SUMMARY

Sl.No.	Description	Amount(Rs)
1	SITE GRADING WORKS	
2	ROAD AND OPEN PARKING	
3	STORM WATER DRAIN	
4	COMPOUND WALL (REAR SIDE)	
	TOTAL COST (Rs)	

SITE DEVELOPMENT BILL OF QUANTITIES

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
1	Clearing & Grubbing the ground, removal and disposal of small trees (less then 30 cm girth), bushes etc. including roots, stumps & logs or anything arising out of the clearing operation. Collecting and Disposing the same debris (including loading, unloading & leveling) to out side the plant premises with contractor's own risk.		3066.00		
2	Earth work excavating and depositing on bank with a initial lead of 10 m & initial lift of 2m in Slush and silt under water upto 0.75m depth requiring the aid of basket and vessels		16100.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
3	Forming Embankment using Brought out earth (97% Proctor Density) Forming embankment by transporting approved soil with required average lead of 55 Km having a CBR value of not less than 8% and minimum Dry Density not less than 1750 Kg/cum which has to be compacted properly and form a stable embankment including cost and labour for proper setting out, stripping and storing the top soil, compacting the original ground by vibratory roller of required -capacity to have a relative compaction of required proctor density, spreading the materials uniformly over the entire width of embankment including over section margin required for roller passing in layers of not exceeding 200 mm compacted thickness, breaking clods, watering with all leads for water, compacting to 97% proctor density for the soil under optimum moisture content with moisture content adjusted in the range of one percent (1%) above and two percent (2%) below the optimum moisture content determined as per		74638.00		
	IS:2720 (Part VII) with power roller/ vibrator roller rolling and using other construction equipment approved by the engineer-incharge and finishing the embankment at 97% proctor density including compaction to specified requirement, working in narrow width of embankment including hire and fuel charges for all tools and plants and all other incidental charges etc. complete as per Standard Specification for road embankment. (The Contractor has to make his own arrangement for the required quantity of soil and cost and transportation of earth including loading and unloading, etc.).				

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
4	Carting out and disposing of the excess contaminated earth from the proposed site to the assigned destination of dumping yard with an average lead of 15 Km including loading, unloading & levelling etc., complete in all respects		16100.00		
5	Hire charges for Diesel pump above 3 HP to 7.5 HP with fuel and crew charges includding transportation for dewatering the stagnated water		1350.00		
	TOTAL Amount c/o summary				

ROAD AND OPEN PARKING BILL OF QUANTITIES

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
1	GSB Providing and laying coarse graded granular subbase conforming to grading I of table 400-2 of MORTH specification for 300mm thick in two layers each layer 150mm consolidated thickness including cost and conveyance of all materials, spreading the materials by mechanical graders and consolidation by vibratory roller all as per clause no.401 of MORTH specification.		3345.00		
2	Providing and laying wet mix macadam for 250mm compacted thickness in two layers each layer 125mm compacted thickness using vibratory compacting rollers with physical requirments of aggregate conforming to table 400-11 and grading requirements of aggregate conforming to table 400-10 of MORTH specification fourth revision and entire work to be carried as per MORTH specification.		2788.00		
3	Providing and laying 300 microns thick HDPE sheet in rolls over dry lean concrete subbase. A minimum lap of 150 mm shall be provided at all junctions and wherever required. Finished net area will only be measured for payment.	-	2625.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
4	Providing centering & shuttering including strutting and propping (Cuplock system) etc. and removal of formwork at all floors, depths, heights and shapes. with Approved Marine plywood of adequate thickness or as approved by Project Manager / structural consultant. The surface of concrete should be smooth and free from honey combing after Deshuttering. Also if required the concrete surface joints have to be grinded for giving fair finish. Each plywood usage to be not more than 5 times.				
а	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.	-	321.00		
5	Cement Concrete 1:4:8 (One Cement, Four sand and Eight hard broken stone jelly) using 20 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification		1126.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
6	Providing and laying in position, Standardised Concrete Mix M-30 Grade in accordance with IS:456-2000, using 20mm and down graded hard granite broken granite stone jelly for all RCC items of works with minimum cement content of 400 Kg/cu.m and maximum water cement ratio of 0.45, including admixture (Plasticiser / Super Plasticiser) in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability. With about (5.0 Cu.m) 7730Kg of 20mm machine crushed stone jelly and with about (4.79 Cu.m) 7690 Kg of Sand for 10 Cu.m of Concrete, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing etc. The Rate is inclusive of Providing vacuum de-watered flooring operation consisting of Vibrating the concrete by using screed vibrator, de-watering using vacuum pumps by suction method and finishing the top surface to required level and grade using skim floaters/discs/power trowels and providing fixtures wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the engineer incharge. The coarse and fine aggregates to be used should comply with the requirements of IS Standards. (No seperate payment will be made by the Department for the excess usage of materials).	Cum	525.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
7	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)		32.00		
8	Providing & Laying Nitofloor hard top (Fosroc) floor hardner @ 4.5 kg/m2 over the green concrete surface & Finish smooth as per manufactures specification.	_	11813.00		
9	Supplying 80mm thick heavy duty precast concrete(M50 mix) hydraulically pressed uniregular machine made interlocking paver blocks of approved design(To give a compressive strength of not less than 500 kg/Sqcm). Transportation of the blocks to the site ,preparation of surface including supplying and filling with river sand to 50mm thk,levelling and compacting with plate vibrator and laying of the interlocking paver blocks with sand binding and final compaction with plate vibrator of 3 tonne capacity and finishing the surface.		8525.00		
10	Providing grooves of size 6 mm wide and 25 mm deep on vacuum de-watering floor surface at every 20 Sqm area grooves made by groove cutting machine with diamond cutting wheel and filling of the grooves with polysulphide sealant.		469.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
11	Providing and fixing expansion joint 12mm thick to full depth of slab with performed bituminous filler Cap cell HD – 100, at top 40 mm primed with sealant with sealing compound grade – A all as per MORTH specification. All as directed by Engineer - in - charge		126.00		
12	Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification		11.00		
13	Manufacturing, supplying and fixing in position plain cement concrete precast kerb slab of size 500mm x 300mm x 100mm in Cement Concrete 1:1:5:3 (One cement, one and half sand and three jelly) using 20mm HBG stone jelly including cost of moulding charges, casting of slab, finishing, curing, fixing and pointing the slab with CM 1:3 (One Cement and Three Sand) to full depth of slab etc., complete complying with standard specification and as directed		710.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
14	All the road markings in the following items shall be painted with hot applied thermo plastic paint. The quality of thermo plastic paint, colour, thickness of paint and application sequence etc. as laid down in section 800 of MOST specifications third revision, shall be strictly followed. The procedure of laying sequence and quality of thermo plastic paint thickness of application, as laid down in 801 & 803 traffic sign of MOST specification shall be strictly adhered to. The sizes and location of road signs shall be in accordance with the code of practice for road signs - IRC: 67.				
а	Providing, marking and painting lanes in broken line of 15 cm thick line using hot applied thermo plastic paint in white or colour conforming to IRC specifications - 67 & MOST specifications.		504.00		
b	Providing, marking and painting lanes in straight line of 15 cm thick line using hot applied thermo plastic paint in white or colour conforming to IRC specifications - 67 & MOST specifications.	Rmt	1008.00		
С	Providing marking and painting route arrows, sizes etc. as per IRC specifications & MOST specification using hot applied thermo plastic paint white or colour etc., complete	Each	10.00		
d	Providing and painting cement concrete kerbs with alternate black and white strips of 50 cm using synthetic enamel paint of approved make two coats over a coat of cement primer paint all as directed by the E.I.C.	Rmt	724.00		

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
e	i) Pedestrian crossing marking (2 M wide marking in broken	Sqm	48.00		
	lines)				
15	Supplying and providing following size NP3 class RCC pipes				
	with required collars and laying and fixing the RCC pipes				
	including 100mm thk PCC bed and labour charges for all				
	conveyance hoisting and placing the pipes and collars in position				
	as directed by the EIC and packing and pointing the joints with				
	cement mortar 1:2 and all other incidental charges etc., complete				
а	300 mm dia., pipes	Rmt	40.00		
b	450 mm dia., pipes	Rmt	40.00		
16	Providing and fixing 110 mm dia PVC Spout pipes of 4 kg/sqcm	Rmt	10.00		
	for drainout the rain water in road.				
17	UPVC PIPES FOR STP				
а	300 mm dia., pipes	Rmt	200.00		
b	200 mm dia., pipes	Rmt	200.00		

ELCOT, Chennai - 35. 11 of 23

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
18	Construction of inspection chamber of size 1m x 1m with best	Each	16.00		
	quality bricks with 230mm wall thickness up to 1.2 M depth,				
	and 345mm wall thicknes for depth deeper than 1.0 M in				
	CM1:4(one part of cement and five part of sand) over a bed of				
	150mm thick PCC 1:4:8 (one part of cement, four part of sand				
	and eight part of stone jelly)for 1.0M depth, 200mm thick for				
	depth 1.0M to 2.0M and 300mm thick for depth more than 2.0M				
	, wall plastered smooth in CM 1:3 (one part of cement and three				
	part of sand) 12mm thick inside, and outside with rougth				
	plastering, Cover Slab in RCC 150mm thick including 600x600				
	SFRC cover with frame-100kg, necessary excavation and				
	refilling in any type of soil, including benching and channelling				
	in PCC1:3:6(one part of cement, three part of sand and six part of				
	stone jelly). Supplying and fixing provide insulated CI steps at				
	300mm intervel for depth more than 0.8M				
	Total Amount C/o to Summary				

ELCOT, Chennai - 35. 12 of 23

STORM WATER DRAIN BILL OF QUANTITIES

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
1	Earth work excavation for foundation in all soils and sub-soils and to full depth as may be directed except in rock requiring blasting inclusive of shoring shuttering, bailing out water wherever necessary and depositing the surplus earth within the compound in places shown by the departmental officers with an initial lead of 10 mts and initial lift of 2 mts. and clearing and levelling the site, etc., complete complying with standard specification. Note: The cost of earth work excavation shall be calculated based on the classifications of soils furnished in the trial pit details appended with the estimates				
a)	Upto 2.0 Metre depth below average ground level.	Cum	2306.00		
2	Supplying and filling in foundation, basement, etc with filling M sand in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the Engineer-incharge.		147.00		

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S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
3	Cement Concrete 1:5:10 (One cement, Five sand and Ten hard	Cum	151.00		
	broken stone) using 40 mm gauge hard broken jelly for flooring				
	including laying, consolidating, finishing, rendering the top				
	surface rough to receive the floor, curing, etc. complete				
	complying with standard specification. (The rate is inclusive of				
	necessary planking for panelling wherever necessary and as				
	directed by the Engineer-in charge.				

ELCOT, Chennai - 35. 14 of 23

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No. 4	Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000, using 20mm and down graded hard granite broken granite stone jelly for all RCC items of works with minimum cement content of 400 Kg/cu.m and maximum water cement ratio of 0.45, including admixture (Plasticiser / Super Plasticiser) in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability. With about (5.0 Cu.m) 7730Kg of 20mm machine crushed stone jelly and with about (3.3 Cu.m) 5156 Kg of 10-12mm machine crushed stone jelly and with about (4.79 Cu.m) 7690 Kg of Sand for 10 Cu.m of Concrete, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the engineer incharge. The coarse and fine aggregates to be used should comply with the requirements of IS Standards. (No seperate payment will be made by the Department for the excess usage of materials).				
a b	Foundation below 1.5 upt to 4.5 M Foundation and Basement	Cum Cum	206.00 572.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
5	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)		86.00		
6	Supplying, fabricating and fixing in position inserts comprising edge angle, MS angles, plates, tees, flats and other structural steel sections, holding down bolts, anchor bolts, anchor plates, pipe sleeves etc., in all cement concrete works at all levels and heights above finished floor level in foundation, trenches, pits, tunnels, lift pits etc., below finished floor level including cutting, bending to shape fabricating, drilling, threading, welding lugs etc., with all tools, tackles and labour as per design or as directed including a coat of primer of approved quality and painting the exposed surface with two coats of synthetic enamel paint of approved quality and colour etc., all complete as per drawings and as directed.		0.25		
7	Providing centering & shuttering including strutting and propping (Cuplock system) etc. and removal of formwork at all floors, depths, heights and shapes. with Approved Marine plywood of adequate thickness or as approved by Project Manager / structural consultant. The surface of concrete should be smooth and free from honey combing after Deshuttering. Also if required the concrete surface joints have to be grinded for giving fair finish. Each plywood usage to be not more than 5 times				

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
а	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.	Sqm	1214.00		
b	For plane surfaces such as RCC columns, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and all verticals etc.	Sqm	3322.00		
8	Plastering with Cement Mortar 1:3 (One Cement and Three Sand) 12mm thick mixed with water proofing compound conforming to BIS at 2% by weight of cement used including finsihing, curing, etc., complete in all floors complying with standard specification and as directed by the departmental officers.		346.00		
9	Supplying and fixing heavy duty CI manhole frame and cover weighing 40 kg (12 TONNES) of clear opening size 600 x 600 mm including painting with two coats of anticorrosive paint over a coat of primer etc. (Item code MS 6 of 600 mm x 600 mm Class A15 grade LD)	Nos	72.00		
	Total cost : Rs.				

COMPOUND WALL (REAR SIDE)

BILL OF QUANTITIES

s.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
1 1	Installation of Vertical Bored cast in situ RCC under reamed piles of 450mm dia in all types of soils to a minimum depth of 4.00 m with intermediate two Bulb, using Ready Mix Concrete of M30 grade, with sulphate resistant Cement, fine aggregate, 20mm and down graded HBGS jelly coarse aggregate. The rate includes cost of reinforcing steel of 8 nos 16mm dia with 8 mmstirrups at 150 mm c/c tied with binding wire, fabrication, welding charges, placing of reinforcement cage in bore hole in correct position, cost of boring to the required depth with Bentonite solution with temprory casing of required length, conveyance of RMC to site and pouring concrete using Tremine pipes, conveyance of all materials to the site including all tools and plants, shifting the plants and equipments from one point to another, excavation of mud pits for circulation of Bentonite solution, closing the mud pits to original level and mud removal with initial lead and lift but including dismandeling the concrete above the cut off level etc complete as directed by the Engineer incharge. The reinforcement cage should be welded properly for				
	lifting. The concrete cubes to be tested as per IS 456-2000. Acceptance criteria by clause 16.1.		125.22		
а	Length of pile upto 6 M	RM	136.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
2	Earthwork excavation in all classes of soils such as hard stiff clay, stiff black cotton, hard red earth, shale's, murram etc. except hard rock requiring blasting for foundation and depositing within the campus with a lead of upto 100 meters in levelled layer with all leads and lifts including cost of all labour materials equipment and all other incidental charges like cribs, sheeting, shoring, bracing, providing protective bunds, cofferdams, baling out water and other items which may be necessary or convenient to the successful completion of the excavation to the bottom of the drain removing of all logs, stumps, grubs and other deleterious matter and obstruction including trimming bottom of excavation, cost of any cleaning grubbing removing slips and blows if any and any surplus materials which may have to be thrown up during the process of excavation including setting out all labour materials, hire and fuel charges for all tools and plants, equipment, safe guards, and incidental necessary to complete the work and subsequent removal and cleaning the excavated materials protective bunds and cofferdams etc., as per Standard Specification.				
a)	Upto 2.0 Metre depth below average ground level.	Cum	162.00		
3	Supplying and filling in foundation, basement, etc with filling sand in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.	cum	13.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
4	Cement Concrete 1:4:8 (One Cement, Four sand and Eight hard broken stone jelly) using 20 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification	Cum	13.00		
5	Providing and laying in position, Standardised Concrete Mix M-30 Grade in accordance with IS:456-2000, using 20mm and down graded hard granite broken granite stone jelly for all RCC items of works with minimum cement content of 400 Kg/cu.m and maximum water cement ratio of 0.45, including admixture (Plasticiser / Super Plasticiser) in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability. With about (5.0 Cu.m) 7730Kg of 20mm machine crushed stone jelly and with about (3.3 Cu.m) 5156 Kg of 10-12mm machine crushed stone jelly and with about (4.79 Cu.m) 7690 Kg of Sand for 10 Cu.m of Concrete, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the engineer incharge. The coarse and fine aggregates to be used should comply with the requirements of IS Standards. (No seperate payment will be made by the Department for the excess usage of materials).				

ELCOT, Chennai - 35. 20 of 23

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
	M-30 Grade:				
а	Foundation below 1.5 upt to 4.5 M	Cum	40.00		
b	Foundation and Basement	Cum	149.00		
С	Ground Floor	Cum	13.00		
6	Supplying, fabricating and placing in position Mild Steel / Ribbed Tor Steel grills for all RCC works as per design given including cost of steel and G.I. binding wire in all floors etc. complete complying with standard specification. (Contractor has to make his own arrangements for the supply of steel and binding wire)		26.00		
7	Supplying, fabricating and fixing in position inserts comprising edge angle, MS angles, plates, tees, flats and other structural steel sections, holding down bolts, anchor bolts, anchor plates, pipe sleeves etc., in all cement concrete works at all levels and heights above finished floor level in foundation, trenches, pits, tunnels, lift pits etc., below finished floor level including cutting, bending to shape fabricating, drilling, threading, welding lugs etc., with all tools, tackles and labour as per design or as directed including a coat of primer of approved quality and painting the exposed surface with two coats of synthetic enamel paint of approved quality and colour etc., all complete as per drawings and as directed.		1.00		

S. No.	Description	Unit	Quantity	Rate	Amount (Rs)
8	Brick work in following Cement Mortar using Fly Ash Bricks of 230 x 110 x 75mm size conforming to IS: 12894-1989 Class designation not less 50 kg./ sq.cm. average compressive strength in cement mortar 1:5 for load bearing structures for foundation and basement and for superstructure including curing, etc., complete complying with standard specifiction.				
а	Ground level	Sqm	57.00		
9	Providing centering & shuttering including strutting and propping (Cuplock system) etc. and removal of formwork at all floors, depths, heights and shapes. with Approved Marine plywood of adequate thickness or as approved by Project Manager / structural consultant. The surface of concrete should be smooth and free from honey combing after Deshuttering. Also if required the concrete surface joints have to be grinded for giving fair finish. Each plywood usage to be not more than 5 times.				
а	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and beams, etc.	Sqm	821.00		
b	For plane surfaces such as RCC columns, roof slab, beams, lintels, bed blocks, landing slab, waist slab, portico slabs and all verticals etc.	Sqm	154.00		
10	Plastering with Cement Mortar 1:5 (One cement and Five sand), 12mm thick in all floors including curing etc. complete complying with standard specification and as directed by the departmental officers.	Sqm	580.00		

ELCOT, Chennai - 35. 22 of 23

S.	Description	Unit	Quantity	Rate	Amount (Rs)
No.					
	Painting two coats of newly plastered wall surface with ready mixed plastic emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification.		580.00		
	Total cost: Rs.				

ELCOT, Chennai - 35. 23 of 23