	Providing one coat of Textured finish of approved make, quality and shade over the wall surface of the building over a coat of primer of approved make including cost of material, brushes, all labour, taxes, loading, unloading, scaffolding, T&P etc. as required for the work as per the direction of Engineer-in-charge. (colour & shade to be approved before procurment & use)	34.88	SQM	153.77	5,363.50
	TOTAL				2,728,870.01
	Internal PH & Sanitary Work (SECURITY CABIN & GATE)				
220	Supplying all materials, labours, T&P for fitting and fixing white glazed vitreous china floor mounted European coupled water closet of Jaquar make having cat no CNS-WHT-755S220SPPZ or equivalent type of approved make including supply of matching P/S trap to the floor with wooden plug and chromium plated screws including jointing the trap with soil pipe in cement mortar (1:1) etc all complete including cost of WC pan, PVC seat cover with CP brass hinges and rubber buffers etc all complete including cost, taxes and conveyance as per specification including polishing etc all complete as per PH specification and direction of Engineer-in-charge.	1.00	NOS	11,270.30	11,270.30
221	Supplying all material, labour T&P and fixtures for providing and fixing of white glazed vitreous chinaware under counter wash hand basin of approved size of Jaquar make having cat no CNS-WHT-705 or equivalent type of approved make with bottle trap of Jaquar cat no ALD 769L250x190 with CP waste coupling nut of Jaquar make having cat no ALD 709 and 15mm x 450mm PVC connection pipe of Jaquar make having cat no ALD 803AB with MS bracket with wooden plugs CP screws including cost of cement, sand, labour, T&P etc. complete including testing cost, conveyance, royalty and taxes of all materials etc. complete as per PH specification and direction of Engineer-in-charge.	1.00	NOS	6,660.70	6,660.70
222	Supplying all materials, labour, T&P and fixing standard sized 15mm dia Angular Stop cock of Jaquar Cat. No.-FLP 5053PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	4.00	NOS	1,172.90	4,691.60
223	Supplying all materials, labour, T&P and fixing standard sized 15mm dia pillar cock of Jaquar Cat. No.-FLP 5011PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	1,862.00	1,862.00
224	Supplying all materials, labour, T&P and fixing two way Bib cock of Jaquar Cat. No.-FLP 5041N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	2,110.30	2,110.30
225	Supplying all materials, labour, T&P and fixing health faucet of Jaquar Cat. No.-ALD 563 or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	1,175.20	1,175.20
226	Supplying all materials, labour, T&P and fixing standard sized CP towel rail - 24" of Jaquar Cat. No.-ACN-1111SM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	1,663.80	1,663.80
227	Supplying all materials, labour, T&P and fixing standard sized CP towel ring square of Jaquar Cat. No.-ACN-1121N or equivalent etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	1,623.30	1,623.30

228	Supplying all materials, labour, T&P and fixing standard sized CP toilet paper holder of Jaquar cat. No.-ACN1153S or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	1,460.20	1,460.20
229	Supplying all materials, labour, T&P and fixing standard sized CP robe hook of Jaquar Cat. No.-ACN 1191N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	549.50	549.50
230	Supplying all materials, labor T&P for fitting and fixing in all floors' fixed type glass mirror of size 600mm x 450mm best INDIAN make of 5.5 mm thickness with supply of 13mm thick asbestos backing and wooden plugs C. P. Brass screw including cost, conveyance, royalty, taxes of all materials complete as per P.H. specification and direction of Engineering-in-charge.	1.00	NOS	2,159.60	2,159.60
231	Supplying all materials, labour, T&P and fixing standard sized Wall Mixer of Jaquar Cat. No.-FLP 5273PM or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	6,350.50	6,350.50
232	Supplying all materials, labour, T&P and fixing of round shape CP overhead shower of Jaquar Cat. No.-OHS 1789 with arm SHA 477 or equivalent etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS	3,978.00	3,978.00
233	Supplying all materials, labour, T&P and fixing standard sized CP Soap case of Jaquar Cat. No.-ACN-1131N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	2.00	NOS	985.50	1,971.00
234	Providing and fixing circular type stainless steel grating with hole for floor /nahani trap etc complete as per PH specification and direction of the engineer in charge	1.00	NOS	123.20	123.20
235	Supplying all materials, labours, T&P and fitting and fixing of the following size of CPVC pipe SDR11 confirming to IS 15778 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance and taxes of all materials all complete as per PH specification and direction of Engineer-in-charge. (Concealed)				
a	15 mm dia	5.00	RM	238.60	1,193.00
b	20 mm dia	5.00	RM	308.90	1,544.50
c	25 mm dia	1.00	RM	410.40	410.40
d	32 mm dia	1.00	RM	588.60	588.60
236	Supplying all materials, labours, T&P and fitting and fixing of the following size of UPVC pipe S-80 confirming to IS 13592 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance of all materials all complete as per PH specification and direction of Engineer-in-charge.(Non Concealed)				
a	40mm dia	5.00	RM	446.50	2,232.50
b	50mm dia	15.00	RM	540.90	8,113.50

237	Supplying all materials, labour, T&P, fitting and fixing UPVC SWR pipes & fittings of approved make confirming to IS-13592, both below and above ground level / floor and on walls including supply of bobbins, nains, screws, wooden cleats, pipe clips as per requirement, including earth work in excavation and fitting, including cuting walls and floor and making good the damages with cement concrete (1:2:4) with hard granite chips, incluidng scaffolding wherever necessary all complete as per the PH specification and direction of the Engineer-in-charge.				
a	75mm dia	5.00	RM	365.40	1,827.00
b	110mm dia	15.00	RM	524.40	7,866.00
238	Supplying all materials, labour, T&P, fitting and fixing of UPVC SWR fittings of approved make with requisite testing etc complete as per PH specification and direction of Engineer-in-charge.				
a	110mm dia Single Junction with door	1.00	NOS	353.60	353.60
b	110mm dia Double Junction with door	0.00	NOS	423.60	0.00
c	110mm dia Cowl	2.00	NOS	58.70	117.40
d	110mm dia Plain Bend	2.00	NOS	207.60	415.20
e	110mm dia SWR Door Bend	1.00	NOS	251.10	251.10
f	125mm x 110mm Gulley Trap	1.00	NOS	1,147.40	1,147.40
g	110mm dia Tee with door	2.00	NOS	316.30	632.60
h	110mm dia Single Junction without door	1.00	NOS	433.90	433.90
i	110mm dia Socket plug	2.00	NOS	178.60	357.20
j	110mm dia Pipe clip	5.00	NOS	82.50	412.50
k	110mm dia Coupler	1.00	NOS	130.10	130.10
l	75mm dia Plain Bend	1.00	NOS	311.10	311.10
239	Supplying all materials, labour, T&P, fitting & fixing of different size UPVC Ball Valve of approved make including supply of all necessary jointing materials such as red lead paint, yarns etc. including cost, conveyance of all materials, T&P etc. all complete as per P.H. specification and direction of the Engineer-in-charge.				
a	25mm Dia	2.00	NOS	736.40	1,472.80
b	32mm Dia	1.00	NOS	1,487.50	1,487.50
c	40mm Dia	1.00	NOS	1,954.30	1,954.30
d	50mm Dia	1.00	NOS	3,191.00	3,191.00
240	Supplying all materials, labour, T&P and fitting and fixing of UPVC NRV valve of 50mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	1.00	NOS	3,474.30	3,474.30
241	Supplying all materials, labour, T&P and fitting and fixing of double air valve of 50mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	1.00	NOS	9,537.10	9,537.10
242	Supplying all materials,labours,T&P for cutting holes through existing brickwork including making good the damages in cement mortar (1:4) for taking GI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	3.00	NOS	65.30	195.90
243	Supplying all materials,labours,T&P for cutting holes through existing RCC floors & roofs including making good the damages for taking GI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	1.00	NOS	224.10	224.10
244	Supplying all materials,labours,T&P for cutting grooves in pucca floors and walls for taking GI/PVC pipes and making good the damages as per direction of Engineer-in-charge.	10.00	MTR	226.40	2,264.00

245	Supplying all materials,labours,T&P for cutting holes through existing brickwork including making good the damages in cement mortar (1:4) for taking SWR/HCI pipes and fittings/PVC pipes and fittings etc all complete as per PH specification and direction of Engineer-in-charge.	1.00	NOS	254.60	254.60
246	Supplyng all materials, labour, T&P for construction of brick masonary Gulley trap chamber of size 250mm x 250 mm with CI gulley trap, by flyash brick masonry in CM (1:4), CP (1:3) with 150mm x 150mm CI grating including labour and materials for fitting and fixing 100mm dia square mouth UPVC gully trap with supply of all jointing materials and encasing the gully trap with a block of CC (1:3:6) with 20mm & 10mm size hard stone metal all complete with providing and fixing of 250mm x 250mm precast RCC cover slab including cost, conveyance, taxes of all materials to site complete as per the PH specification and direction of Engineer-in-charge.	1.00	NOS	2,644.90	2,644.90
	TOTAL				102,687.30
	External Development				
A	**BRICK BOUNDARY WALL**				
247	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	436.93	CUM	315.40	137,807.09
248	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	145.64	CUM	175.00	25,487.47
249	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	291.29	CUM	278.80	81,210.35
250	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	78.74	CUM	860.50	67,754.91
251	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	78.74	CUM	6,091.50	479,638.62

252	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				
i	Foundation	120.09	Cum	6,887.60	827,165.46
ii	Column	94.40	Cum	16,347.00	1,543,075.07
iii	Grade beam	61.84	Cum	16,347.00	1,010,908.70
iv	Cement concrete coping	30.92	Cum	14,638.10	452,614.63
253	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	291.79	Qtl	9,595.50	2,799,877.24
254	Brick work in superstructure with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. complete as per direction of Engineer-in-charge.				
	Superstructure	27.05	Cum	5,754.70	155,650.97
255	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	137.86	Sqm	196.40	27,075.21
256	Providing 16mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	137.86	Sqm	283.60	39,096.39
257	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary, scraping, cleaning and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty, taxes of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	569.19	Sqm	219.10	124,708.98

258	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance and taxes of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	844.90	Sqm	187.80	158,672.69
259	Providing one coat of Textured finish of approved make, quality and shade over the wall surface of the building over a coat of primer of approved make including cost of material, brushes, all labour, taxes, loading, unloading, scaffolding, T&P etc. as required for the work as per the direction of Engineer-in-charge. (colour & shade to be approved before procurment & use)	844.90	Sqm	222.50	187,990.81
260	Supplying, fitting and fixing of M.S compound wall grills made out of ms flats, pipes, square bar etc (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	10759.46	Kg	90.40	972,655.59
261	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirmming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading, and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	1469.72	Sqm	271.50	399,028.64
262	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer-in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre.	772.00	MTR	287.00	221,564.00
	SUB TOTAL				**9,711,982.80**
B	**DRAINAGE SYSTEM**				
263	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	191.10	CUM	315.40	60,272.94
264	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	63.70	CUM	175.00	11,147.50
265	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	127.40	CUM	278.80	35,519.12

266	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	20.48	CUM	860.50	17,618.74
267	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	20.48	CUM	6,091.50	124,723.46
268	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.)				
a	Foundation	27.30	CUM	6,887.60	188,031.48
b	Wall	37.80	CUM	8,703.60	328,996.08
269	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	42.32	QTL	9,595.50	406,033.58
270	Providing and fixing factory made precast RCC perforated drain covers, having concrete of strength not less than M-25, of size 1000x450x50mm, reinforced with 8mm dia four nos longitudinal & 9 nos cross sectional T.M.T hoop bars, including providing 50mm dia perforations @ 100 to 125 mm c/c, including providing edge binding with M.S. flats of size 50mmx1.6 mm complete, all as per direction of Engineer-in-charge.	273.00	SQM	2,539.90	693,392.70
	SUB TOTAL				1,865,735.60
	DRIVEWAY & PATHWAY				
271	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	2387.85	Cum	37.06	88,493.72
272	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	1591.90	Cum	175.00	278,582.50

273	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	795.95	CUM	278.80	221,910.86
274	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	378.85	CUM	860.50	326,000.43
275	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	57.38	CUM	6,091.50	349,499.81
276	Rolling & compacting to sub grade or formation loosening by cutting earth for 15cm below the sub grade including watering and compacting in layers by PRR, cost & conveyance of required quantity of water, cost of all labour sundries, T & P etc. required for the work to complete in all respect as per specification and direction of Engineer-in-charge.	1136.55	CUM	295.90	336,305.15
277	Construction of granular sub-base by providing Close graded Granular subbase Grading-III material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	1136.55	Cum	1,692.90	1,924,065.50
278	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, laying in uniform layers with paver in subbase/base course on well prepared surface and compacting with vibratory roller to achieve the desired density as per Clause 406 of MoSRT&H Specifications for Road & Bridge works	420.00	Cum	2,346.92	985,708.44
279	Providing and laying 80mm thick factory made cement concrete interlocking paver block of M-40 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	2800.00	Sqm	**608.40**	1,703,520.00
280	Supplying and fixing of precast kerb stone of size 600mm x 300mm x 150mm of M-30 grade of approved make, design, colour and size made by Block making machine with proper compaction fixed in required pattern etc. complete in all respect conforming to IS 5758:1984 (SOR PG- 234 SL NO-4)	8500.00	Each	**249.55**	2,121,175.00
281	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirmming to ISI on brick/rcc work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading, and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	1147.50	Sqm	278.10	319,119.75
	Total Amount				8,654,381.15
B	**LANDSCAPE & HORTICULTURE**				

282	Trenching in ordinary soil upto a depth of 60 cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly levelling within a lead of 50 m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge of land manure before and after flooding trench with water (excluding the cost of imported earth, sludge or manure).	3696.60	cum	58.85	217,548.17
283	Supplying and stacking of good earth at site (Earth measured in stacks will be reduced by 20% for payment) with all lead and lift.	2464.40	Cum	639.63	1,576,304.17
284	Supplying and stacking sludge at site (sludge measured in stacks will be reduced by 8% for payment) with all lead and lift.	1232.20	Cum	448.64	552,814.21
285	Supplying and stacking at site dump manure from approved source, including carriage upto 5 km complete (manure measured in stacks will be reduced by 8% for payment) .				
a.	Screened through sieve of I.S. designation 20 mm	73.93	Cum	290.55	21,480.94
b.	Screened through sieve of I.S. designation 16 mm	59.15	Cum	324.65	19,201.62
c.	Screened through sieve of I.S. designation 4.75 mm	175.59	Cum	340.52	59,791.40
286	Rough Dressing the trenched ground including breaking clods etc.all complete as per the direction of Engineer-in-charge.	6161.00	sqm	1.10	6,773.40
287	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	6161.00	sqm	3.63	22,352.23
288	Fine dressing of the ground	6161.00	sqm	2.75	16,933.51
289	Spreading of sludge, dump manure and/or good earth in required thickness as per direction of officer-in-charge (cost of sludge, dump manure and/ or good earth to be paid separately).	4005.27	Cum	38.48	154,118.63
290	Mixing earth and sludge or manure in proportion specified or directed.	4005.27	Cum	27.76	111,186.19
291	Providing & laying Selection no. 1 grass turf with earth 50mm to 60mm thickness on existing ground prepared with proper level and ramming with required tools wooden and than rolling the surface with light roller make the surface smoothen and light watering the same, as per direction of officer in charge	3080.50	SQM	84.02	258,823.61
292	Providing and laying Neelgiri/Mexican grass turf with earth 50mm to 60mm thickness of existing ground prepared with proper level and ramming with tools wooden (Dhurmos) and than rolling the surface with light roller make the surface smoothen and light waterning with sprinkler and maintenance for 30 days or more till the grass establish properly, as per direction of officer-in-charge.	3080.50	SQM	202.22	622,926.39
293	Renovating lawns including weeding, cheeling the grass, forking the ground, top dressing with sludge or manure, mixing the same with forked soil, watering and maintaining the lawn for 60 days or more till the grass forms a thick lawn free from weeds and fit for mowing and disposal of rubbish as directed, including supplying good earth if needed but excluding the cost of sludge or manure (The manure/sludge shall be paid for separately).	6161.00	SQM	26.09	160,740.49
294	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any, with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately)				
a	Holes 60 cm dia, and 60 cm deep	110.00	NOS	10.19	1,120.90
b	Holes 45 cm dia, and 45 cm deep	110.00	NOS	4.99	548.90
295	Preparation of mounds of various size and shape by available excavated / supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc., lead upto 50 meter and lift upto 1.5 m complete as per direction of Officer-in-charge.	75.00	CUM	346.86	26,014.50

296	Providing Circular Cement Concrete pots of specified size, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 Nos (3 nos horizontal & 4 nos vertical " U " shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height, all complete as per direction of Officer-in-charge.Top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm	20.00	NOS	234.96	4,699.20
297	Filling of the following size empty pots with mixture of good earth & manure in the ratio of 2:1 (Two part of Good earth & one port of manure) and placing them on appropriate place i/c carriage of earth, manure and pots up to 50 mtr, as per direction of officer incharge. (The cost of good earth, earthen pots & manure will be paid separately.) Size of Empty Pots 35cm Top dia, 25cm Bottom Dia & 35cm Perpendicular height.	20.00	NOS	37.96	759.16
298	Anti termite treatment by digging pits 30 cm deep and 4 cm dia, 6 to 7 holes around the tree using chemical emulsion at the rate of 1.5 liter per hole in two time or more application to get the trees free from termite infection chemicals used Chlorpyriphos 20% EC in the ratio of 1% concentration and as per direction of officer-in-charge.	240.00	NOS	50.84	12,201.96
299	Anti termite treatment of lawn area through premise 30.50% I P. one liter premise diluted in 499 liters water and applying solution @ 1.00 litre solution per sqm lawn or bed area.(two application) i/c cost of chemical)and as per direction of officer-in-charge.and as per direction of officer-in-charge.	6161.00	SQM	2.49	15,312.34
300	Plantation of Trees, Shrubs, and Hedge at site i/c watering and removal of unserveiceable material's as per direction of officer in charge (excluding cast of plant & water)				
a	Trees Plant	120.00	NOS	5.55	666.00
b	Shrubs Plant	60.00	NOS	2.78	166.80
c	Hedge Plant	60.00	NOS	1.85	111.00
301	Providing and displaying of Aglaonema dove variety Plant, having ht. 30 cm to 45 cm with 8 to 10 leaves, well developed, fresh and healthy in 25 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge. (DSR 2020 PG- 11 SL-10011)	20.00	NOS	75.00	1,500.00
302	Providing and displaying of Aglaonema Snow-White hybrid plant (three in one), having ht. 30 cm & above with 6 to 8 leaves, bright colour, well developed, fresh and healthy in 25 cm size of Earthen pot / Plastic pot . (Specimen Plant) & as per direction of the officer-in-charge.(DSR 2020 PG- 11 SL-10014)	20.00	NOS	195.00	3,900.00
303	Providing and displaying of Areca Palm plant, having ht. 90 cm to 1.20 m with 4 to 5 suckers, well developed, fresh and healthy with lush green foliage in 25 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge.(DSR 2020 PG- 11 SL-10024)	20.00	NOS	140.00	2,800.00
304	Providing and displaying of Croton Challanger variety plant, having ht. 30cm and above, well developed with full of fresh and healthy leaves in 20 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge.(DSR 2020 PG- 13 SL-10032)	25.00	NOS	40.00	1,000.00
305	Providing and displaying of Croton Baby Golden plant (three in one), having ht. 30cm, multi branches, well developed with fresh and healthy foliage in 25 cm size of Earthen pot / Plastic pot. as per direction of the officer-incharge.(DSR 2020 PG- 13 SL-10036)	20.00	NOS	75.00	1,500.00
306	Providing and displaying of Dracaena Song of India plant (three in one), having ht. 30 cm and above, multibranched, well developed with fresh and healthy leaves in 25 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge.(DSR 2020 PG- 15 SL-10048)	15.00	NOS	100.00	1,500.00

307	Providing and displaying of Money Plant Broad Leaves mounted on moss stick 90 cm ht., 3 to 4 plants in each pot, well developed with full of fresh & healthy leaves in size of 25 cm Top dia x 18 cm Bottom dia x 25 cm Perpendicular height Earthen pot / Plastic pot . & as per direction of the officer-in-charge.(DSR 2020 PG- 17 SL-10062)	15.00	NOS	170.00	2,550.00
308	Providing and displaying of Phoenix palm plant, having ht. 75 cm to 90 cm with 10 to 15 or more leaves, well developed, fresh and healthy in 25 cm size of Earthen pot / Plastic pot & as per direction of the officer-in-charge.(DSR 2020 PG- 19 SL-10077)	20.00	NOS	190.00	3,800.00
309	Providing and Displaying plants Cladium Hybrid variety 3 to 4 plants in a pot well developed with fresh & healthy foliage 30 to 45 cm ht. in different colour 25 cm Earthen Pot/Plastic Pot and as per direction of the officer incharge.(DSR 2020 PG- 27 SL-10163)	20.00	NOS	58.00	1,160.00
310	Providing and Displaying plants Cosmos well developed fresh & healthy 20 to 25 cm ht. attractive colours multi branching at blooming stage in 20 cm Earthen Pot/Plastic Pot and as per direction of the officer-in-charge.(DSR 2020 PG- 29 SL-10165)	10.00	NOS	38.00	380.00
311	Providing and Displaying plants Creeper Rose variety 3 to 4 healthy branch 60 cm and above ht. well developed with one and above flowers in 25 cm Earthen Pot, as per direction of the officer-in-charge.(DSR 2020 PG- 29 SL-10179)	15.00	NOS	65.00	975.00
312	Providing and Displaying plants Standard Rose (H.T. variety) 3 to 4 healthy branch 90 cm and above ht. well developed with one and above flowers in 25 cm Earthen Pot, as per direction of the officer-in-charge.(DSR 2020 PG- 29 SL-10180)	10.00	NOS	130.00	1,300.00
313	Providing and Displaying Acalypha green plant well developed, fresh & healthy with good foliage, multi branch 30 to 45 cm ht. in 20 cm size Earthen Pot/ Plastic Pot bushy plant as per direction of the officer-in-charge.(DSR 2020 PG- 31 SL-10182)	10.00	NOS	32.00	320.00
314	Providing and Displaying Bamboo Buddha vally variety with umbrella shape plant having 120 to 135 ht. with fresh & healthy foliage well developed in 40 cm Cement pot multy branch, bushy plant as per direction of the officer-in-charge.(DSR 2020 PG- 31 SL-10188)	20.00	NOS	910.00	18,200.00
315	Providing and fixing overhead type sprinkler system with self closing valve type 25mm X 20mm with self closing spring made up of alluminium alloy and brass fittings including cost of all materials, labour, T & P etc complete as per direction of Engineer-in-charge.	4.00	NOS	4,355.60	17,422.40
316	Supplying all materials, labour, T&P and fixing 15mm dia CP Bib cock of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	4.00	NOS	1,757.20	7,028.80
317	Supplying all materials, labours, T&P and fitting and fixing of the 20mm dia CPVC pipe confirming to IS 15778 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance and taxes of all materials all complete as per PH specification and direction of Engineer-in-charge. (Concealed)	200.00	RM	335.60	67,120.00
	Total Amount				3,995,051.92
	Water Supplyline including of Borewell & Rain Recharge pit				

318	Supplying all materials, equipment, labour & conducting reconnaissance survey, integrated Hydrological and Geophysical (Electrical Resistivity Method) survey & selection of potential source for exploration of Ground Water including selection and recommendation of site for drilling wells in selected locations in any part of Orissa under the following Geological formation:				
a	Rocky terrain with boulder formation for 300m depth	1.00	EACH	5,000.00	5,000.00
319	Labour for drilling a perfectly vertical bore hole of specified dia for a specified depth below ground level through consolidated and unconsolidated rock with down the hole hammer drilling rig or combination rig as required to suit the site condition as per the direction of the Engineer in charge including use of own rig with its accessories, tools and plant and consumables etc for lowering of 200mm/150mm dia G.I/P.V.C/M.S casing pipes for housing fitted with socket and with or without well screen as per the necessity for soft, medium, hard and boulder formation (G.I/ P.V.C/ M.S casing pipes if required to prevent collapse of overburden is to be provided by the contractor including lowering and withdrawing after completion of the tube well).	90.00	MTR	897.60	80,784.00
320	Supplying 200mm polyvinyl chloride pipes as per ASTM-D-1785-89 schedule 80 having threads in accordance with DIN 2999 part-1/DIN-42225 part-II specification length of pipe (laying length) will be 3 mtrs. The pipes shall be supplied with both external and internal threaded with free socket. The pipe having external thread at one end i.e female and or belled end. The female end having internal thread is to be belled in order to accept the male end while jointing pipes,pipes shall be provided with a groove at the male thread to accomodate flexible PVC/Rubber 'O' ring to make the joint water tight colour of the pipe shall be blue. The name of the manufacture along with batch No class of pipe shall be stranded legibly of each pipe length.	80.00	MTR	2,926.40	234,112.00
321	Lowering the following size of G.I/P.V.C/M.S housing pipes with or without slotted pipes as per the necessity from ground level up to 45.00m depth and fitted and fixed up in perfectly vertical position including cutting and threading of pipes and slotted pipes and supplying and fixing all jointing materials, tools and plant etc all complete and keeping the top of casing pipe threaded including plugging tube wells to prevent entry of foreign materials.	80.00	MTR	224.90	17,992.00
322	Supplying all materials, labour, T&P and providing and providing sanitary sealing by cement concrete grouting of annular space around GI/PVC/MS housing pipe upto 5m below ground level (as per drawing) to plug the bore hole excluding cost of cement all complete as per direction of the Engineer in charge. Minimum one metre of casing pipe to be inserted in the bore into the rock at the bottom to ensure sanitary sealing (excluding cost of cement which will be supplied directly by the department)	1.00	NOS	399.60	399.60
323	Cleaning and developing the tube well with supply of compressor worked till clear and adequate discharge is obtained from the tube well including supply and use of all necessary equipment and labour as per direction of the Engineer in charge	1.00	NOS	8,385.60	8,385.60
324	Supplying all materials, labours, T&P and fitting and fixing of the 80mm dia of UPVC pipe (Sch-80) confirming to ASTM D1785 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage, etc. for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance of all materials all complete as per PH specification and direction of Engineer-in-charge.(Non Concealed)	70.00	MTR	1,159.10	81,137.00

325	Supply, installation, testing and commisioning of vertical submerssible pump set of approved make having discharge 20m3 per hour and 60mtr head including installation of pump set with wire ropes, clamps etc inside the borewell, etc complete as per the Direction of Engineer-in-charge. (Duty of pump to be decided depending upon yeild of the borewell)	1.00	NOS	32,481.20	32,481.20
326	Supply, installation, testing and commisioning of automatic star delta control panel suitable for 10HP pumpset including MS box fitted with main switch ,contactor, single phasing preventer, timer, selector switch, voltmetre, ammeter etc and connection with motor inside the borewell complete as per the Direction of Engineer-in-charge. (Excluding power supply and flat cable for connection with motor)	1.00	NOS	9,756.60	9,756.60
327	Protection to the Borewell with CC base	1.00	NOS	2,555.30	2,555.30
328	3 core 6.0sqmm copper flat cable	80.00	RM	218.20	17,456.00
329	Bore Cap	1.00	NOS	638.80	638.80
330	Clamp	1.00	NOS	817.70	817.70
331	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	140.10	CUM	315.40	44,187.54
332	Extra lift of 1.5m or part there of over the initial lift of 1.5m in all kinds of embankments and road works and ordinary earth work in general.	67.60	CUM	22.50	1,521.00
333	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	69.23	CUM	175.00	12,115.25
334	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	5.07	CUM	860.50	4,362.74
335	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	5.07	CUM	6,091.50	30,883.91
336	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				

a	Foundation	11.44	CUM	6,887.60	78,794.14
b	Beam & Column	1.08	CUM	16,347.00	17,654.76
c	Wall	19.01	CUM	8,703.60	165,455.44
d	Roof Slab	2.51	CUM	14,253.10	35,775.28
337	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	37.16	QTL	9,595.50	356,568.78
338	Providing 12mm. thick cement plaster with cement mortar of mix (1:4) in all floors with Portland slag cement (PSC) and with screened and washed sharp sand for mortar with neat cement punning finished smooth to brick/RCC walls after racking out the joints including watering and curing complete with cost, conveyance, loading and unloading, royalties and taxes of all materials, cost of all labour, sundries, T&P, scaffolding required for the work etc. complete in all respect as per the direction of Engineer-in-Charge.	79.40	SQM	208.70	16,570.78
339	Providing 12 mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside/outside surface of brick masonry walls after racking out joints including watering and curing rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labour, T&P, sundries and scaffolding required for the work etc. with providing grooves as directed by the Engineer in charge.	10.80	SQM	196.40	2,121.12
340	Providing and painting two coats of cement paint over a coat of cement wash of approved quality and approved shade in all floors at all height including required admixture by making the surface to the internal plastered surface of wall smooth including cost, coveyance, loading and unloading and taxes of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	10.80	SQM	66.20	714.96
341	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties, taxes of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.	16.76	SQM	396.50	6,645.34
342	Water Tank Water Proofing: Providing and applying Single component AquaArm Saniflex/Equivalent synthetic rubber based coating with a coverage of 1.2 kg /m2 over primer surface for 0.8mm DFT in two coats .The coating shall be taken upto 300mm from finished floor level on the vertical walls. The coating shall have an elongation of a minimum of 86% when tested as per ASTM D 412 and tensile strength of 1.05 N/mm2.Thorough surface preparation by mechanical means to level and plain the surface of walls and floors of the toilet areas. All cracks and crevices to filled and made good to receive waterproofing coating treatment The coating shall cover all the floor area of the wet area (toilet) and be applied over on to the vertical walls upto tap point/shower point height above the floor in two or more coats to achieve required thickness.The rate includes coving/ bore packing wherever neccessary. Work shall be carried out by manufacturer's authorised applicator as per manufacturer's methodology.	114.46	SQM	**380.03**	43,498.23

343	Supplying and fixing 900mm dia SFRC cover without frame for manhole including cost of all materials, T&P, labour etc complete as per direction of Engineer-in-charge.	4.00	NOS	5,408.80	21,635.20
344	Supplying and fixing stainless steel ladder of approved gauge of 4.0 mtr long and required width inside under ground tank including cost of all materials, labour, T&P etc complete as per approved drawing, design and direction of Engineer-in-charge.	80.00	KG	298.80	23,904.00
345	Supplying all materials, labour, T&P for fitting and fixing of water level indicator made of MS flats and plates with lablling etc complete as per direction of Engineer-in-charge.	2.00	NOS	7,136.30	14,272.60
346	Supplying all materials, labour, T&P for fitting and fixing of 100mm dia CI/MS/DI overflow line of approved make etc complete as per direction of Engineer-in-charge.	2.00	NOS	1,009.20	2,018.40
347	Supplying all materials, labour, T&P for fitting and fixing of puddle collar of 150mm dia of approved make etc complete as per direction of Engineer-in-charge.	2.00	NOS	3,918.10	7,836.20
348	Supplying all materials, labour, T&P for fitting and fixing of 100mm vent pipe of approved make etc complete as per direction of Engineer-in-charge.	2.00	NOS	434.30	868.60
349	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	138.47	CUM	278.80	38,605.44
350	Supplying all materials, labours, T&P and fitting and fixing of the following size of CPVC pipe SDR11 confirming to IS 15778 certification mark with socket and screw joints in walls and floors including supplying of required number of fittings of approved make including cutting threads to pipes and pipes to length, including wastage,etc for fitting to the walls with supply of holder ats, clamps, fixing wooden plugs in walls, including testing of pipe line for water tightness complete as per IS specification including cost, conveyance and taxes of all materials all complete as per PH specification and direction of Engineer-in-charge. (Concealed)				
a	65mm Dia	35.00	RM	643.20	22,512.00
b	80mm Dia	75.00	RM	1,159.10	86,932.50
351	Supplying all materials, labour, T&P, fitting & fixing of different size UPVC Ball Valve of approved make including supply of all necessary jointing materials such as red lead paint, yarns etc. including cost, conveyance of all materials, T&P etc. all complete as per P.H. specification and direction of the Engineer-in-charge.				
a	65mm Dia	2.00	NOS	3,721.80	7,443.60
b	80mm Dia	2.00	NOS	6,242.00	12,484.00
352	Supplying all materials, labour, T&P and fitting and fixing of CI/DI gate valve of following Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.				
a	65mm Dia	1.00	NOS	6,250.00	6,250.00
b	80mm Dia	2.00	NOS	5,720.80	11,441.60

353	Supplying all materials & labour, T&P and constructing brick masonary chamber for water sluice valve, single air valve & non return valve with flyash brick masonary in cement mortar (1:4) as per approved drawing and specification CC (1:4:8) with 4cm size hard granite metal on the bed, 12mm cement plaster (1:3) to inside and cement flush pointing (1:3) to outside surface with 100mm thick RCC M25 cover slab with 12mm hg chips using required quantity of tor steel, centring and shuttering to the slab and dismantling it after 31 days of casting, filling the outside cavity with excavated materials, watering, curing including cost, conveyance, taxes of all materials, labour charges for cutting, bending, binding and tying the grills in proper position etc all complete as per drawing, design and direction of Engineer-in-charge.				
a	Sluice Valve Chamber (0.75x0.75x1.20mtr)	2.00	NOS	14,207.50	28,415.00
354	Providing & fixing of following dia CI/DI body non return valve of approved make with high tensile bress rising stem suitable for the system pressure as per IS 780				
a	65mm Dia	1.00	NOS	5,545.10	5,545.10
b	80mm Dia	2.00	NOS	9,537.10	19,074.20
355	Supplying all materials, labour, T&P, fitting & fixing of different size bourden type pressure gauge of reputed make (0-10 kg/sqcm) with valves, piping, fitting of approved make including supply of all necessary jointing materials such as red lead paint, yarns etc. including cost, conveyance & taxes of all materials, T&P etc. all complete as per P.H. specification and as per the direction of the Engineer-in-charge.	1.00	SET	3,321.90	3,321.90
356	Supplying all materials, labour, T&P and fitting and fixing of double air valve confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	1.00	NOS	9,537.10	9,537.10
357	Supplying all materials, labour, T&P and fitting and fixing of CI/DI foot valve of following Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.				
a	65mm Dia	1.00	NOS	13,199.00	13,199.00
b	80mm Dia	1.00	NOS	9,537.10	9,537.10
358	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control centre shall be fabricated out of 14 gauge CRCA sheet steel in form in 3b formation with reinforcement of suitable size angle iron, channel 'T' sections irons and/or flats wherever necessary. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before painting as per specifications with 2 coats of red oxide primer and final approved shade of powder coated paint. 2 Nos. earthing terminals shall be provided for 3 phase, 4 wire, 50 Hz supply system. Lifting hooks shall also be provided in case of large panels. Approval shall be taken for each panel before fabrication. Cadmium Plated hardware shall be used in fabrication of panels. Quoted rates shall inclusive of cables (in accordance to specification) with earthing from panel to each motor / equipment.	1.00	SET	9,756.60	9,756.60
359	Supply, installation, testing and commisioning of horizontal centrifugal pump set of approved make having discharge 16.5m3 per hour and 35-40mtr head including installation of pump set (5HP) with suitable base plate and foundation inside the sump, delivery arrangement with suitable GI or MS pipe providing valves fittings etc and connection within 10mtr distance etc complete as per the Direction of Engineer-in-charge. (1W + 1S)	2.00	SET	59,548.80	119,097.60

	TOTAL				
360	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in all kinds of soil including ordinary soil, hard/gravelly soil and stony earth mixed with stone and boulders etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	183.11	CUM	315.40	57,752.89
361	Extra lift of 1.5m or part there of over the initial lift of 1.5m in all kinds of embankments and road works and ordinary earth work in general.	20.61	CUM	22.50	463.73
362	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	25.58	CUM	860.50	22,011.59
363	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	4.56	CUM	6,091.50	27,777.24
364	Brick work in foundation and plinth with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. and as per direction of Engineer-in-charge.	19.65	CUM	5,721.30	112,423.55
365	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				0.00
366	Roof Slab	2.83	CUM	14,253.10	40,336.27

367	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	2.55	QTL	9,595.50	24,468.53
368	Providing 12mm. thick cement plaster with cement mortar of mix (1:4) in all floors with Portland slag cement (PSC) and with screened and washed sharp sand for mortar with neat cement punning finished smooth to brick/RCC walls after racking out the joints including watering and curing complete with cost, conveyance, loading and unloading, royalties and taxes of all materials, cost of all labour, sundries, T&P, scaffolding required for the work etc. complete in all respect as per the direction of Engineer-in-Charge.	35.10	SQM	208.70	7,325.37
369	Supplying and fixing 900mm dia SFRC cover without frame for manhole including cost of all materials, T&P, labour etc complete as per direction of Engineer-in-charge.	8.00	NOS	5,408.80	43,270.40
370	Supplying, fitting & fixing of MS grill to be fixed into the walls etc. made as per approved drawing etc. complete for all floors as per approved drawing and design, cutting to required size and welding properly, finished smooth and sand papering, painting one coat with red oxide primer, including cost, conveyance, taxes of all materials, T&P etc. as required for the work complete as per direction of the Engineer-in-charge. (Weight certificate way measurement will be produce at the time of bill)	72.00	KG	90.40	6,508.80
371	Gravel(Quartz) filling to the filtration chamber with good quality gravel, mixing with water to make it to a plastic state and proper backing as per correct profile including cost conveyance royalty and other taxes of materials with all labour T&P materials required for the item complete as directed by the Engineer-in-charge.	30.27	CUM	2,000.80	60,564.22
372	Supplying all materials, labour, T&P, fitting and laying in trenches UPVC pipes & fittings of approved make confirming to IS-4985 and specials of the following outside diameter and classes including jointing with supply of approved solvent cement by non heat application method including testing etc complete as per the PH specification and direction of the Engineer-in-charge. (Earthwork to be measured separately)				
A	100mm dia	120.00	RM	524.40	62,928.00
B	150mm dia	60.00	RM	1,029.30	61,758.00
C	200mm dia	40.00	RM	1,396.50	55,860.00
373	Providing and laying in trench cement concrete (1:3:6) with 40mm size hard granite metal in the following type of bedding for pvc pipes of the following internal diameter including curing complete as per specification				
A	100mm dia	60.00	RM	289.30	17,358.00
B	150mm dia	60.00	RM	482.40	28,944.00
C	200mm dia	40.00	RM	537.90	21,516.00
374	Supplying all materials, labour, T&P and necessary materials towards laying of 250mm dia RCC NP2 Hume pipe push tight joint type (including cost of RCC Hume pipe) over PCC bed with plastic rope without damage to the pipe with all convenience the materials to site and including all taxes all complete as per direction of Engineer-in-charge.	15.00	RM	1,648.00	24,720.00

375	Supplying all materials, labour, T&P and fitting and fixing of PP flanzed end ball valve of 150mm Dia confirming to the relevant IS specification and dimension including fixing it in position along the pipeline with supply of all required materials such as rubber insertion, nuts & bolts including cost of all materials, taxes, and duties, transportation charges from store to site etc all complete as per the direction of Engineer-in-charge.	16.00	NOS	14,025.50	224,408.00
376	Filling foundation trenches and plinth with excavated earth (excluding rock) including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	67.91	CUM	175.00	11,884.25
377	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	135.81	CUM	278.80	37,863.83
378	Providing and placing in position RCC ring of following dia below ground level including jointing the rings with cement mortar 1:4 for rain water silting chamber including cost of all materials, labours, T&P etc complete as per direction of Engineer-in-charge.				
a	900mm Dia	48.00	NOS	520.00	24,960.00
b	1200mm Dia	96.00	NOS	780.00	74,880.00
379	Supplying and fixing RAINY 100mm size MECHANICAL FILTER with auto clean screen and bypass valve as IFC -1 etc complete as per direction of Engineer-in-charge.	8.00	NOS	7,948.40	63,587.20
380	Supplying and fixing 200 mm dia FRP Filter Screen with epoxy resin base for dry bore upto 20 mtrs (1 mtr@2500) nos- ARC or equivalent etc complete as per direction of Engineer-in-charge.	8.00	NOS	2,090.70	16,725.60
381	Labour for drilling a perfectly vertical bore hole for a specified dia for a specified depth below G.L through consolidated and un-consolidated rocks with down the hole hammer drilling rig or combination drilling rig (1200 cfm/ 300 psi) as required to suit the site condition as per the direction of EIC including use of own rigs with its accessories, T&P & consumables etc. for lowering of 200mm dia PVC/GI pipes for housing fitted with socket and with or without well screen as per the necessity for soft, medium, hard and boulder formation (GI/ PVC casing pipes, if required to prevent collapse of over burden is to be provided by the contractor including lowering and withdrawing after completion of the Tube Well).				
A	Labour for drilling of 200mm dia & 150mm dia bore from '0' mtr. to '100' mtr.	160.00	RM	897.60	143,616.00
382	Providing & lowering the following size PVC pipes (ASTM) with or without slotted pipes as per the necessity from 1.00m above ground level up to required depth and fitting and fixing up in perfectly vertical position, including cutting, threading pipe and slotted pipe and supplying and fixing all jointing materials, T&P etc. complete and keeping the top of the casing pipe threaded including plugging the tube well to prevent entry of foreign materials from above. The cost inclusive of pipes, fittings, labour, consumables, POL, consumables with hire & running charges of machinaries etc. as per specification & direction of EIC.				
	Lowering of 200mm (8") dia PVC plastic pipes Sch-80 as per ASTM-D-1785/2004 upto required depth.	160.00	RM	2,926.40	468,224.00
383	Lowering the following size of G.I/P.V.C/M.S housing pipes with or without slotted pipes as per the necessity from ground level up to 45.00m depth and fitted and fixed up in perfectly vertical position including cutting and threading of pipes and slotted pipes and supplying and fixing all jointing materials, tools and plant etc all complete and keeping the top of casing pipe threaded including plugging tube wells to prevent entry of foreign materials.	160.00	RM	224.90	35,984.00
	TOTAL				3,560,192.26
	EXTERNAL SEWERAGE WORKS				

384	Supplying all materials,labours,T&P for constructing inspection chamber of 900mmx800mmx450mm with cement concrete (1:3:6) on bed with hard granite metal size 40mm and flyash brickwork in cement mortar (1:4) in foundation and plinth, 100mm thick RCC M25 cover slab with supplying fitting and fixing of medium duty SFRC manhole cover, moulding and shaping the channel and benching with cement concrete (1:2:4) using 12mm size hg chips,12mm thick cement plaster in cement mortar (1:3) with punning to inside, cement plaster in CM (1:3) to outside the chamber including centring, shuttering, providing required quantity of MS rods and binding wires for reinforcement, bending, binding, tying the grills and placing in the proper position and drawing and design and PH specification including cost, conveyance, royalty, taxes etc for all materials as per the drawing, design and direction of Engineer-in-charge.	6.00	NOS	16,707.70	100,246.20
385	Extra for every additional depth of 0.10mtr or part there of inspection chamber as of previous item of size 900x800mm from 450mm to 900mm depth (data for 0.10 mtr per each)	2.00	NOS	816.60	1,633.20
386	Supplying all materials,labours,T&P and constructing inspection chamber/manhole of 1200mmx 900mmx900mm with cement concrete (1:3:6) on bed with hard granite metal size 40mm of 150mm thick and flyash brickwork in cement mortar (1:4) in foundation and plinth, 150mm thick RCC M25 cover slab with supplying fitting and fixing of medium duty SFRC manhole cover, moulding and shaping the channel and benching with cement concrete (1:2:4) using 12mm size hg chips,12mm thick cement plaster in cement mortar (1:3) with punning to inside, cement plaster in CM (1:3) to outside the chamber including centring, shuttering, providing required quantity of MS rods and binding wires for reinforcement, bending, binding, tying the grills and placing in the proper position and drawing and design and PH specification including cost, conveyance, royalty, taxes etc for all materials all complete as per the drawing, design and direction of Engineer-in-charge	2.00	NOS	24,853.90	49,707.80
387	Extra for every additional depth of 0.10mtr or part there of inspection chamber as of previous item of size 1200x900mm from 900mm to 2.5mtr depth (data for 0.10 mtr per each)	2.00	NOS	965.10	1,930.20
388	Construction of circular brick masonary manhole chamber of size 1.20 x 0.90 mtr including cement concrete (1:3:6) in bed by using 40mm size granite metal, brickwork in CM (1:4) in foundation & plinth, cement plastering (1:3) over flyash brick, plastering in CM (1:3) with neat cement punning, CC (1:2:4) over bed for benching and channeling, RCC M25 for roof slab of 150mm thick and supply fitting and fixing SFRC medium duty type cover including cost of centring and shuttering cost of MS rod for RCC work, supplying fitting and fixing of the polypropelen step iron of required interval etc all complete with all cost, conveyance, royalties taxes etc all complete as per direction of Engineer-in-charge.	2.00	NOS	21,994.50	43,989.00
389	Extra for every additional depth of 0.10mtr or part there of manhole size 1200x900mm from 1100mm to 1650mm depth (data for 0.10 mtr per each)	2.00	NOS	668.20	1,336.40
390	Construction of circular brick masonary manhole chamber of size 1.20 x 1.670 mtr including cement concrete (1:3:6) in bed by using 40mm size granite metal, flyash brickwork in CM (1:3) in foundation & plinth, cement plastering (1:3) over flyash brick, plastering in CM (1:3) with neat cement punning, CC (1:2:4) over bed for benching and channeling, RCC M25 for roof slab of 150mm thick and supply fitting and fixing SFRC medium duty type cover including cost of centring and shuttering cost of MS rod for RCC work, supplying fitting and fixing of the polypropelen step iron of required interval etc all complete with all cost, conveyance, royalties taxes etc all complete as per direction of Engineer-in-charge.	2.00	NOS	28,869.30	57,738.60

391	Extra for every additional depth of 0.10mtr or part there of manhole size 1200x1670mm from 1650mm to 2300mm depth (data for 0.10 mtr per each)	2.00	NOS	846.10	1,692.20
392	Supplying all materials, labour, T&P and laying of UPVC SWR pipes & fittings of approved make confirming to IS-13592,in trenches as sewer line including jointing, laying in proper gradient etc all complete as per the PH specification and direction of the Engineer-in-charge.				
a	100mm Dia	120.00	RM	524.40	62,928.00
b	150mm Dia	40.00	RM	1,029.30	41,172.00
393	Supplying all materials, labour, T&P and necessary materials towards laying of RCC NP2 Hume pipe push tight joint type (including cost of RCC Hume pipe) inside the pipeline trench of required size with plastic rope without damage to the pipe with all convenience the materials to site and including all taxes all complete as per direction of Engineer-in-charge.				
a	150mm Dia	70.00	RM	1,070.90	74,963.00
b	200mm Dia	25.00	RM	1,283.90	32,097.50
c	250mm Dia	15.00	RM	1,648.00	24,720.00
394	Providing and laying in trench cement concrete (1:3:6) with 40mm size hard granite metal in the following type of bedding for pvc pipes of the following internal diameter including curing complete as per specification (A1-Type Bedding)				
a	150mm Dia	70.00	RM	482.40	33,768.00
b	200mm Dia	25.00	RM	537.90	13,447.50
c	250mm Dia	15.00	RM	611.00	9,165.00
395	Supply of all labour, T&P towards excavation of sewage pipe line trench in all kinds of soil within 50 mtr initial lead and 1.5 mtr initial lift including rough dressing and breaching of clods to maximum 5cm to 7cm and laying in layers not exceeding 0.30mtr in depth as per design and drawing and as per direction of Engineer-in-charge.	195.10	CUM	315.40	61,534.54
396	Supply of all labour, T&P towards excavation of sewage pipe line trench in all kinds of soil within 50 mtr initial lead and beyond 1.5 mtr initial lift including rough dressing and breaching of clods to maximum 5cm to 7cm and laying in layers not exceeding 0.30mtr in depth as per design and drawing and as per direction of Engineer-in-charge.	50.71	CUM	22.50	1,140.98
397	Supplying and filling the pipeline trench with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	18.65	CUM	860.50	16,048.33
395	Filling pipeline trench with excavated earth including laying the earth in layers not exceeding 23.5cm (9”) thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	138.98	CUM	175.20	24,348.67
398	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	56.12	CUM	278.80	15,646.26
399	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	5.98	CUM	6,091.50	36,427.17

400	Providing and laying plain cement concrete of (1:2:4) for mending of sewer line trench using 12 mm. Size black hard crusher broken granite stone chips and screened and washed sharp sand for mortar of approved quality from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels laid in layers not exceeding 15 cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes of all materials and cost of all labours, sundries, T & P required for the work etc complete as per the instruction of the Engineer-in-Charge.	7.36	CUM	7,717.70	56,802.27
401	Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.)				
a	Foundation	16.51	CUM	6,887.60	113,714.28
b	Wall	23.63	CUM	8,703.60	205,666.07
c	Slab	3.13	CUM	14,253.10	44,612.20
402	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	46.26	QTL	9,595.50	443,887.83
403	Brick work in foundation and plinth with flyash bricks of size 25cmx12cmx8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm2 immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty and taxes of all materials, labour, T&P etc. and as per direction of Engineer-in-charge.	1.20	CUM	5,721.30	6,865.56
404	Providing 12mm. thick cement plaster with cement mortar of mix (1:4) in all floors with Portland slag cement (PSC) and with screened and washed sharp sand for mortar with neat cement punning finished smooth to brick/RCC walls after racking out the joints including watering and curing complete with cost, conveyance, loading and unloading, royalties and taxes of all materials, cost of all labour, sundries, T&P, scaffolding required for the work etc. complete in all respect as per the direction of Engineer-in-Charge.	120.89	SQM	208.70	25,229.74
405	Providing 16mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after scraping, cleaning and racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties and taxes of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	7.96	SQM	283.60	2,257.46

406	Supplying all materials, labour, T&P and providing, fitting & fixing 100mm x100mm x100 mm SW Tee in wall including filling the recess with cement concrete (1:3:6) with 12mm size h.g chips all complete including watering, curing, conveyance of all materials to worksite, payment of royalty all complete as per specification and direction of the Engineer in charge.	2.00	NOS	309.70	619.40
407	Supplying all materials, labour, T&P and making MS Step Iron in 20mm diameter MS steel bars & fixing into walls of man hole/septic tank duly embedded in cement concrete (1:3:6) complete as per specification and direction of the Engineer in charge.	12.00	NOS	308.90	3,706.80
408	Supplying and fixing 900mm dia SFRC cover without frame for manhole including cost of all materials, T&P, labour etc complete as per direction of Engineer-in-charge.	2.00	NOS	5,408.80	10,817.60
409	Supplying all materials, labours, T&P and constructing 1.22m dia and 2.1m depth soakway pit with precast RCC rings joined loose, gravel backing in the rear of well steining, precast RCC cover slab in cement concrete (1:2:4) using 12mm size hg chips fitted with iron lifting handles including cutting hole in the rings for inlet pipe, earthwork in open well excavation in all kinds of soil and refilling of cavity around the pit & painting the iron works, watering, curing, conveyance of all materials to worksite, payment of royalty etc all complete as per approved specification and direction of Engineer-in-charge.	2.00	NOS	20,593.10	41,186.20
	TOTAL				1,661,045.95
	External Lighting				
410	SITC of **Street light- 120W,130/140 lm/w efficacy** ,IP PC Lens new generation energy saving & environmental friendly long life versatile pressure die-cast alluminium IP66 roadway luminaire with high power LED as light source with acrylic cover (5Years Warranty)	41.00	NOS	8,450.00	346,450.00
411	SITC of 7 mtr long hot dip galvanized Conical PU Polyurethane (PU) paint coating for enhanced weather resistance and aesthetics painted pole having bottom 143 mm A/F & 75 mm top A/F made up of 3mm thk with PU painted pole suitable for wind speed >220km/hr considering the weight & dimension of 1 nos 120 W LED light to be fitted in the top of the pole. HT sheet alongwith base plate of size 230X230X16mm thk. Pu paint color must be choosen as direction of EIC/ RAL Code 7001 . The door of the pole must have lockable hinges & can have theft protective. The foundation bolts 4 nos. J type En 8 grade (M20X700 mm). The Pole must have 1 MTR single arm designed decorative btacket with PU paint as direction of EIC , The design of the bracket will be The bidder shall also furnish wind load test report of the solar fixture and wind load test of the pole considering the weight and dimension of 1 no 120 W street light to be fitted in the pole to sustain wind speed of 220km/hr or more from /central/state govt accredited NABL lab after award of the work. Manufacturer must having own testing lab in side plant & all testing machines should be NABL calibrated & lab should be NABL accredited. Manufacturer must having latest wind tunnel test reports not less than 2020.	41.00	NOS	18,480.00	757,680.00
412	**STREET LIGHT:** S/I/T&Commissioning of LT OUT DOOR FLOOR mounted cubical type IP66 based panel made out by 2mm CRCA steel sheet duly derusted & pented by simens gray powder cote paint is designed as G.A drawing. (FOR USE) with 63A TPN MCB 01 NO,1 no. Astronomical digital timer, AUTO MANUAL(with start and stop push button) SELECTOR 63 A 3P contactor, OLR,RYB,ON,OFF trip indication, Type-II SPD 40ka ,,04 nos 16A 4P MCB,C,10KA as outgoing as per direction of Engg.-in-Charge. Ncessary test report & Warrnaty certificate to be submitted to the department for genuinity of product & to avail free after sales service within warranty period 1 years of acceptance of materials	2.00	NOS	42,882.53	85,765.06

413	Supplying of one number PVC insulated armoured and PVC sheathed XLPE property AL. conductor power cable of 1.1 KV grade of following size cables as per direction of Engg.-in-Charge.				
a	3.5 core x 25 sq mm Aluminium armoured Cable.(FOR street PANEL)	145.00	MTR	344.17	49,904.80
b	4 core x 6 sqmm A2XFY	650.00	MTR	242.11	157,371.52
415	Laying of PVC Insulated PVC Seated /XLPE power cable of 1.1 kv grade size exceeding 25 SQ. MM but not exceeding 120 SQ. MM direct in ground in the trench in one horizental formation including excavation ,sand coushing protection covering and refilling the trench etc as required as per direction of Engg.-in -charge.	600.00	MTR	178.00	106,800.00
	Total of External Lighting				1,503,971.38
	OUT DOOR LIGHT				
418	Supply, Installation, Testing and Commissioning of LED SPorts Arena Light with Max system power of 200W, CCT 5700K +/- 355K as per ANSI, CRI>70, SDCM<3, with Minimum delivered lumen of >30,000 lumens at 60 degree beam angle. The fixture housing must be Made of ADC 12 Pressure die cast Aluminium housing for rapid thermal healing & Powder coated by Corrosion resistant Nano coating technology. Luminaire must have minimum Ingress protection of IP66 and Impact Resistance of IK08. The light engine should use Metal Core PCB with high grade aluminium (AL5052) and should have a thermal conductivity of >2W/m.K. The fixture should be equiped with stabilized Injection moulded special PC lens optics ensuring low glare & best in class uniformity(Glass cover not allowed). The light engine and the driver compartment should be thermally isolated by an natural airgap for better thermal management . Luminaire housing and optical compartment both should carry OEM's logo embossed / engraved (no stickering is allowed). The luminaire must have Integral encapsulated high efficiency electronic thermally isolated constant current IP67 driver having a Aluminium extrusion construction with operating voltage range of 90-305V, power factor > 0.95, THD < 10%, Output Current Ripple at < 200 Hz (pk-pk) <2% , with Inbuilt surge protection of : DM 6kV, CM 10kV and upgraded with integrated External IP67 protected SPD of 20KV/10KA surge protection . Driver should have Over Voltage Protection, Short Circuit Protection, and Over Temperature Protection and should have output lumen compensation to maintain constant light output over the life of the LEDs .Weight of the Luminaire including cradle should be less than 5 Kg Luminaire performance & Safety :IEC 60598, IS 10322-5, IS 161-03/05/06/07, Surge : IEC 61000-4-5, EMC : EN 55015 , CE Certified, ROHS compliant, BIS Certification for	12.00	NOS	23,124.00	277,488.00
419	Supply of 9 mtr long hot dip galvanized Octagonal pole with channel bracket (for mounting at least 6nos. or more of flood light as per final lux level design) manufactured from HT steel having base dia if 210 mm & top dia 90 mm or more and sheet thickness of 4 mm or more and 4 Nos. M30X850mm EN8 Grade foundation bolt. The octagonal pole shall be suitable to withstand 200 KM/HR or more wind speed by considering the weight & wind expose area . All accessories included like anchor plate, foundation nuts & bolts including required size of control cable from starter panel to each light .	6.00	NOS	37,000.00	222,000.00
420	Construction of pedestal type foundation with M20 grade concrete for pole 2000mm depth x 550mm length x 550mm breadth including all material and labour as per the direction of Engineer-in-charge. The structural calculation and civil foundation shall be duly approved by the competant authority from civil wing before execution of the work.	6.00	NOS	7,400.00	44,400.00

421	S/I/T&Commissioning of LT Outdoor CPRI tested floor mounted cubical type electrical control panel made out by 2mm CRCA steel sheet duly derusted & painted by simens grey powder cote paint is designed as G.A drawing.as per direction of Engg.-in-Charge. Warrentee period of replacement of panel & accessories must be 1 year & compelete test certificate must be submitted along with panel board including component list.. 20X10MM Separate Aluminium Earth bus bar should be installed. All the feeders shall have ON/OFF/TRIP indication.Provision of 40kA 3P+N type 2 SPD alongwith 63A, 4P, MCB, C series, 10kA is to be given in the incomer. **Incoming:** 125 Amp. 4P MCCB- 25 KA 1 No withTMR based release with adjustable overload ,Icu=100%Ics ., 200 Amp. Electrolytic aluminum Bus Bar - 4 Nos. by color coded PVC sleeve & supported by suitable size DMC insulator. Outgoing: 63 Amp.4P MCCB 16 KA withTMR based release with adjustable overload ,Icu=100%Ics -6 Nos ,40 Amp.4P MCB 10 KA -3 Nos Instrument- (i)3 numbers phase indicating lamp for R,Y,B inndication with 2A SP MCB,C,10KA. (ii) 01 set of 3 ph digital type Voltmeter.(iii)01 set of 3 ph digital type Ammeter(0-200)A with CTs 125/5A 3 nos class 1 type conforming to the relevant ISS and as per special conditions of contract making good the damages caused complete as per the direction of Engineer-in-charge.	1.00	NOS	124,000.00	124,000.00
422	Supplying, laying & testing of following size of PVC insulated XLPE shethed / strip armoured aluminium / Copper conductor power cables of 1100 volt grade laid directly unground with sand cushioning, brick protection, clamped on surface of the walss / columns / existing RCC / inside masonry cable trenches / on the cable tray /throuth G.I Pipes / hume pipes / PVC pipes as the case may be, including cost of shaddles/ clamps/ markers etc but excluding the cost of G.I. Pipes / Hume pipes cpmplete with making good to the damages as required and as per direction of Engineer-in-charge.				
a	3.5 core x 50 sq mm Aluminium armoured Cable.(FOR AREA LIGHT PANEL)	40.00	Mtr.	671.00	26,840.00
b	3.5 core x 6 sq mm copper armoured Cable.	40.00	Mtr.	448.05	17,922.00
	Total of OUTDOOR LIGHT				712,650.00
	DG SET				
423	Supply, Transportation, erection, testing and commissioning of 3 Phase, 415V, 50Hz, water cooled multi cylinder diesel generator set with alternator of 58.5KVA out put contineous rating directly coupled Engine and Alternator with guard and mounted on a common base plate of Robust construction and complete with AMF panel having IP-52 protection, Acoustic Enclosure as per CPCB IV+ norms , sound absorbing material, to restrict sound level up to 75 dB up to 1 mtr distance and as per CPCB IV+ norms etc as per following specifications mentioned below. Warrentee period must be 2 years	1.00	SET	1,100,000.00	1,100,000.00
423	ALTERNATOR:The alternator of the output rating shall be 3 Phase, 415V, 50Hz, Ac , 0.8 P.F. lagging at 1500 RPM. The alternator is self excited, self regulated, and shall confirm to IS: 13364 of 1992 with regulation of +5% from no load to full load. degree of protections shall be IP21.				

424	ENGINE: Diesel Engine start, developing suitable BHP output at 1500 RPM with mechanical / electronic governing so as to enable the alternator to give 50KVA continuous output at 0.8 P.F. lagging at NTP conditions. The diesel engine shall be capable of providing 10% O/L for 1 Hr for every 11 Hrs of continuous running at full load. The engine with 1st filling of oil and Diesel etc. 01. Exhaust pipe of required size and length with insulation or clading. 02. Diesel tank suitable for 8 to 10 Hours running capacity. 03. Residential Silencer. 04. SMF Batteries with leads as per the Manufacturer standards				
425	AMF PANEL: Cubical, Compartmentalized, AMF Panel Baord with all Power & Control Contractors, Switches, Meters and other accessories, Internal Wiring, connection, inter-connection etc. for Trouble Free smooth function for 58.5 KVA DG Set complete with Battery Charger & leads as required.				
426	BASE PLATE: Common Base Plate of required size for mounting of Engine Alternator Set fabricated from MS Channerl and vibration damping arrangement with cushy foor mounting including paintng etc. as required.				
427	FOUNDATION: Suitable size Cement Concrete (1:2:4) foundation duly plastered and finished with neat coat Cement as required along with smoke exhaust system piping including base frame of structure & lightening protection system. , control cable of 15mtr 2.5sqmm 6core , civil foundation work. (The Manufacturing of DG set shall not in any case be more than six months old from the date of award of work)				
	Total				1,100,000.00
	CCTV & DATA NETWORK				
428	Supply Installation Testing & Commissioning of 5mp Dome Camera Image sensor1/2.8", 5MP Low Illumination Progressive Scan CMOS Sensor, Effective Pixels2560(H)x1920(V), Min. Illumination, Color: 0.001Lux @ (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR, S/N Ratio ≥58dB (AGC OFF), IR Distance30Mtr, Shutter Speed(1/5 sec ~ 1/100,000 sec Adjustable), WDR Up to 120 dB, TWDR (Off/ Low/ Middle/ High), Output PAL/NTSC adjustable, Lens-3.6mm, Streaming CapabilityQuad Streams, Resolution-5 MP, Streams "Mainstream: 5MP (2560X1920)@25/30fps With H.265, Sub Stream: 1080P (1920X1080)@25/30fps With H.265, Third Stream: VGA(640x480)@10fps With H.265, Fourth Stream: VGA(640x480)@10fps With H.265" Frame Rate 1~ 30fps, Exposure Mode Off, High Light correction, Backlight Correction, Range (1-10), BLC Mode-1-10 configurable Levels, Digital Zoom25X, ROI Support 4 Zone, Analytics, Electronic Fence (Entry, Exits & Loitering Detection), Line Crossing Detection, Motion Detection, Temper Detection, CompressionG.711U/A, Audio Bit Rate 8 – 64 Kbps, Network Port-RJ45 10M, 100M Network Self Adjustable, ProtocolTCP/IP, IPv4, IPv6, SSL, TLS, UDP, HTTP/HTTPS, HTTP-Base64, HTTP-Digest, DHCP, DNS, RTP, RTSPS, ICMP, RTCP, NTP, SMTP, IGMP, Multicast, System CompatibilityONVIF Profile S, G & T, Max. User Access-20 Users, Security Features "Authorized username and password, HTTPS with password, HTTPS digest authentication, Watermark, RTSPS, AES 256 encryption, SHA256 and RSA2048, OTP, Signed Firmware, Firmware Anti-rollback, TEE (Trusted Execution Environment), TRNG, User Authentication, and encrypted firmware, Hardware Secure Boot", ANR Support, SD Card SupportedUpto 1 TB, Operating Conditions -40 °C ~ 70 °C, Humidity 95%, Ingress Protection IP67 &	5.00	Nos.	15,495.00	77,475.00

429	Supply Installation Testing & Commissioning of 5mp Bullet Camera Image sensor 1/2.8", 5MP Low Illumination Progressive Scan CMOS Sensor, Effective Pixels 2560(H)x1920(V), Min. Illumination Color:0.001Lux @ (F1.2, AGC ON), 0.014 Lux @ (F1.4, AGC ON), 0 Lux with IR, S/N Ratio ≥58dB (AGC OFF, IR Distance30Mtr Shutter Speed(1/5 sec ~ 1/100,000 sec Adjustable) WDR Up to 120 dB, Lens Type 3.6mm, Streaming Capability Quad Streams, Resolution 5MP, Streams"Mainstream: 5MP (2560X1920)@25/30fps With H.265, Sub Stream: 1080P (1920X1080)@25/30fps With H.265, Third Stream: VGA(640x480)@10fps With H.265, Fourth Stream: VGA(640x480)@10fps With H.265", Frame Rate1~ 30fps, White BalanceAuto, Manual, Warm light, Natural light, Incandescent lamp, fluorescent lamp, Locked WB, Gain ControlLow, MID-Low, MID, MID- HIGH, High, Motion DetectionYes, Temper DetectionYes, Compression G.711U/A, Audio Bit Rate 8 – 64 Kbps, Network Port RJ45 10M, 100M Network Self Adjustable, Protocol TCP/IP, IPv4, IPv6, SSL, TLS, UDP, HTTP/HTTPS, HTTP-Base64, HTTP-Digest, DHCP, DNS, RTP, RTSPS, RTCP, ICMP, NTP, SMTP, IGMP, Multicast, System Compatibility ONVIF Profile S, G & T, Max. User Access 20 Users, General Function User Authentication, Watermark, IP address filtering, Security Features"Authorized username and password, HTTPS with password, HTTPS digest authentication, Watermark, RTSPS, AES 256 encryption, SHA256 and RSA2048, OTP, Signed Firmware, Firmware Anti-rollback, TEE (Trusted Execution Environment), TRNG, User Authentication, and encrypted firmware, Hardware Secure Boot" ANR Support, SD Card SupportedUp to 1 TB, Operating Conditions-40 °C ~ 70 °C Humidity 95%, Ingress ProtectionIP67 Compliant & IK10, Power Consumption <12W, Certification 3years warranty	5.00	Nos.	22,876.00	114,380.00
430	SITC of 32Ch 4K Network Video Recorder 8 sata , Up to 12 Megapixels resolution recording,Remonte Connection 128, SSynchronous Playback16CH, RAID0, RAID1, RAID5, RAID10. Supported, RS-232, RS-485, Keyboard, Front panel: 2 × USB 2.0, Rear panel: 1 × USB 3.0,ALARM IN/OUT-16/4, Incoming bandwidth-320Mbps or 200Mbps (when RAID is enabled),2HDMI/2VGA. /STQC compliant	1.00	Nos.	54,902.00	54,902.00
431	Supply, Installation,Testing & Commisioning of Surveliance 10 TB HDD	1.00	Nos	21,016.00	21,016.00
432	SITC of 55" UHD IPS Commercial Digital Display for Small Size Discussion & Chambers: Brightness (440 nits or higher), Dynamic Contrast Ratio (Dynamic MCI (Hz)):1000000:1), 1000000:1, Static (Panel) Contrast Ratio-1200:1, Response Time (G to G)-8 ms, Refresh Rate.-60 Hz, Life span (hrs)-30,000, Speaker (Sound Output):10W + 10W, Speaker System: 2.0 ch, DVB-T2/C Broadcasting System, Commercial Smart UX, webOS version (webOS 6.0), BIS Certification with 3 years onsite warrenty.	1.00	Nos.	91,503.00	91,503.00
433	SITC of 4 pair Cat6 23 awg U/UTP LSZH Cable in the existing surface/ recessed steel/ PVC conduit as required: The 4 pair Unshielded Twisted Pair cable shall be UL Listed,exceeds the requirements of ANSI/TIA-568-C.2 and ISO/IEC 11801 Class E , 4 twisted pairs separated by internal PE Cross Separator. Full separator. Half shall not be accepted. Rip Cord is must,Insertion Loss of 32.8 db/100m at 250 MHz ,Cable should support operating temperature from -20° to +70°C Cable support Conductor Resistance ≤ 9.38 Ω/100m Max., Cable support Delay Skew: < 45 ns/100m, Operating Voltage: 72V , Impedance: 100 ± 15 Ω @100 MHz. and Propagation Delay @250 MHz : 536 ns/100m, ETL Verified 4 connector channel performance up to 700 MHz , RoHS Compliant.	200.00	Mtr	61.00	12,200.40

434	SITC of Cat6 I/O with Single Face plate: The Outlet shall meet or exceed requirement as per ANSI/TIA 568C.2,ISO/IEC 11801, & EN50173. The information outlet NEXT, PSNEXT, FEXT, ELFEXT, PSELFEXT and return loss should be verified for CAT6 @ 250Mhz & CAT6A @ 500Mhz. The information outlet connector shall be of gold/nickel, thickness of gold > 0.8 µm. The connectors shall be compatible as per IEEE 802.3af standard for POE application. The PVC material of Face plate should complie ABS /UL94-V-O certified.	5.00	Nos	252.00	1,260.00
435	SITC of Cat 6, 24-port loaded, 1U Modular patch Panel Should accommodate Cat6 with Rear Cable Management and Front removable Tooless Information outlet. Should have easy clip management with labels and clear label covers, Made with of Dicast Aluminium Alloy Material and Non Corrosive with Cat6 toolless RJ45 x 24 ports with color code front panel with patch cord locking.	1.00	Nos	4,473.00	4,473.00
436	SITC of Cat6 UTP 24 AWG Patch Cord Patch cord: 6 UTP Patch Cords are Factory Tested for Better Quality and Suitable for the High Speed Data Transmission. Complies to the Standard ANSI/TIA/EIA-568-C.2 Standard. Supports Data Networks Speeds Up to 10/100-Base-T and 1000-Base-T. Available In LSZH Jacket- Reduced Toxic Gasses Emitted During Combustion , RJ45, 8P8C, 2 FORK 50µ'' Gold Plated Contacts , 100% Factory Tested , Transparent Boot Cable Assemblies. **(1 mtr length)**	10.00	Nos	126.00	1,260.00
437	SITC of Cat6 UTP 24 AWG Patch Cord Patch cord: 6 UTP Patch Cords are Factory Tested for Better Quality and Suitable for the High Speed Data Transmission. Complies to the Standard ANSI/TIA/EIA-568-C.2 Standard. Supports Data Networks Speeds Up to 10/100-Base-T and 1000-Base-T. Available In LSZH Jacket- Reduced Toxic Gasses Emitted During Combustion , RJ45, 8P8C, 2 FORK 50µ'' Gold Plated Contacts , 100% Factory Tested , Transparent Boot Cable Assemblies. **(3 mtr length)**	10.00	Nos	189.00	1,890.00
438	SITC of 6 core Single mode OS2 Unitube Armoured Optical fiber cable through existing conduit: The Fiber should be OS2 Single Mode Optical Fiber Cable of Size 9/125µm. Outdoor Corrugated Steel tape Central loose tube. (Standard Approved: ISO 11801 2nd edition/ EN 50173-1:2002 / IEC 60794-1/IEC 60793-2-50 class B1.3 / EN 60793-2-50: class B1.3 / ITU Recommendation G.652.D - the oder ITU designations A, B and C are also fulfilled / OS1/ISO/IEC 24702:2006, cat. OS2; also OS1 requirements are fulfilled/IEEE 802.3 - 2002 incl. 802.3ae) Jacket.	80.00	Mtr	35.19	2,814.88
439	SITC of Rack mount Draw Type Loaded 6 port LIU available in Standard 19" ,Dimensions (mm) : 430 X 220 X 1U , Cold Rolled Steel as Raw Material , Consist of Top Cover and Bottom Panel , Easy to Assemble and Dissemble , Three Types of Input Holes Cable Entry Through Water Proof Cable Clamp , 12 Duplex SC or LC Adapter Interface , Splice 24 Fibers at Most with 1 Tray ,Adaptor, SM, Duplex SC, PC Type ,Pigtail, Support the TIA/EIA Telecommunication Wiring Standards. Compact Design , Telcordia GR-326-Core .	1.00	Nos	4,681.00	4,681.00
440	SITC of OFC Patch Cor, SM (OS2), Duplex LC-SC, LC-LC PC Type, 3M, LSZH Fiber Optic Single Mode OS2 Patch Cords are offered in LSZH Jackets with Corning Fiber,Insertion Loss : <= 0.2 db, Max 0.3db/MTRJ: Max 0.5db Return Loss : PC>= 45db, UPC>=50db, APC>=60db.	1.00	Nos	2,301.00	2,301.00
441	SITC of 10G-LX/LH SFP transceiver module,SMF, 1310nm, 9/125 um Single mode Fiber Type up to 20 KM.	1.00	Nos	12,689.00	12,689.00

442	SITC of 24 Port Layer 2 PoE+ Switch having 24 x 10/100/1000 Mbps Ethernet PoE+ ports with 4 x 1/10Gig SFP+ ports ,1 x RJ45 port console port ,Switching Capacity 128 Gbps , Throughput 96 Mpps ,MAC Address 16k , Switch should support IEEE 802.3af (15.4W) & IEEE 802.3at (30W). Total PoE power: 370W or above , Switch should support DHCP server/relay/client, DHCP snooping/option82 , Switch should support Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON , TFTP, FTP, SFTP, NTP, ZTP, SPAN, RSPAN,Switch should support support ICMPv6, DHCPv6, ACLv6 ,IPV6 Telnet ,Temperature 0°C -50°C ,Power Supply AC: 100-240V.	1.00	Nos	73,020.00	73,020.00
443	Supply ,installation ,testing & commissioning of **3KVA** UPS SYSTEM WITH IGBT based inverter system, true online double conversion system, inbuilt isolation transformer & automatic phase sequence corrector of 1ph in put to1 ph output,415V, with built in BMS with battery back up up to 30 minutes with MS Rack for battery Housing, DC cable 7 Mtr with SFU and links for installation (Battery required: 12V, 26AH, 5 No.s) protection for fault by OL,UV,EF,GF,OC,Ph. **,** as per direction of Engg.-in-Charge. **Warranty period of all accessories & component & system must be 2 years & complete test certificate must be submitted along with ups including component list & SLD. for services building**	1.00	Nos	120,000.00	120,000.00
	Total				595,865.27
	63 KVA TRANSFORMER				
444	Supply, installtion, testing, commissiong of the following capacity 11/0.433 KV, 50 Hz, 3phase, Al wound , Oil cooled (ONAN) transformer suitable for Outdoor type installation on pole, with first filling of oil and with LV cable end box , fitted with standard accessories, first filling of oil, and as per detailed specification attached.				
	a) 63 *kVA, 11/0.433 KV, AL Wound, (Energy Efficiency Level-2 as per IS -1180 with latest ammendment-4)*	1.00	nos	133,750.00	133,750.00
445	SITC of 2P structure with GI pole of 13 mtr long 160*152WPB & all other acessories as required for installation of 1nos 63KVA Transformer including structural materials like chanel,agels,5kv bracket type LA,200A horn Gap fuse,sockets,Glands,assorted siz nuts & Bolts,binding wire & tape ,HT stay set, 50sq mm insulated jumpering cable , 1 Sets of 200A AB Switch,11kv HG Fuse,LA(5KA),Insulators (Disc/Pin)as required,earthings(Neutral with copper Plate & Body , with GI plate)with chamber,danger Board,Fire Bucket,Hand Gloves,aluminium Paint, fencing as per approve drawing with 6' gate,spreading 40mm gravells upto 100mmm height, 160A FP 36KA MCCB Panel including all civil works as required size ,including Liosioning & **inspection for both HT & LT** side as per EIC & all other materials & labour as required AS per EIC or TATA POWER).	1.00	job	390,000.00	390,000.00
446	Construction of OH line of using GI pole of 11mtr long 160*152WPB including11kv disc 7 pin insulator with H/W fittings ,assorted size nuts & bolts ,HT stay set,11kv guarding ,GI Chanel as per size ,55mm2 insulated conductor including all other materials & labour as required as per EIC.(4omtr/Span)	2.00	span	85,000.00	170,000.00
	SH-IV (Earthing for Sub Station & Panels)				
447	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as reqd.	6.00	set	5,613.00	33,678.00
448	a) Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	120.00	mtr	66.00	7,920.00

449	Supply, delivery & installation of GI coil earthing made out of 8 swg GI wire closely wound in shape of a helical coil of 50mm diameter with 115 numbers of turns including excavation of earthpit of size 800x 800x 1500mm in all kinds of soil, back filling the excavated pit with alternate layers of salt, charcoal around the coil with a diameter of 300mm upto 1000mm and balance by good quality soil, end termination complete as required.	40.00	NO	750.00	30,000.00
450	Supplying and laying 6 SWG G.I. wire at 0.50 meter below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required	90.00	mtr	18.00	1,620.00
	SH-V (Cables MV & LAYING & CABLE TRAY)				
451	Supplying the following Size ISI mark Aluminum conductor, XLPE insulated cable, FRLS PVC, galvanized steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - I) with latest amendments & complete all as required including the cost of material T & P as required as EIC.				
a	3 1/2 core 95 sq.mm	32.00	mtr	1,424.00	45,568.00
b	3 1/2 core 35 sq.mm	1.00	mtr	622.00	622.00
452	Laying and fixing of one number of following size of cable on wall surface as required, ISI mark Aluminum/copper conductor, XLPE insulated cable, FRLS PVC, galvanized steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - I) with latest amendments & complete all as required				
a	25 sq. mm and upto 120 sq. mm	3.00	mtr	152.00	456.00
453	Laying and fixing of one number .following size cable direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. ISI mark Aluminum/copper conductor, XLPE insulated cable, FRLS PVC, galvanized steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098 (Part - I) with latest amendments & complete all as required				
a	Above 25 sq. mm and upto 120 sq. mm	30.00	mtr	167.00	5,010.00
454	Supplying and making end termination with double brass compression gland and aluminium lugs/copper for following size of PVC insulated and PVC sheathed / XLPE aluminium/copper conductor cable of 1.1 KV grade as required.				
a	3 1/2 core 95 sq.mm	4.00	nos	464.00	1,856.00
b	3 1/2 core 35 sq.mm	2.00	nos	391.00	782.00
455	Providing, laying and fixing following dia RCC pipe NP4 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.				
a	100 mm dia	130.00	mtr	662.00	86,060.00
	SH-VII (Main Panels & APFC PANEL)				
456	Design, supply, installation, testing and commsioning of cubicle main panel for Outdoor installation of wether proof design as per IP 54 class, made out of 2 mm thick CRCA sheet as per the drawing with cubicle type internal arrangement of 2.0 mm thick sheet and with front & back opening system, Suitable opening for receiving bus trunking, extended bus bar, suitable for mounting following switch gears, busbars, metering unit, including painting with powder coated paint of approved colour and shed with earthing the body etc as reqd. (drawing shall be approved by engineer -in charge) ***(Main Panel)***	1.00	set	180,500.00	180,500.00
	Incommer -Transformer				
457	a) 160A, 4 pole MCCB, 36kA, with ther. release 125-160A (Model D sine DN1-250D Sine of L&T or SS make) -1 no				
458	b) 160A Onload Changeover switch, FP , Open execution type				
	Outgoing				
459	a) 32-100A, 4 pole MCCB, 36kA, with thermal release 32-80-100A (Model D-Sine, DN0-100D of L&T or SS make) -9no, 32A DP MCB-3nos				

460	g) 4 strip Alluminium Bus bar suitable for 200A (preferably 40mm x 8 mm x 1 nos Al flat) with heat shrinkable tube as per the drawing) & 4 strip Alluminium Bus bar suitable for 150A (preferably 30mm x 5 mm x 1 nos Al flat) with heat shrinkable tube as per the drawing)				
461	h) Multi function meter Digital- 2 set with CT and accessories				
462	l) RYB Neon/ LED indicating lamp - 2 set				
463	n) 200/5A & 100/5A ammeter with selector switch and CT - 2 set.				
464	q) All MCCB shall have rotary operating mechanism.				
465	r) Inter connection of Bus bar and switch gears shall be made through suitable size Alluminium flats. Copper multi core cable shall be used for ineter connection upto 63A capacity.				
466	s) 25 x 5 mm Allumnium Earth bus with insulation.				
467	t) The Cubicle should have 2-part hinged door with front and back openeable system				
468	u) All other required accessories, wirings, as per SLD				
	SH-VIII (SAFETY)				
469	Providing and fixing MV danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	3.00	nos	270.00	810.00
470	Providing and fixing HV danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	3.00	nos	575.00	1,725.00
471	Supplying anf fixing 3 nos GI fire bucket of 9 ltr capacity with suitable pedastal arrangement for each transformer sub-station yard etc as reqd.	3.00	set	1,350.00	4,050.00
472	Supplying and Laying 12 mm thick rubber mat of ISI marked, 11kV and of approved make etc as reqd.	6.00	sq.m	1,640.00	9,840.00
473	Supplying and fixing shock treatment chart with lamination bonded with glass frame of bigger size on the existing surface with suitble clamp /hook arrangement etc as reqd.	3.00	set	950.00	2,850.00
474	Supplying and fixing First aid box with required first aid for the sub station as reqd.	2.00	set	1,500.00	3,000.00
475	Supplying 11 kV class hand gloves as reqd.	3.00	set	1,115.00	3,345.00
476	Supplying Backelite/ FRP Earth discharge rod of ISI maeked with clamps, extension cable etc as reqd	1.00	set	1,828.00	1,828.00
	Total				1,115,270.00
	SPORTS EQUIPMENT				
477	Supply & Installation of AIFF/FIFA Compliant Portable & Movable Football Goal Post , Size 7.32 M X 2.44 M Inner to Inner, With 8 Inch Non Marking solid Galvanised Wheels for smooth movement, Main pipe made of 100mm Round Powder Coated High Grade Aluminium Alloy Pipe of 3mm thickness, Back Support made of 60mm Round Powder Coated High Grade Aluminium Alloy Pipe of 2.5 mm thickness, No sharp edges, All corners fully welded and ground smooth, 220 Pcs Polyproplene unbreakable net clips no sharp edges, including transportation, Installation, testing & commissioning as per Engineer-In-Charge Must be of reputed make like Stag Global, Nelco, SodexSport	1.00	Pair	218,205.00	218,205.00
478	Supply & Installation of FIVB Compliant Portable & Movable telescopic Volleyball Post, Made of heavy duty 100mm round Aluminium Alloy Pipe with crank system for height adjustment 2.43 m for mens & 2.24m for womens, With 120kgs Weight Stacks for stability. Steel pulley on top, including transportation , Installation, testing & commissioning as per Engineer-In-Charge Must Be Of Reputed Make Like NELCO, Stag Global, Senoh	2.00	Pair	85,860.00	171,720.00
479	Supply & Installation of Kho Kho Pole,Two rigid poles of 1.20 m height from ground level, Heavy Duty 4 inch Dia Smooth & Round Steel Uprights, No sharp edges to prevent injury. Must be of Reputed Make Like NELCO, STAG GLOBAL, Gravolite	2.00	Pair	15,750.00	31,500.00

480	Supply & Installation of TTFI/ITTF Certified Table Tennis Table, Size 274cm X 152.5cm X 76cm, 25mm Top to ensure consistent bounce & optimal Spin Performance. 25 X 50 mm Heavy-duty alloy steel frame for superior durability and strength. Smooth, Axalta Polyurethane Anti-Glare top Finish for clear visibility and accurate play. Top Colour Black. Must have 100 mm eight wheels for easy mobility, with four being lockable for added stability. Premium Professional T T Tables with Foldable Design. N. W. / G. W. - 116 Kgs / 123 Kgs, including transportation, Installation, testing & commissioning as per Engineer-In Charge . Must be of Reputed Make LIke Stag Global, Butterfly or STIGA	2.00	SET	75,950.00	151,900.00
481	Supply & Installation of BWF Certified Movable Badminton Post With 80 Kg Cast Iron Base for stability, 75 mm Nylon Wheels & Anti Stick PU Rubber Sheet Inside Base and Weights. 95x46mm Square Steel Pipe Connecting the Base & Uprights. 39mm Round Uprights of 4mm thickness. Uprights Height Must be 1.55 Mtr. Stainless Steel Pully Strong System. Powder Coated Rustproof. Must be approved by BWF Must Be Of Reputed Brand Like YONEX, STAG GLOBAL, LINING	2.00	PAIR	92,250.00	184,500.00
482	Providing, supplying Nylon BADMINTON NET With 4 side tape (Tournament Quality) of approved quality, size as per specificationand direction of Engineer-In-Charge Must be Approved by - BWF Must be of reputed make like Yonex, Li Ning, Cougar	2.00	NOS	2,450.00	4,900.00
483	Providing, supplying Badminton racket of approved quality, size as per specification and direction of Engineer-In-Charge.Must be of reputed make like Yonex, Vextor-X or Li Ning	8.00	NOS	1,885.00	15,080.00
484	Providing, supplying Nylon Shuttle Cock Tournament approved quality, size as per specification and direction of Engineer-In-Charge. Must be of reputed make like Yonex, Li Ning, Vector X	4.00	PACK OF 6 NOS	455.00	1,820.00
	SUB TOTAL				**779,625.00**
	Cutting and Filling				
485	Construction of embankment with approved material obtened from borrow pits with all lifts and leads, transporting to site by mechanical means including watering upto OMC and rolling by PRR to required density with all labour, hire and running charges of all machinaries, T&P, sundries etc. complete as per specification etc. complete in all respect excluding GST as directed by the Engineer-in-charge.	12450.00	Cum	305.27	3,800,623.61
486	**Supplying and filling the Foundation & Plinth with clean coarse river sand** of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	12450.00	Cum	860.50	10,713,225.00
487	**Loosening, leveling and Compacting** original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150 mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in table 300-2 for embankment construction & Clause 305 of MoSRT&H Specifications for Road & Bridge works (5th Revision)	3735.00	Cum	36.11	134,859.89

488	Excavation, loading & carriage by mechanical means in medium hard rock (can not be scapped or peeled with knife, hanheld specimen can be broken with single moderate blow with pick, crushing strength between 100 to 250 kg/sqcm) in canal, foundation & cut-off trenches of earth dam & other deep cutting by means of Rock Breaker with all lifts, delifts including trimming the bed & slopes to designed finished section, loading into & transportation by taransport vehicle within 1 KM lead & depositing the excaveted materials neatly in specific dump yard as directed by the Enginerer-incharge etc complete.	3600.00	Cum	597.80	2,152,080.00
	TOTAL of Cutting and Filling				16,800,788.50
II	**RCC RETAINING WALL (PERIPHERIAL)**				
492	Excavation in all kinds of soil with hydraulic excavator (1 cum 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 within all lifts and lead upto 1000m.	286.83	Cum	37.06	10,629.73
493	**Filling foundation trenches and plinth with excavated earth (excluding rock)** including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	191.22	Cum	175.00	33,462.92
494	**Supplying and filling the Foundation & Plinth with clean coarse river sand** of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of the Engineer-in-charge.	8.25	Cum	860.50	7,099.13
495	**Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors** using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty and taxes of all materials, cost of all labour, T&P etc. as required for complete the work as per direction of Engineer-in-charge.	15.40	Cum	6,091.50	93,809.10
496	**Providing, lifting, hoisting and laying Reinforced cement concrete work of M-25 grade** having minimum compressive strength of 250kg./cm2 in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth **centering & shuttering** and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties & taxes of all materials and cost of all labour, T&P etc. as required for complete the work in all respects as per drawing, design and direction of Engineer-in-charge. (But excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills)				
	Footing	66.00	Cum	6,887.60	454,581.60
	RCC Wall	61.05	Cum	8,703.60	531,354.78

497	**Providing & fixing TOR Fe-500 D grade reinforcement bars** of approved makes for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance and taxes of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	82.58	Qtl	9,595.50	792,420.38
498	Providing weep holes in Brick masonry /Plain/Reinforced concrete abutment,wing wall return wall with 100 mm dia PVC pipe,extendeding through the full width of the structure with slope 1V:20H towards drawing face,complete as per the drawing and direction of Engineer-in-charge.The cost inclusive of all material,pipe,fitting cost of all labour etc all complete.	10.00	Nos	112.37	1,123.75
	TOTAL RCC RETAINING WALL (PERIPHERIAL)				**1,924,481.38**
	SIGNAGES				
499	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001				
a	Mandatory/ Regulatory sign boards of 900 mm diametre with support length of 3750 mm	5.00	NOS	6,691.20	33,456.00
b	Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm	5.00	NOS	5,345.60	26,728.00
500	Manufacturing, supplying and fixing retro reflective overhead signage boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge, letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures, including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-incharge.(Structural frame work including M.S. plate to be provided separately. Rectangular area of the sheet only shall be measured for payment).	2.00	SQM	4,884.00	9,768.00

501	Providing Retro-reflective regulatory sign board of size 900 mm dia meter made out of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro - reflective sheeting as approved by Engineer-in-charge . Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4 mm. The boards will be fixed to 1 No. 50x50 mm square post made of M.S. angle 50x50x4 mm, 4 m long welded to the frame with adequate anti-theft arrangement .Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	5.00	NOS	7,981.60	39,908.00
502	Providing and fixing post delineators made of ABS round body fitted with 2 nos 100 mm dia high reflective reflectors and mounted on MS pipe of 65 mm dia duly powder coated anti-rust and anti theft steel to be installed as per direction of Engineer-in-charge.	10.00	NOS	738.20	7,382.00
503	Providing and fixing letters made out of acrylic sheet with light arrangement as per the architectural drawing/design complete with all materials cost, coveyance, loading and unloading, royalties and cost of all labour, T&P, sundries, with necessary scafolding & accessories complete in all respects as per the direction of architect / engineer in charge.				
a	750mm height	27.00	NOS	8,500.00	229,500.00
b	300mm height	24.00	NOS	3,500.00	84,000.00
504	Plastic Waste bin Rectangular alongwith fabricated MS stand with one coat of primer and two coats of enamel paint for stand. MS stand should be grouted properly on the ground level. Capacity-60 350x350 mm Top Dia.250x250 mm Bottom Dia.850 mm Height pair Sintex, Nilkamal, Otto, Aristo	10.00	SET	5,050.00	50,500.00
505	Plastic Waste bin without Wheel with Push type Top load along with fabricated MS stand with one coat of primer and two coats of enamel paint for stand. MS stand should be grouted properly on the ground level capacity 60 pair 350x350 mm Top Dia. 250x250 mm Bottom Dia. 850 mm Height Sintex, Nilkamal, Otto, Aristo	5.00	SET	7,575.00	37,875.00
506	Plastic Waste bin without Wheel with Swing lid type Top load along with fabricated MS stand with one coat of primer and two coats of enamel paint for stand. MS stand should be grouted properly on the ground level. Capacity-60 pair 350x350 mm Top Dia. 250x250 mm Bottom Dia. 850 mm Height Sintex, Nilkamal, Otto, Aristo	5.00	SET	7,575.00	37,875.00
	TOTAL				556,992.00
	Grand Total				**86,548,402.72**
	Say				**86,548,403.00**

Sd/-
Chief General Manager