

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ನಿಯಮಿತ

(ಕೆನಾಡಟಿಕ್ ಸರ್ಕಾರದ ಉದ್ದೇಶ)



Financial Bid

ಕಾರ್ಮಾರಿ ಹೆಸರು: SCHEME TO LIFT WATER FROM HEMAVATHY RIVER NEAR KATTERPURA

VILLAGE OF SOMAVARPET TALUK TO FILL 150 TANKS AND 50 KATTES FOR DRINKING WATER PURPOSE IN THE VILLAGES OF KASABA, MALLIPATTANA, KONANUR & DODDAMAGGE HOBLIS OF ARKALAGUD TALUK HASSAN DISTRICT - (Indent No 30269).

—Indent No-30269

ಕಾರ್ಮಾರಿ ಇಂಜಿನಿಯರ್ ರವರ್ ಕೆಜ್ಜೆರಿ,
ಹಾರಂಗಿ ಮುನಿಸಿಪಾಲಿಟಿ ವಿಭಾಗ, ಕುಶಾಲನಗರ - 571 234,
ಕ್ರೊಡನ್ ಜಿಲ್ಲೆ

CAUVERY NEERAVARI NIGAM LIMITED

Tender Number: CNNL/2019-20/LI/WORK_INDENT30269

H.R.Division, Kushalnagar

Part A & B Combined Schedule-B

NAME OF WORK: SCHEME TO LIFT WATER FROM HEMAVATHI RIVER NEAR KATTEPURA VILLAGE OF SOMAVARPET TALUK TO FILL 150 TANKS AND 50 KATTES FOR DRINKING WATER PURPOSE IN THE VILLAGES OF KASABA, MALLIPATTANA, KONANUR AND DODDAMAGGE HOBELIS OF ARAKALAGUD TALUK HASSAN DISTRICT

SI No	Description of Work	Amount put to Tender (in Rs)	Approved Percentage by		
			2018-19 PWD Building SR & CHESCOM SR Rates CSR Value	L1	Percentage
				Amount (in Rs)	
1	PART "A" TURNKEY TENDER	88,71,05,289	933758420.00	10.33% Above 4.82 % Above	978743265.00
2	PART "B" PERCENTAGE TENDER	7,77,18,463.2	81140523.95	4.98 % Above 0.55 % Above	81588806.08
	TOTAL:	964823752.00	1014898943.95	9.90 % Above 4.48 % Above	1060332071.080

Part A-Schedule-B

CNNL/2019-20/LIWORK_INDENT30269

Tender Number
 SCHEME TO LIFT WATER FROM HEMAVATHI RIVER NEAR KATTEPURA VILLAGE OF SOMAVARRET TALUK TO FILL 150 TANKS AND 50 KATTES FOR DRINKING WATER PURPOSE IN THE VILLAGES OF KASABA, MALLIPATTANA, KONANUR AND DODDAMAGGE HOBLIS OF ARAKALAGUD TALUK HASSAN DISTRICT

SNo	Item Name	Unit	Estimate Quantity	Estimate Rate	Total Amount	2018-19 PWD Building SR & Electrical SR Rates	Total Amount as per CSR	PRASAD MYNENI RAVENDRA (UNITED GLOBAL CORPORATION LIMITED FORMERLY KNOWN AS UNITED INFRA CORPORATION BANGALORE LIMITED)	
								Approved Rate	Total Amount
1	PART : A : TURN KEY :- Survey, Investigation, Planning and Design with drawings for all components of the scheme for both Part-A & Part-B , Supply, Installation, Testing and Commissioning of the SCHEME TO LIFT WATER FROM HEMAVATHI RIVER NEAR KATTEPURA VILLAGE OF SOMAVARRET TALUK TO FILL 150 TANKS AND 50 KATTES FOR DRINKING WATER PURPOSE IN THE VILLAGES OF KASABA, MALLIPATTANA, KONANUR & DODDAMAGGE HOBLIS OF ARAKALAGUD TALUK HASSAN DISTRICT with a discharge of 60 cusecs to a height of 129.04 m in first stage consisting of the Components such as Providing M.S. Rising Main in single row of required diameter thickness and gravity mains network of MS pipe and HDPE including necessary Lifting of water, power and civil works, Earthwork Excavation in all Classifications to the required depth Construction of Anchor Blocks & Thrust Blocks for rising main and gravity main, Encasing of The Pipes in Road /Halla Crossings, providing RCC supports to rising main as per necessity, Providing Suitable dismantling joints, vent pipes, Bleeders, Conducting surge Analysis and providing suitable surge protection system, conducting Sump Model Analysis, Providing & fixing all types of necessary Valves of Suitable Capacity with construction of Valve chambers for rising main and gravity main, Providing and Erecting suction end Delivery pipes to the Manifold, Construction of Delivery chamber etc., with Suitable Foundations, Providing, Erecting & Commissioning of Suitable capacity of vertical Turbine Pumps and Motors for 1st Stage & Vertical Turbines pumpsets with suitable suction and delivery system, Providing outdoor substation including providing Transformers / Auxiliary transformer, Express feeder line and Towers for line along with terminal bay at KPTEL sub station, Malipatna for single stage, providing chain link fencing to out door substation and transformers. Providing & Fixing EOT Cranes of Suitable Capacity, arranging power supply to pump house control room with necessary control cables, HT panels, soft starters, capacitor bank, breakers and allied components as per KPTEL / CESC Norms and Other Connected Electrical & Electro-Mechanical Works, complete Supply of Spare Parts, Tools with gear to pump house yard and Technical Man Power for Operating and Maintaining to Scheme for a Period of 3 Years after Successful Commissioning of the Scheme as per the detailed scope of work.	Job	1	887105289	887105289	933758420	933758420	978743265	978743265
	Total Summary Amount				887105289.00	933758420		978743265.00	
	% against Estimated Rate							10.33 % above	
	% against CSR							4.82% above	
	Total Bid Amount							1060332071.08 (L1)	

MAY 2019 / 2020 DRILLING WORKS

Part B-Schedule-B

Tender Number

CNNL/2019-20/LI/WORK_INDENT30263

Tender Name

SCHEME TO LIFT WATER FROM HEMAVATHI RIVER NEAR KATTEPURA VILLAGE OF
SOMAVARPET TALUK TO FILL 150 TANKS AND 50 KATTES FOR DRINKING WATER
PURPOSE IN THE VILLAGES OF KASABA, MALLIPATTANA, KONANUR AND
DODDAMAGGE HOBLIS OF ARAKALAGUD TALUK HASSAN DISTRICT

SNo	Item Name	Unit	Estimate Quantity	Estimate Rate	Updated Rates as per Revised PWD Building SR & CHESCOM SR		PRASAD MYNENI RAVENDRA (UNITED GLOBAL CORPORATION LIMITED FORMERLY KNOWN AS UNITED INFRA CORPORATION BANGALORE LIMITED)	
					Total Amount	CSR Value	Total Amount	
1	Excavation in all kinds of soil including boulders up to 0.6 m diameter(0.113Cum) and placing excavated stuff neatly in specified dump area or disposing off the same as directed for approach channel / foundation of jack-well/pump house / delivery chamber and appurtenant structures including cost of all materials, machinery, labour, working in wet and watery site condition(excluding dewatering) etc.,complete with all lead and lifts as directed by Engineer in Charge.	Cum	1548.09	105	162549.45	105	162549.45	110.0 170289.90
2	Excavation in soft rock without blasting including boulders up to 0.6 m diameter(0.113Cum) and placing excavated stuff neatly as directed for approach channel / foundation of jack-well/pump house / delivery chamber and appurtenant structures including cost of all materials, machinery, labour, working in wet and watery site condition(excluding dewatering) etc., complete with all lead and lifts as directed by Engineer in Charge.	Cum	3085.92	136.5	421228.08	136.5	421228.08	143.0 441286.56
3	Excavation in soft rock requiring blasting including boulders up to 0.6 m diameter(0.113Cum) for approach channel/foundation of jack-well/pump house/delivery chamber and appurtenant structures and placing excavated stuff neatly in specified dump area or disposing off the same as directed including cost of all materials, machinery, labour, working in wet and watery site conditions (excluding dewatering) etc.,complete with all lead and lifts as directed by Engineer in Charge.	Cum	6171.83	236.25	1458094.8	236.25	1458094.84	248.0 1530613.84

4	Excavation in hard rock all toughness including boulders above 0.6 m dia.(0.113Cum) for approach channel/foundation of jack-well/pump house/delivery chamber and other appurtenant structures by approved controlled blasting methods including control of vibration by use of delay detonators and control of fly-rock by muffling arrangement and adopting only jack hammers for drilling holes and minimising damage to rock beyond excavation line by adopting any one or combination of line drilling/pre-splitting/smooth blasting techniques and placing excavated rock neatly in specified dump area or disposing the same as directed drilling cost of all materials, machinery, labour, working in wet and watery site conditions (excluding dewatering) etc., complete with all lead and lifts as directed by Engineer in Charge.	Cum	4628.87	500.85	2318369.5	500.85	2318369.54	526.0	2434785.62
5	Providing and laying insitu vibrated M-15 (28 days cube compressive strength not less than 15 N/Sq mm) grade cement concrete using 40mm down size approved, clean, hard, graded aggregate for foundation filling / levelling course including cost of all materials, machinery, labour, formwork, cleaning bed, batching, mixing, placing in position, levelling vibrating/tamping, finishing, curing etc., complete with all lead and lifts as directed by Engineer in Charge. (Cement content:240Kg/cum for use of super plasticizer)	Cum	318.18	6488.91	2064641.4	6488.91	2064641.38	6813.0	2167760.34
6	Providing and laying insitu vibrated M-25 (28 days cube compressive strength not less than 25N/Sq mm) grade cement concrete using 20mm down approved, clean, hard, graded aggregates for approach channel/ fore-bay/ delivery chamber side lining including cost of all materials, machinery, labour, formwork, scaffolding, cleaning surface, batching, mixing, placing in position as specified, forming drainage holes, levelling, vibrating/tamping, finishing, curing etc., complete with lead upto 50m and all lifts upto 1.5m from bed level (Cement content: 360kg/cum with use of plasticizer) complete with all lead and lifts as directed by Engineer in Charge.	Cum	1527.32	8670.87	13243193	8670.87	13243193.17	9104.0	13904721.28
7	Providing, fabricating and placing in position reinforcement steel bars for RCC works including cost of all materials, machinery, Labour, clearing, straightening, cutting, bending, hooking, lapping, welding, wherever required, tying with 1.25mm dia soft annealed steel wire, etc., complete with all lead and lifts as directed by Engineer in Charge.	Kg	160556	73.5	11800866	73.5	11800866.00	77.0	12362812.00
8	Providing and constructing burnt brick masonry in CM 1:4 proportion by volume for walls using burnt bricks from approved source including cost of all materials, machinery, labour, scaffolding, ramps, cleaning, batching & mixing mortar, packing mortar into joints, finishing, curing etc., complete with all lead and lifts as directed by Engineer in Charge.	Cum	35.81	6508.55	233071.18	6508.55	233071.18	6834.0	244725.54

9	Providing and constructing granite / trap / basalt rubble stone masonry in foundation with cement mortar 1:8 (uncoursed), bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.12, complete with all lead and lifts as directed by Engineer in Charge.	Cum	101.21	3225.6	326462.98	3893.4	394051.01	3387.0	342798.27
10	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges or stones chiselled dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13, complete with all lead and lifts as directed by Engineer in Charge.	Cum	72.88	5255.25	383002.62	6701.1	488376.17	5518.0	402151.84
11	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms., in depth, compacting each deposited layer by ramming after watering with all lead & lifts, including cost of all labour complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	115.2	133.35	15361.92	211.05	24312.96	140.0	16128.00
12	Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung / top hung fully openable as per approved drawings using Z angles of 25x33x3mm, weighing 1.419 Kg/m both for outer and inner frames and central mullion section of size 25x46x3mm, weighing 2.28kg/m duly providing T section 19x19x3mm, weighing 0.839 kg/m for glazing of windows not more than 34 cms c to c including providing, and fixing 4mm. thick reeded glass with teakwood beading of required size, all steel sections should confirm to I.S 7452:1990, 4nos of holdfasts of approved size, section should be cut to length, welded and electrically grinded, subdividing frames of unit shall be tenoned and revetted into the frames electrically. All the steel surface shall be thoroughly cleaned free of rust and painted with one coat of anti-corrosive paint and finishing with two coats of ready mix paint of approved colour and make including cost of materials, fixtures, labour and HOM of machinery complete as per specifications, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	75	3706.5	277987.5	4122.30	309172.50	3892.0	291900.00
13	Providing and fixing pull and push type rolling shutter(excluding top cover) made out of 18 gauge x 75mm wide cold rolled steel laths of convex corrugation, complete with side guides, bottom rail, interlocking arrangements by means of alternate end clips, suspension shaft with High tension coil type springs, locking arrangements, pulling hooks, handles and all other fittings & accessories including cost of all materials, labour, machinery, applying two coats of synthetic enamel paint of approved quality over a coat of zinc chromate red oxide primer paint etc., complete with all leads & lifts.	Sqm	9	3190.95	28718.55	3190.95	28718.55	3350.0	30150.00

14	Providing and fixing Top Covers to rolling shutter made out of 18 gauge cold rolled steel sheet including cost of all materials, machinery, labour, applying two coats of synthetic enamel paint of approved quality over a coat of zinc chromate red oxide primer paint etc., complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	3	922.95	2768.85	922.95	2768.85	969.0	2907.00
15	Providing Home wood frames of doors, windows, clerestory windows, ventilators & other frames, wrought, framed or assembled including making plaster grooves (excluding cost of cement concrete & side clamps), but including cost of materials, labour, HOM of machineries, complete as per specification. complete with all lead and lifts as directed by Engineer in Charge.	Cum	0.14	107997.75	15119.685	91984.2	12877.79	113398.0	15875.72
16	Providing and fixing in position Home wood half panelled and half glazed shutters for door, styles and rails of 40mm thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick, 4mm thick plain glass, fixed with beading 15mm wide and thickness to finish with the shutters surface including cost of materials, labour, HOM of machineries complete as per specification. (Excluding cost of fixtures) complete with all lead and lifts as directed by Engineer in Charge.	Sqm	9.9	4296.6	42536.34	4501.35	44563.37	4511.0	44658.90
17	Providing 12mm thick plastering in cement mortar 1:3 proportion by volume including cost of all materials, machinery, labour, scaffolding, cleaning joints, smooth finishing, curing, etc., complete with all lead and lifts as directed by Engineer in Charge.	Sqm	1176	262.79	309041.04	262.79	309041.04	276.0	324576.00
18	Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	1176	26.25	30870.00	33.60	39513.60	28.0	32928.00
19	Providing and applying two coats of plastic emulsion paint of approved quality & colour including cost of all materials, labour, scraping and cleaning surface, scaffolding, etc., complete with all lead and lifts as directed by Engineer in Charge.	Sqm	384.34	134.4	51655.296	134.4	51655.30	141.0	54191.94
20	Applying priming coat over new wood surface and / or wood based surface, after brushing with ready mix enamel priming paint including preparing the surface after thoroughly cleaning oil, grease, dirt and foreign matter, sand papering and knotting ready mix paint including cost of materials, labour, complete as per specifications, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	168	32.55	5468.40	52.50	8820.00	34.0	5712.00
21	Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface, with enamel paint to give an even shade, cleaning the surface for dirt, dust and foreign matter, sand papering, including cost of materials, labour, complete as per specifications, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	168	88.2	14817.6	101.85	17110.80	93.0	15624.00

22	Providing and finishing external walls in two coats with water proof cement paint of approved brand and shade to give an even shade after thoroughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications.- with primer . complete with all lead and lifts as directed by Engineer in Charge.	Sqm	24	88.2	2116.8	114.45	2746.80	93.0	2232.00
23	Providing and placing sand bags consisting of empty cement bags filled with 35 to 40 Kg locally available sand for forming ring bund including cost of all labour, materials, labour, plugging the joints with selected earth,etc., complete with all lead and lifts as directed by Engineer in Charge.	Each	25000	58.8	1470000	58.8	1470000.00	62.0	1550000
24	Construction of embankment with approved material gravel/munram with all lifts & leads, transporting to site, spreading, grading to required slope & compacting to meet requirement of table 300-2 complete as per specifications which includes cost of gravel/munram, watering charges & compaction by vibratory roller. MORTH Specification No.305 . complete with all lead and lifts as directed by Engineer in Charge.	Cum	25132.23	354.9	8919428.4	354.9	8919428.43	373.0	9374321.79
25	Construction of embankment with approved material deposit at site from road way cutting & excavating from drain and foundation of other structures graded and compacted to meet requirement of table 300-2 complete as per specifications which includes watering charges & compaction by vibratory roller. MORTH Specification No.305. complete with all lead and lifts as directed by Engineer in Charge.	Cum	1234.37	99.75	123128.41	99.75	123128.41	105.0	129608.85
26	Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials,labour, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	229.5	99.75	22892.625	148.05	33977.48	105.0	24097.50
27	Providing & constructing 600 mm thick hand packed rough stone revetment with 650 to 750 mm long through stones at 1.50 m c/c over 450mm thick graded filter media backingk consisting of sand, 10 mm down & 40 mm down approved clean, hard, graded aggregates laid in layers of 150 mm thick each including cost of all materials for revetment and filter, machinary, labour, laying to required slopes as per approved drawings, packing and wedging with stone chips, finishing surface etc., complete with all lead and lifts as directed by Engineer in Charge.	Cum	3467.52	1851.61	6420494.7	1851.61	6420494.71	1944.0	6740858.88

28	Providing and laying M-15 cement concrete flooring, 60mm thick with metallic concrete hardner toping, under layer of 45mm thick M-15 cement concrete using broken granite metal of 20mm and down size and top layer of 15mm thick metallic cement hardner consisting of mix 1:2 (1 Cement hardner mix: 2 granite metal 10mm nominal size) by volume, with metallic hardening compound of approved quality mix in the ratio of 4:1 (4 part of cement = 1 part of metallic floor hardening compound of approved quality by wt), including finishing, cost of materials, labour, curing, complete as per specifications. Specification No. KBS 14.4, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	132.67	706.65	93751.256	748.65	99323.40	742.0	98441.14	
29	Design, fabrication, supply, erection and commissioning of embedded parts consisting of liners for trash rack grooves (coarse and fine screens) with all accessories for pump house intake structure including cost of all materials, machinery, labour, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings with lead upto 1 km for structural steel components and all leads and lifts including packing /forwarding charges for other materials.	Tonne	0.18	149625	26932.50	149625	26932.50	157106.0	28279.08	
30	Design, fabrication, supply, erection and commissioning of trash racks consisting of a number of structural steel panels of suitable height with vertical trash bars at wider interval and weld mesh frame for pump house intake structure including cost of all materials, machinery/labour, aligning, anchoring, welding, finishing, cleaning, applying one coat of zinc rich epoxy primer and four coats of cold applied coal tar epoxy paint etc., complete as per specifications and approved drawings structural steel components, complete with all lead and lifts as directed by Engineer in Charge.	Tonne	0.386	110670	42718.62	110670	42718.62	116204.0	44854.744	
31	Providing and fixing MS ladder between landing 45 cms wide using angle iron of following size and 20 mm M.S. bars at 25 cms centre to centre with necessary supports of same angle iron as directed including hand railing on both sides with 25 mm dia GI pipes with angle iron props at 2 mtrs. interval and 0.5 mtr height including fixing in ground with CC 1:2:4 and two coats of non poisonous anticorrosive bituminous paint with all lead and lift etc. complete .-65x65x 10/12 mm angle iron , complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	20	2128.35	42567.00	2128.35	42567.00	2235.0	44700.00	

	Providing and fixing M.S. Hand railing for Balcony with 50mm dia. M.S. hollow pipe of 14 gauge, welded to 20mmx20mm M.S. square rod placed vertically, spaced at 100mm at regular intervals of 600mm. These vertical rods laterally tied to 3 horizontal rods spaced at equal interval. These assembly is fixed to concrete by using expansion bolts and welding the same to reinforcement bars and making good the surface. All the joints and sections should be cut to length, welded and grinded wherever necessary etc. complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, etc., complete as per specification and drawing. complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	50.9	2778.3	141415.47	2977.8	151570.02	2917.0	148475.30
32	Providing rubble / boulder and sand filling behind abutment and return walls in layers including cost of all materials, labour, watering, ramming, etc., complete with all lead and lifts as directed by Engineer in Charge.	Cum	402.71	1966.73	792021.84	1966.73	792021.84	2065.0	831596.15
33	Manufacturing, Supplying, Laying in Position, aligning, jointing, testing and commissioning of electric resistance welded/ submerged arc welded mild steel (Fe-410 grade) rising main or specified diameter and plate thickness provided with flanges/ wherever required for connecting to manifold system/ for fixing valves and provided with 1 coat of 40 micron thick zinc rich epoxy primer paint. and 4 coats of each 100 micron thick coat coal tar epoxy paint for inner surface and 25 mm thick outer lining of CM 1:3 proportion (aggregate for outer lining shall be mixture of 80 percent natural sand and 20 percent 6 mm down crushed stone chips) over 50 x 50 mm 13 gauge weld mesh including cost of all materials, machinery, labour, cutting, bending, welding, Cement mortar lining, finishing, curing, conveying, aligning, jointing, arranging water for testing, hydraulic testing at manufacturing site and after laying and jointing specified test pressure etc., compete as per specification and approved drawing, complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	380	53114.62	20183556	61193.99	23253716.20	55770.0	21192600
34	KSSRB 300-1, Earthwork excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications .MORTH specification clause 301.	Cum	2380.8	187.95	447471.36	187.95	447471.36	197.0	469017.60

36	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specifications, including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel/vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/binding materials to fill up the interstices of coarses aggregates,watering and compacting to the required density complete as per specification. B By Mechanical Means. MORTH Specification No. 404.- Crushable type such as Moorum or Gravel for Grading-II, complete with all lead and lifts as directed by Engineer in Charge.	Cum	562.5	2090.55	1175934.4	2090.55	1175934.38	2195.0	1234687.50
37	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specifications, including spreading in uniform thickness, hand packing, rolling with 3 wheeled steel/vibratory roller 8-10 tonnes in stages to proper grade and camber, applying and brooming requisite type of screening/binding materials to fill up the interstices of coarses aggregates, watering and compacting to the required density complete as per specification. B.By Mechanical Means. MORTH Specification No. 404. - Type B 11.2mm for Grading-III, complete with all lead and lifts as directed by Engineer in Charge.	Cum	281.25	2480.1	697528.125	2480.1	697528.13	2604.0	732375.00
38	Providing and laying reinforced cement concrete pipe NP2 for culverts including pointing ends, and fixing collars with cement mortar 1:2 including cost of all materials, labour, curing complete as per specifications. Specification No. KSRB 100.2300 MOST Specification No. 1000/2300, with all lead & lifts. 600mm dia., complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	37.5	2269.05	85089.375	2269.05	85089.38	2383.0	89362.50
39	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220 kgs,with 40mm and down size graded granite metal coarse aggregates @0.892 cum and fine aggregates @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2, complete with all lead and lifts as directed by Engineer in Charge.	Cum	121.2	5298.3	642153.96	5613.3	680331.96	5563.0	674235.60
40	Providing and laying in position reinforced cement concrete's of mix M-20 with OPC @ 320Kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 Cum and fine aggregates @ 0.460 Cum with super plastisifer @ 3 liters confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cm thick, vibrated for all works in foundation for: footing, pedestals, retaining walls, return walls, walls (any thickness) including attached plasters, columns, pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No: KBS 4.1, 4.6, complete with all lead and lifts as directed by Engineer in Charge.(Excluding cost of steel, fabrication & plastering charges)	Cum	187.51	6311.55	1183478.7	6139.35	1151189.52	6627.0	1242628.77

41	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) With 2 Nos 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending, scaffolding wherever necessary, nicely finishing the welded joints with all lead and lifts and as per the directions of the Engineer in-charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete),, complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	365	898.8	328062	898.8	328062.00	944.0	344560.00
42	Providing Chain link fencing 50mm size of 8 gauge properly stretched between rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	900	751.8	676620	751.8	676620.00	789.0	710100.00
43	Providing & fixing M.S. Block pipe of 38mm dia. Of heavy gauge of 14 including removing the bends, cutting the pipe & fixing pipe in between 2 vertical poles (M.S. Rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting & scaffolding wherever necessary with all lead & lift as directed by the Engineer-in-charge of work etc. complete including two coats of approved quality paint over one coat of shop paint, including cost of materials, labour, HOM complete as per specification. complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	600	428.4	257040.00	428.4	257040.00	450.0	270000
44	Providing and laying insitu vibrated M-20 (28 days cube compressive strength not less than 20N/sq mm) grade cement concrete using 20mm down approved, clean, hard, graded aggregate for sub-structure works including cost of all materials, machinery, labour, formwork, scaffolding, cleaning, batching, mixing, placing in position, levelling, vibrating, finishing, curing etc. complete with all lead and lifts as directed by Engineer in Charge.(Cement content 330 kg/cum with use of super plasticizer)	Cum	5.6	7888.18	44173.808	7888.18	44173.81	8283.0	46384.80

	Providing and fixing M.S. Gate as per Chief Architect Drawing, using 50mm x 50mm 14 gauge M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specification, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	7.5	3080.7	23105.25	3157.35	23680.13	3235.0	24262.50
45	Earthwork excavation for foundation of building, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation complete with all lead and lifts as directed by Engineer in Charge, breaking of clods complete as per specifications.	Cum	47.23	297.15	14034.395	471.45	22266.58	312.0	14735.76
46	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering . complete with all lead and lifts as directed by Engineer in Charge.	Cum	15.36	133.35	2048.256	211.05	3241.73	140.0	2150.40
47	Providing and injecting chemical emulsion for Pre-constructional Anti-Termite Treatment, creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor, along the external perimeter of the building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surrounding of pipes and conduits, with chloropyriphos emulsifiable concentrates of 20% concentration, including cost of chemical, diluting in water to one percent concentration, labour, HOM of equipment's, complete as per specifications. (Plinth area of the building at ground floor only shall be measured) complete with all lead and lifts as directed by Engineer in Charge.	Sqm	27.5	108.15	2974.125	111.3	3060.75	114.0	3135.00
48	Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220 kgs. with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications,complete with all lead and lifts as directed by Engineer in Charge.	Cum	5.18	5298.3	27445.194	5613.3	29076.89	5563.0	28816.34

50	Providing and constructing granite / trap / basalt size stone masonry in foundation cement mortar 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2.0m apart in each course including cost of materials, labour, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	9.04	4396.35	39743.004	5521.95	49918.43	4616.0	41728.64
51	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stone chisite dressed in courses not less than 15cms high, bond stones at 2m apart in each course including cost of materials, labour, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	4.33	5255.25	22755.233	6701.1	29015.76	5518.0	23892.94
52	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15cms thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	1.49	5713.05	8512.4445	5911.5	8808.14	5999.0	8938.51
53	Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	9.05	99.75	902.7375	148.05	1339.85	105.0	950.25
54	Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m ³ having a minimum average compressive strength of 5.00 N/mm ² confirming to IS 2185(Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing hire charges of machineries etc., complete as per specifications. KBS No. 5.4-d-o- with solid concrete blocks of size 400x200x200mm. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	52.08	983.85	51238.908	963.9	50199.91	1033.0	53798.64
55	Providing and constructing non load bearing wall with solid concrete blocks of 400x100x200mm having a block density not less than 1800 kg/m ³ having a minimum average compressive strength of 4.00 N/mm ² confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	31.37	751.8	23583.966	854.7	26811.94	789.0	24750.93

	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.70cum and fine aggregates @ 0.47cum, with superplasticiser @ 3lts confirming to ISQ 103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in ground floor level for roof slabs, staircase, lintels and beams retaining walls, return walls, walls (any thickness) including attached pilasters, columns, lintels, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	2.81	6685.35	18785.834	6550.95	18408.17	7020.0	19726.20
56	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as roofs, landing, balconies and like, thickness upto 200mm including cost of all materials, labour complete as per specifications. up to 3.50m from Ground level complete with all lead and lifts as directed by Engineer in Charge.	Sqm	35.68	328.65	11726.232	328.65	11726.23	345.0	12309.60
57	Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM or machinery complete as per specifications. Specification No. KBS 4.6.3-d- for TMT Bars Fe 500complete with all lead and lifts as directed by Engineer in Charge.	MT	0.28	58852.5	16478.7	75675.6	21189.17	61795.0	17302.60
58	Providing 15mm thick cement plaster in single coat with cement mortar 1:6, to brick/block masonry including rounding off corners wherever required smooth rendering. : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.Internal Walls. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	91.66	175.35	16072.581	222.6	20403.52	184.0	16865.44
59	Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering. : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.External. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	86.26	207.9	17933.454	262.5	22643.25	218.0	18804.68
60	Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering. : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. Internal ceiling. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	18.34	202.65	3716.601	250.95	4602.42	213.0	3906.42

62	Providing and applying two coats of wall putty to inside plastered walls and ceiling using white cement putty. Scrapping and levelling the surface using steel blade and preparing the surface even and smooth by using different grade sand papers , including cost of all materials, cost of labour and scaffolding etc., complete with all lead and lifts as directed by Engineer in Charge.	Sqm	107.43	58.8	6316.884	81.9	8798.52	62.0	6660.66
63	Providing and applying painting in two coats with plastic emulsion paint of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface , free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications.with primer. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	107.43	94.5	10152.135	106.05	11392.95	99.0	10635.57
64	Providing and applying painting in two coats with plastic emulsion paint of approved brand on ceiling surface to give an even approved shade after thoroughly brushing the surface , free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications.with primer. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	18.34	98.7	1810.158	111.3	2041.24	104.0	1907.36
65	Providing and fixing in position in cement concrete 1:3:6 steel glazed windows and ventilators side hung/top hung fullyopenable as per approved drawings using Z angles of 25x33x3mm,weighing 1.419 Kg/m both for outer and inner frames and central mullionsection of size 25x46x3mm, weighing 2.28Kg/m duly providing T section 19x19x3mm including providing and fixing 4mm. thick reeded glass withteakwood beading of required size, all steel sections should confirm tol.S 7452-1990, 4nos. of holdfasts of approved size, section should becut to length welded and electrically grinded subdividing frames of unit shall be tenoned and revetted into the frames electrically. All the steelsurface shall be thoroughly cleaned free of rust and painted with one ccator anticorrosive paint and finishing with two coats of ready mix paint ofapproved colour and make including cost of materials, fixtures, labour and HOM complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Sqm	0.96	3706.5	3558.24	4122.3	3957.41	3892.0	3736.32
66	Providing and fixing 1mm thick M.S. sheet garage door withframe and diagonal braces of size 40x40x6 mm angle Iron, 3.15mm thickM.S. Gusset plates at the junctions and corners, with handles, stoppers and locking arrangements etc., including applying a priming coat of redlead paint cost of materials, labour, HOM complete as per specifications.Double leaf door of size 2.4x2.4m. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	3.47	2438.1	8460.207	2853.9	9903.03	2560.0	8883.20

67	Providing and applying enamel metal paint two coats(excluding priming coat) over new steel or other metal surfacebrushing to give an even shade after cleaning oil, grease, dirt and otherforeign matter, including cost of materials, labour, complete as per specifications,complete with all lead and lifts as directed by Engineer in Charge.	Sqm	15.39	86.1	1325.079	99.75	1535.15	90.0	1385.10
68	Providing & of Fixed Louvered Ventilator made out of multi chambered upVC sections with TPv gaskets having isolated drainage and reinforced with Galvanized Iron profiles through out the window. The outer frame having a overall size of 60x55mm with reinforcement of 1 mm thickness and Mullion with overall size of 74x60mm with reinforcement of 1mm thickness. Ventilator shall be provided with 4.5 mm Pin Head. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	0.96	6510	6249.60	4767.00	4576.32	6836.0	6562.56
69	Waterproofing of RCC Terrace / podium slab / toilet / utilities / water retaining structure by preparing the surface by chipping and cleaning and Grouting of Honey comb, voids, cracks , construction joints with cement slurry (1kg Cement added in 10 ltr of water) added with 100gm of inorganic accelerator, followed by spraying of liquid biological modified alkaline earth silicates @ 0.40 ltr per sqm on whole surface to reduce the micro porosity and allowing it to dry, curing the surface for the silicates to penetrate deeper into the concrete and spraying waterproofing impregnate liquid containing silane and silanol linear copolymer @ 0.50 ltr per sqm and finally applying polymer slurry made out of cross linked acrylic / styrene / butadiene & cement in the ratio of 1:0.1, @ 0.50 kg/sqm on the whole surface, including all labour charges tools and equipment's, all complete as per specification,For Water retaining structures, Terrace Flat & Slope portion, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	18.34	619.5	11361.63	603.75	11072.78	650.0	11921.00
70	Providing ceramic tiles of approved make, shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing with white cement using colour pigment, including cost of materials, labour, curing, complete as per specifications. Specification No. KBS -do- for Ceramic Tiles of size 30x30 cms 6mm thick, complete with all lead and lifts as directed by Engineer in Charge.	Sqm	18.34	1234.8	22646.232	1275.75	23397.26	1297.0	23786.98
71	Providing skirting, dadoing, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over existing rough plaster surface using glazed tile of approved make and size including cost of materials, labour, complete as per specifications. Specification No. KBS 14-16, 14-17 -do- Colour glazed tiles of size 30x45 cms 6mm thick with border of size 30x10 cms. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	40.26	1174.95	47303.487	1344	54109.44	1234.0	49680.84

	Providing and laying platform using prepolished, water cut/gang saw 40mm thick telephonic Black Granite. laid on existing vertical supports and fixing in C.M 1:3 proportion, including cutting to required shape, pattern with paper joints, including full rounding for nosing, finished with cement mortar, pointed with colour pigments to match the colour of slab making through jointing with sealant, making holes 25mm x12mm grooves in joints including curing. complete with all lead and lifts as directed by Engineer in Charge.	Sqm	0.45	3794.7	1707.615	3702.3	1666.04	3984.0	1792.80
72	Providing and fixing white vitreous china clay,flat wash basin size 550 x 400 with a pair of 15mm C.P brass pillar taps with C.I.M.S brackets, 32mm dia C.P brass waste of standard pattern, painting of fittings and brackets,cutting and making good the wall and floor wherever required,including cost of materials,labour complete as per specification. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	3920.7	3920.70	4072.95	4072.95	4117.0	4117.00
73	Providing and fixing white vitreous china clay,water closet european type(peDESTAL ,type P trap)with black solid plastic seat and lid,C.P brass hinges,rubber buffer,10ltrs white glazed/vitreous china clay low level,flushing cistern(all are approved make) with fittings,C.I.M.S brackets,40mm diameter flush bend with fittings and clamps,overflow arrangement with specials and 25mm mosquito proof coupling of approved design,painting of fittings and brackets,cutting and making good the wall and floor wherever required, including cost of materials,labour complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	5386.5	5386.50	5202.75	5202.75	5656.0	5656.00
74	Providing and fixing C.P. Health faucet with flexible hose,C.P Hose pipe ,wall flange, supporting hook with screws, fixing materials and sealant to all sides of wall flange complete Make : JAQUAR Model No - ALD-573. complete with all lead and lifts as directed by Engineer in Charge.	Nos	1	2625	2625.00	2625	2625.00	2756.0	2756.00
75	Providing and fixing in position C.P robe hook with pair of fixing screws and fixing material complete Make :JAQUAR Model No-ACN-1161N. complete with all lead and lifts as directed by Engineer in Charge.	Nos	1	672	672.00	672	672.00	706.0	706.00
76	Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour, H.O.M of equipments with all leads complete as per specifications,complete with all lead and lifts as directed by Engineer in Charge.	Each	2	168	336.00	148.05	296.10	176.0	352.00
77	Providing and fixing to wall, ceiling and floor , medium density polyethylene pipes 6.00 kgf /sqcm working pressure 40 mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, H.O.M of equipments and testing complete as per specifications complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	1	236.25	236.25	239.4	239.40	248.0	248.00

79	Providing and fixing in position chromium plated brass shower rose with 15 or 20mm inlet 150mm dia including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	893.55	893.55	787.5	787.50	938.0	938.00
80	Providing and fixing to wall, ceiling and floor , mediumdensity polyethylene pipes 6.00 kgf /sqcm working pressure 75 mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No. KBS 13.2.15.1 / 13.9) Make: Astral / Ashirvad / supreme, complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	5	317.1	1585.50	342.3	1711.50	333.0	1665.00
81	Providing and fixing to wall, ceiling and floor , mediumdensity polyethylene pipes 6.00 kgf /sqcm working pressure 110 mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No. KBS 13.2.15.1 / 13.9) Make: Astral / Ashirvad / supreme, complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	10	447.3	4473.00	472.5	4725.00	470.0	4700.00
82	Providing & fixing, testing and commissioning u PVC multi inlet floor trap conforming to IS 13592 with required P C support placed to required level as per site condition complete,complete with all lead and lifts as directed by Engineer in Charge.	No.s	2	451.5	903.00	451.5	903.00	474.0	948.00
83	Supplying and fixing PVC 'P' trap of self cleansing design with or without vent arm complete including cutting and making good the walls and floors, complete with all lead and lifts as directed by Engineer in Charge.	No.s	1	656.25	656.25	656.25	656.25	689.0	689.00
84	Providing & Fixing in position heavy duty C P grating with frame of below mentioned sizes including jointing and fixing material complete. Make -Chilli -ctt- ss127. complete with all lead and lifts as directed by Engineer in Charge.	No.s	1	304.5	304.50	304.5	304.50	320.0	320.00
85	Providing and grouting sleeves made in beam/slab to draw waste and soil lines at all floor level of the below mentioned sizes , including conducting water ponding test to ensure zero leakage with all leads and lifts complete Size : 150 mm dia. complete with all lead and lifts as directed by Engineer in Charge.	No.s	1	934.5	934.50	934.5	934.50	981.0	981.00
86	Providing and fixing chlorinated poly vinyl chloride (CPVC(C) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of joints cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) 25 mm dia pipe nominal OD pipes Make: Ashirvad / supreme. complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	10	301.88	3018.80	307.65	3076.50	317.0	3170.00

	Providing and fixing chlorinated poly vinyl chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) 20 mm dia pipe nominal OD pipes Make: Ashinvad / supreme. complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	10	253.58	2535.80	248.75	2487.50	266.0	2660.00
87	Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 20mm NB including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification no: KBS 13.2.6/13.3. Make: Zoloto. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	429.45	429.45	352.8	352.80	451.0	451.00
88	Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 25mm NB including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification no: KBS 13.2.6/13.3. Make: Zoloto. v. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	630	630.00	471.45	471.45	662.0	662.00
89	Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf /sqcm working pressure 110 mm outside diameter raising mains & exposed distribution pipes with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No. KBS 13.2.15.2 / 13.9 Make: Astral / Ashinvad / supreme. complete with all lead and lifts as directed by Engineer in Charge.	Rmtr	10	599.55	5995.50	624.75	6247.50	630.0	6300.00
90	Constructing brick masonry inspection chamber 600x850mm, and 450mm depth, (clear inside dimension) for pipeline with three or more inlets, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete M 15 with 20mm and downsize granite metal foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finished smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Each	1	283.57	283.57	9630.6	9630.60	298.0	298.00
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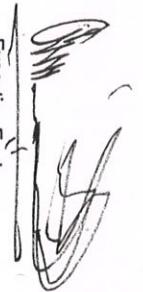
92	Depth beyond 450mm and brick masonry inspection chamber with table moulded non-modular bricks of class designation 50 in cement mortar 1.5, for every 150mm depth or part thereof including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS(PW,P & IWD, South Zone, Bangalore - Item No 11.55 / Pg no.75)	Each	1	1016.4	1016.40	1019.55	1019.55	1067.0	1067.00
93	Earthwork excavation for foundation of building, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches where excavation width upto 0.6m, in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	6.3	297.68	1875.384	313.95	1977.89	313.0	1971.90
94	Providing and placing on terrace, polyethylene water storage tanks as per IS:12701:1996 with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM and testing complete as per specifications. (For 1000 litre capacity) complete with all lead and lifts as directed by Engineer in Charge.	No.s	1	7169.4	7169.40	7056.0	7056.00	7528.0	7528.00
95	Earthwork excavation for foundation of building, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	9.43	309.75	2920.9425	484.05	4564.59	325.0	3064.75
96	Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301 (complete with all lead and lifts as directed by Engineer in Charge.	Cum	18.86	38.85	732.711	34.65	653.50	20.0	777.00
97	Providing and filling in foundation with granite / trap broken metal 100mm and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift complete as per specifications complete with all lead and lifts as directed by Engineer in Charge.	Cum	3.84	2219.7	8523.648	2605.05	10003.39	2331.0	8951.04

	Providing and laying in position reinforced cement concrete of Design mix M20, with OPC cement @ 320Kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69cum and fine aggregates @ 0.46 cum with super plasticisers @ 3 liters confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, columns pillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc, including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Cum	1.45	6311.55	9151.7475	6139.35	8902.06	6627.0	9609.15
98	Providing and laying reinforced cement concrete pipe NP2 for culverts including pointing ends, and fixing collars with cement mortar 1:2 including cost of all materials, labour, curing complete as per specifications.	Rmtr	4	6451.2	25804.80	5923.05	23692.20	6774.0	27096.00
99	Specification No. KSRB 1000, 2300 MOST Specification No. 1000/2300 - do - 1200 mm dia complete with all lead and lifts as directed by Engineer in Charge.	No.s	2	945	1890.00	801.15	1602.30	992.0	1984.00
100	Providing and fixing SFRC cover for Septic Tank rectangular in shape of size 600mm x 600mm including the frame etc complete as per manufacturer's recommendation of reputed make such as southern concrete industries or equivalent.complete with all lead and lifts as directed by Engineer in Charge.								
101	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications. complete with all lead and lifts as directed by Engineer in Charge.	Cum	11.22	133.35	1496.187	211.05	2367.98	140.0	1570.80
102	Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301complete with all lead and lifts as directed by Engineer in Charge.	Cum	11.22	38.85	435.897	34.65	388.77	41.0	460.02
103	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180 kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2complete with all lead and lifts as directed by Engineer in Charge.	Cum	1.13	5110.35	5774.6955	5532.45	6251.67	5366.0	6063.58

104	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.70cum and fine aggregates @ 0.47cum, with superplastisiser @ 3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms thick, vibrated for all works in foundation for footings, pedestals, retaining walls, return walls, walls (any thickness) including attached pilasters, column pillars, posts,struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6 complete with all lead and lifts as directed by Engineer in Charge.	Cum	9.15	6532.05	59768.2575	6306.3	57702.65	6859.0	62759.85
105	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications.Specification No. KBS 4.6.2 complete with all lead and lifts as directed by Engineer in Charge.	Sqm	2.4	242.55	582.12	270.9	650.16	255.0	612.00
106	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landing, balconies and like, thickness upto 200 mm including cost of all materials, labour complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Sqm	9.86	403.2	3975.552	462	4555.32	423.0	4170.78
107	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floor, including cost of all materials, labour complete as per specificaiton. Specification No. KBS 4.6.2complete with all lead and lifts as directed by Engineer in Charge.	Sqm	2.52	711.9	1793.988	792.75	1997.73	747.0	1882.44
108	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Sqm	54.28	307.65	16699.242	375.9	20403.85	323.0	17532.44
109	Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing inposition, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM or machinery complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Tonne	1.13	58852.5	66503.325	75675.6	85513.43	61795.0	69828.35
110	Providing floating coat of cement to plastering and finishing smooth, including cost of materials, labour, curing complete as per specifications.complete with all lead and lifts as directed by Engineer in Charge.	Sqm	32.8	19.95	654.36	19.95	654.36	21.0	688.80

Providing 20mm thick cement plaster in single coat with cement mortar 1:4, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering : Providing and removing scaffolding, including cost of materials, labour, curing complete with all lead and lifts as directed by Engineer in Charge.									
111	Sqm	63.67	282.45	17983.5915	309.75	19721.78	297.0	18909.99	
Providing and fixing of PVC Rungs footrest in under ground tanks / OHT manhole using M20 concrete bed blocks for masonry walls or during construction for RCC surfaces, including cost of materials, labour, curing etc., complete as per specifications, complete with all lead and lifts as directed by Engineer in Charge.	Each	6	257.25	1543.50	257.25	1543.50	270.0	1620.00	
Total Summary Amount			77718463.20		81140523.95		81588806.08		
% against Estimated Rate							4.98		
% against CSR							0.55		
Total Bid Amount							1060332071.08 (L1)		


Contractor


Executive Engineer