

**JOB SCHEDULE FOR CONSTRUCTION/MODERNISATION
OF OUTLETS UNDER KADAPA RETAIL REGIONAL OFFICE.**

10000052-HD-11770

1. Quoted rate shall be applicable for any height, depth, level and thickness of wall etc unless otherwise specified. Sales Building shall be generally ground floor and G+1 in some cases.
2. Samples of all materials will have to be approved by EIC before use.
List of approved make/brand is attached to technical/commercial bid. Decision of HPCL with regard to selection of make/brand of material to be used shall be final.
3. All jobs to be carried out as per technical specification attached to technical/commercial bid. All IS Codes referred to shall be of Latest Edition.

PART A: COMPOUND WALL/CULVERT/KERB WALL

Sr. NO	DESCRIPTION	UNIT
1.0	SITE CLEARANCE Surface dressing of the ground including removing trees, vegetation and making surface levelled and disposal of rubbish outside HPCL's premises to an unobjectionable place, as directed by the Engineer in Charge.	SQM
2.0 2.1	EXCAVATION Excavation for foundation up to 2m depth below existing ground level in any type of soil except hard rock. Rate to include dressing the sides and bottom, bailing out of water if encountered, shoring, strutting, backfilling after the construction of foundation, compacting by the side of the foundation and disposal of surplus excavated earth within/outside HPCL's premises to an unobjectionable place, as directed by the Engineer in Charge including spreading, watering and compaction, complete	CUM
2.2	Above 2.0m and Up to 4.0m	CUM
2.3	EXCAVATION IN HARD ROCK Description same as item no.2.1 but cutting hard rock by pneumatic hammer and compressor.	CUM
2.4	Excavation of Hard Rock Above 2.0m and Up to 4.0m	CUM
3.0	SAND FILLING Supply and filling with clean locally available approved quality sand in layers of 150 mm each including compacting by hand ramming and watering.	CUM
4.0	PCC WORK :	
4.1	PCC 1:4:8 FOR FOUNDATION Providing and laying PCC 1:4:8 using 40 mm and down size graded stone aggregates including machine mixing, providing formwork if required, placing, compacting by hand ramming, curing etc complete.	CUM
4.2	PCC 1:3:6 mix using 20 mm and down size graded crushed aggregates below flooring, plinth protection etc.	CUM
4.3	PCC 1:2:4 FOR DPC Providing and laying 50 mm thick DPC in 1:2:4 mix with 6 to 12 mm size aggregate and water proofing compound at the rate of 1 kg per bag of cement .	SQM
4.4	PCC 1:2:4 FOR COPING Providing and laying 60 mm average thickness coping in CC 1:2:4 mix using	CUM

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	6 to 12 mm stone aggregate with 40 mm projection on either side of wall with drip mould. Rate to include mixing, providing necessary shuttering, compaction and curing. Thickness of coping at the ends shall be 40 mm and 80 mm at centre .	
4.5	PCC 1:2:4 FOR GROUTING Providing and laying PCC 1:2:4 mix using 20mm to 12 mm stone aggregate including mixing, providing necessary shuttering, compaction and curing.	CUM
5.0	REINFORCED CEMENT CONCRETE Providing, mixing and placing RCC 1:1.5:3 mix with ordinary Portland cement using 20 mm and down size graded crushed aggregate including providing and fixing necessary plywood /steel shuttering, scaffolding, machine mixing, compacting by vibrators, curing, hacking the surface to receive plaster etc. complete. Rate shall be exclusive of the cost of steel reinforcement, which will be paid under a separate item. Concrete shall conform to relevant specifications of IS 456 Latest Edition	
5.1	FOOTINGS/PILE CAPS	CUM
5.2	COLUMNS/BEAMS	CUM
5.3	CULVERT SLAB	CUM
6.0	UNDER REAMED PILES Providing RCC 1:1.5:3 for under reamed piles up to required depth with double bulbs as per IS 2911 etc. All complete. Reinforcement steel shall be paid separately. Pile cap shall be paid separately.	
6.1	300mm dia pile	RMT
6.2	230mm dia pile	RMT
6.0	REINFORCEMENT STEEL Supply ,fabrication , hoisting and placing in position TMT steel (FE 415 Gr) reinforcement bars conforming to IS 1786 -Latest Edition Grade FE 415 as per detailed drawing and specifications including cutting, bending and tying with 18 SWG binding wire complete. The rates shall be applicable for all heights and depths. Payment shall be made as per reinforcement drawings and with theoretical weights only including all authorised laps and hooks. Weight of binding wire shall not be considered for payment.	MT
7.0	BRICK MASONRY WORKS Providing and constructing following brick masonry in CM 1:5 using first quality bricks of Class designation 35 (minimum) and conforming to IS-1077-1986 including providing all openings and projections , raking the joints to 1 cm deep, scaffolding, soaking of bricks in water prior to use and curing etc complete as per specifications .	
7.1	SUB STRUCTURE Providing and laying brick masonry as above for foundation below DPC level.	CUM
7.2	SUPER STRUCTURES. Providing and laying brick Masonry as above for superstructure above DPC level including scaffolding.	CUM
8.0	RANDOM RUBBLE MASONRY Providing and constructing random rubble masonry with good quality stone in CM 1:5 for substructure & superstructure as per IS 1597 part 1, latest edition Rate to include raking the joints to 1 cm deep , providing through stones @ 2m c/c and curing etc. complete.	
8.1	SUBSTRUCTURE	CUM
8.2	SUPERSTRUCTURE including scaffolding	CUM
9.0	RUBBLE PITCHING Providing 230mm thick rubble pitching including surface dressing, making required slope. Rate to exclude flush pointing which will be paid separately	SQM

10.0	POINTING	
10.1	Providing flush pointing in rubble pitching with 1:3 cement mortar including curing etc. complete.	SQM
10.2	Providing 12mm raised pointing in RR masonry wall with 1:3 cement mortar including curing etc. Complete.	SQM
11.0	PLASTERING Providing and laying average 12 mm thick sand faced cement plaster in single coat in CM 1:4. -Rate shall include providing necessary scaffolding, chicken wire mesh at all joints of brick and concrete surfaces, with a minimum overlap of 150 mm in all directions and curing complete. No extra payment shall be made for additional thickness if required to achieve perfect line and level.	SQM
12.0	WATER PROOF CEMENT PAINT (SNOWCEM) Providing and applying 2 coats of snowcem to plastered and concrete surfaces including providing necessary scaffolding, surface preparation etc. complete. If additional coats are required to obtain uniform and smooth finish, the same shall be carried out at no extra cost.	SQM
13.0	WEEP HOLES Providing, fabricating and installing in place, 75 mm dia PVC Pipes of various lengths & at places as directed at site on the masonry wall for water drainage.	RMT
14.0	CHAIN LINK FENCING /BIRBED WIRE FENCING	
14.1	STRUCTURAL STEEL : ANGLE IRON POST : Supply, fabrication, erection and grouting of 65 x 65 x 6 ISA post and supporting angles of specified length in 1:2:4 concrete grout at every 2.4 m C-C or as advised. Rate to include fabrication of the post as per the specification, erecting, placing, grouting and painting of the posts with two coats of Synthetic Enamel over two coats of red oxide Primer Paints and primer shall be of SHALIMAR/ BERGER/ASIAN Make first quality only. Excavation and concrete will be paid separately under their respective items	MT
14.2	PIPE RAILING : Supply and fixing of 40 NB medium quality MS pipes conforming to IS 1239 latest addition for top and bottom railings to the angle iron posts for fixing the edges of the chain link fencing. Rate to include fabricating, cutting, bending of the MS pipe where ever necessary. Supply and fixing of the required size MS clamps at every post, with required size nuts and bolts and painting the railing with two coats of Zinc Phosphate Primer and two coats of Synthetic enamel paint after necessary cleaning and scrapping . Paint and primer used shall be of SHALIMAR/ BERGER/ASIAN Make first quality only.	RMT
14.3	CHAIN LINK FENCING : Supply and fixing of 50 x 50mm opening size 10 SWG GI chain link fencing to the angle iron post with 8 SWG GI hooks and nuts and railing with 14 SWG GI continuous wire (all details shall be as per enclosed drawing) up to a height of 1.8 m from the ground level. Rate to include unrolling the bundle, erecting, tightening and fixing at 300 mm C-C on the vertical portion of the posts to every top and bottom railing with 14 gauge GI wire.	SQM
14.4	BARBED WIRE FENCING Providing and fixing 13 rows horizontal and two diagonals with two ply 12 SWG GI barbed wire fencing with barbes @ 100mm c/c. Angle iron post shall be paid separately. For payment purpose measurement shall be taken for the length of plot boundary. No measurement shall be taken for 13 rows	RMT

	individually	
15.0	<p>HUME PIPE</p> <p>Supplying, laying, joining and aligning 900mm NB NP3 class RCC Hume pipes conforming to IS-458 Latest Edition below approach road wherever directed. Rate to include joining with cement mortar, excavation up to required depth and providing and laying 150mm thick PCC 1:4:8 bedding, PCC 1:2:4 haunching @ 1m c/c. Test certificates from manufacture shall be submitted and approved by EIC before use.</p>	RMT

PART B: SALES BUILDING

SL NO.	DESCRIPTION	UNIT
1.0	EXCAVATION	
1.1	Excavation in any type of soil excluding hard rock for foundation, plinth beam, trenches etc. Including dressing the sides and bottom, bailing out water if encountered, shoring, strutting, and backfilling and compacting the excavated earth in the sides of foundations. Rate to include carting away surplus excavated earth, spreading, levelling and compacting, inside or outside the HPCL premises to an unobjectionable place as directed by Engineer-In-Charge.	
1.1.1	Upto 2.0 M depth	CUM
1.1.2	Above 2.0 m and upto 4.0 M depth	CUM
1.2	Same as above but cutting hard rock by pneumatic hammer and compressor.	
1.2.1	Up to 2m depth	CUM
1.2.2	Above 2m and up to 4m depth	CUM
2.0	ANTI TERMITE TREATMENT Providing anti-termite treatment including diluting and injecting Neem base solution and creating a continuous barrier under and alround the column pits, wall trenches, basement excavation, top surface of plinth filing, junction of wall and floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid, surroundings of pipes and conduits etc. Complete as per specification using Neem based solution. Plinth area of building at ground floor only shall be measured for payment. The work shall be carried out by a qualified agency and 10 years guarantee to be given.	SQM
3.0	MURUM FILLING Supplying and filling good quality murum in layers of 150 mm thick including watering and compacting till maximum compaction is achieved as directed by Engineer In Charge. Compacted volume shall be considered for payment.	CUM
4.0	SAND FILLING Supplying and filling locally available good quality river sand in layers of 150 mm thick including watering and compacting till maximum compaction is achieved as directed by Engineer In Charge. Compacted volume shall be considered for payment.	CUM
5.0	RUBBLE SOLING Providing and laying 150mm thick rubble soling including hand packing, filling the interstices with chips, spalls and binding with grit and selected murrum, watering, compacting by hand ramming.	SQM
6.0	PLAIN CEMENT CONCRETE Providing and laying PCC of following mix including providing and fixing form work, machine mixing, compaction and curing etc complete as per specification.	
6.1	PCC 1:4:8 mix using 40 mm and down size graded crushed aggregate below footing, in foundation trench etc.	CUM
6.2	PCC 1:3:6 mix using 20 mm and down size graded crushed aggregates below flooring, plinth protection etc.	CUM
6.3	PCC 1:2:4 for DPC Providing and laying 50 mm thick DPC in PCC 1:2:4 mix with 6 to 12 mm size aggregate and water proofing compound at the rate of 1 kg per bag of cement.	SQM

7.0	REINFORCED CEMENT CONCRETE 1:1.5:3 Providing and laying RCC 1:1.5:3 concrete for following works using 20 mm and down size graded crushed aggregate including providing and fixing necessary steel/plywood shuttering, scaffolding, machine mixing, compacting by mechanical vibrators, curing,etc complete. Concrete shall conform to IS 456-Latest edition Rate shall be excluding the cost of steel reinforcement, which will be paid under a separate item.	
7.1	Footings/ pile cap	CUM
7.2	Pedestals,Columns , plinth beams, floor beams, lintel	CUM
7.3	Roof Slab, Chhaja, staircase	CUM
8.0	UNDER REAMED PILES Providing RCC 1:1.5:3 for under reamed piles up to required depth with double bulbs as per IS 2911 etc. All complete. Pile cap and reinforcement steel shall be paid separately.	
8.1	300mm dia pile	RMT
8.2	230mm dia pile	RMT
9.0	STEEL REINFORCEMENT Supplying, fabricating, and placing in position TMT reinforcement bar conforming to IS 1786 grade FE 415 including cutting, bending & supply and binding with 18 SWG annealed binding wire. Payment shall be made as per reinforcement drawings and as per theoretical weights only . Authorised chairs, spacers and laps will be considered for payment. Weight of binding wire shall not be considered for payment.	MT
10.0	BRICK MASONRY Providing and constructing brick masonry in CM 1:5 using bricks having minimum compressive strength 35 Kg/cm ² and conforming to IS: 1077- Latest Edition including providing all openings and projections as per the drawing, raking the joints to 1 cm deep, scaffolding, soaking of bricks prior to use and curing etc complete as per specifications .	
10.1	230 mm & above thickness in walls/foundations	CUM
10.2	115 mm thick in partition walls in CM 1:4. Rate to include providing 75 mm thick RCC 1:2:4 bands using 2 nos 8 mm dia Torsteel reinforcement at every 1 M height of wall including shuttering. Steel reinforcement shall be paid for separately.	SQM
11.0	PLASTERING	
11.1	SAND FACED PLASTER (EXTERNAL) Providing and laying average 18 mm thick sand faced cement plaster as per following procedure : Apply 12 mm thick 1st coat of plaster in CM 1:4 and leaving the surface rough. Apply 2nd coat of 6 mm thick of CM 1:3 mixed with CICO/ IMPERMO/ ACCOPROOF water proofing compound mixed as per manufacturer's specifications and finishing the surface by rubbing with sponge till uniform texture is obtained. Rate shall include providing necessary scaffolding, chicken wire mesh at all joints of brick and concrete surfaces, with a minimum overlap of 150 mm in all directions and curing complete.	SQM
11.2	SMOOTH CEMENT PLASTER FOR CEILING/CHHAJA Providing and applying 6 mm thick plaster in CM 1:3 to ceiling and bottom surface of chajja using screened sand including finishing smooth and providing drip moulds at chajja edges, scaffolding and curing etc.	SQM

	Complete.	
11.3	SMOOTH CEMENT PLASTERING (INTERNAL WALL) Providing and laying 12mm thick smooth cement plastering in 1:4 CM in single coat to all the interior walls including providing necessary scaffolding, chicken wire mesh at all joints of brick and concrete surfaces, with a minimum overlap of 150 mm in all directions and additional thickness if required to achieve perfect line and level without any extra cost.	SQM
12.0	CERAMIC TILE FLOORING Providing and laying matt finish 1st quality joint free Ceramic tiles of following size in flooring of approved make and shade and free from cracks, warpage, fissures and flakes with straight edges (Joint free) and perfect corner laid at right angle as per design and pattern over a bedding of cement mortar of 30 mm thick CM 1:5 finishing the joints neatly with white cement mixed with matching colour pigment and finish in all respect and all material and labour complete.	
12.1	600mmx600mm	SQM
12.2	400mmx400mm	SQM
12.3	CERAMIC TILE SKIRTING: Ceramic tile skirting 100mm in height using C. M. bedding 1:3 & fixed with neat cement slurry. Rate to include all necessary chipping of brick masonry / concrete so that skirting is projecting uniformly 6mm from plaster thickness. All vertical joints of skirting shall match with floor tile spacing uniformly as per standard specifications and EIC directions.	RMT
13.0	POLISHED VITRIFIED CERAMIC TILE FLOORING Providing and laying 1st quality polished vitrified Ceramic tiles of 8 mm thick of following size in flooring of approved make and shade and free from cracks, warpage, fissures and flakes with straight edges and perfect corner laid at right angle as per design and pattern over a bedding of cement mortar of 30 mm thick CM 1:5 finishing the joints neatly with white cement mixed with matching colour pigment and finish in all respect and all material and labour complete.	
13.1	900X900mm	SQM
13.2	600mmx600mm	SQM
13.3	VITRIFIED CERAMIC TILE SKIRTING: Skirting of 100mm in height using C. M. bedding 1:3 & fixed with neat cement slurry. Rate to include all necessary chipping of brick masonry / concrete so that skirting is projecting uniformly 6mm from plaster thickness. All vertical joints of skirting shall match with floor tile spacing uniformly as per standard specifications and EIC directions.	RMT
14.0	GRANITE TILE FLOORING Providing and laying 18mm granite slabs of sizes and colour, shade as decided by hpcl for flooring of approved shade and free from cracks, warpage, fissures and flakes with straight edges and perfect corner laid at right angle as per design and pattern over a bedding of 30 mm thick 1:5 cement mortar and neat cement slurry, finishing the joints neatly with white cement mixed with matching colour pigment and finish in all respect and all material and labour complete.	SQM
15.0	IPS FLOORING Providing mixing and laying 50 mm thick Indian Patent Stone flooring in PCC 1:2:4 mix concrete with 12 mm and down size graded crushed aggregate including providing and fixing 4 x 25 mm size glass strips in 1 metre x 1 metre panels, casting the concrete compacting and finishing the surface smooth using cement slurry.	SQM

16.0	GRANITE SKIRTING Providing and fixing 10mm thick granite skirting of colour & shade as per HPCL 100 mm high free from crack fissures & flakes with straight edges & perfect corners fixed at right angles with neat cement paste and finishing the joint with white cement mixed with matching colour pigment. The skirting shall project only 6mm from the wall and job includes chipping the wall for fixing the skirting and making good the same after fixing the skirting.	RMT
17.0	CERAMIC TILES DADO IN TOILET: Providing and fixing ceramic tiles of size of approved shade and make First quality, free from crack fissures & flakes with straight edges & perfect corners fixed at right angles as per the design and pattern, including applying 12mm thick backing plaster in 1:4 CM and fixing the tiles with neat cement paste, and finishing the joints with white cement mixed with colouring pigments to match the colour of tiles properly cured & finished in all respects, etc complete	
17.1	200X300 mm	SQM
17.2	300X400 mm	SQM
17.3	600X300 mm	SQM
17.4.1	600X600 mm	SQM
17.4.2	600X300 mm	SQM
18	Providing and fixing designer ceramic Border Tiles ceramic tiles of approved shade and make First quality, free from crack fissures & flakes with straight edges & perfect corners fixed at right angles as per the design and pattern, including applying 12mm thick backing plaster in 1:4 CM and fixing the tiles with neat cement paste, and finishing the joints with white cement mixed with colouring pigments to match the colour of tiles properly cured & finished in all respects, etc complete	RMT
19.0	20MM THICK GRANITE CLADDING FOR CURTAIN WALL Providing and fixing machine cut and polished black Granite slab of thickness of 20 mm selected & sorted for uniformity in colour, free from cracks, fissures and flakes with straight edges and perfect corners using 50mmx20mmx3mm SS T shaped cleats of 100mm long. The cleats are fixed over the wall with M12x100mm long GI fasteners by providing 2 nos 12mmx25mm size slots and drilling the wall. Rate to include making necessary grooves in granite slab, finishing the joints neatly with white cement mixed with coloring pigment to match color, polished and finished in all respect, all materials and labour complete.	SQM
20.0	KOTA STONE STEPS Providing and fixing 20 mm thick one piece Kota stone for steps with 25mm bedding CM 1:3, cement slurry and machine polishing including nosing etc. Complete	SQM
21.0	SILL SLAB Providing and laying 20 mm thick machine cut & machine polished jet black granite strips over a bedding of 20 mm thick 1:5 CM for window sills. The strips shall be of single piece only as per width of window wall and project 12 mm beyond the face of the wall.	SQM
22.0	EUROCON TILE FOR WALK WAY Supply and fixing concrete tile of EUROCON make approved shade of 20mm thickness for flooring including providing 20mm thick 1:5 cement mortar bed and a floating coat of neat cement slurry, finishing the joints with white cement mixed with matching colour pigment, cleaning the surface with dilute sulphuric acid etc. Complete. Basic rate : Rs. 500/sqm	SQM

23.0	Same as above item 22 but for treads and risers Basic rate: Rs. 400/sqm	SQM
24.0	WATER PROOFING	
24.1	TERRACE Providing and laying integral cement based water proofing of average 100 mm thick as per specifications given below: - cleaning RCC slab and applying neat cement slurry mixed with waterproofing compound. - providing and laying brickbat coba in CM 1:4 mixed with water proofing compound and curing for a period of 24 hours. - laying of 25 mm thick PCC 1:1.5:3 mix with 6 mm and down size coarse aggregate and water proofing compound, finishing smooth , making half round vata at the junction of parapet wall and slab and curing for 10 days. Contractor will be required to submit a guarantee in respect of performance of waterproofing for 10 years on stamp-paper. In addition to this, an amount equal to 10% of cost of waterproofing items shall be retained as retention money for 2 years from the date of completion, which shall be returned only after successful completion of this period.	SQM
24.2	Water proofing on top of chhaja with 25mm thick PCC 1:1.5:3 with 6mm and down size stone aggregate mixed with water proofing compound, finishing smooth, making half round vata at the junction of chhaja and wall , curing etc. complete.	SQM
25.0	PAINTING	
25.1	WHITEWASH Providing and applying 3 coats of white wash to plastered and concrete surfaces including providing necessary scaffolding, surface preparation , mixing DDL binder, blue etc. complete as per IS: 712- Latest Edition. If additional coats are required to obtain uniform and smooth finish, the same shall be carried out at no extra cost.	SQM
25.2	OIL BOUND DISTEMPER Providing and applying 2 coats (first coat with brush and final coat with Roller) of OBD of approved make and shade on all surfaces and heights to give an even shade including priming coat and full putty after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material and labour complete	SQM
25.3	ACRYLIC EMULSION PAINT (INTERIOR GRADE) Providing and applying 2 coats (first coat with brush and final coat with Roller) of Acrylic Emulsion paint of approved make and shade on all surfaces and heights to give an even shade including primer and full putty after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material and labour complete	SQM
25.4	ACRYLIC EMULSION PAINT (EXTERIOR GRADE) Providing and applying 2 coats of acrylic anti fungal cement paint including primer of BERGER (Weathercoat) or approved equivalent make and shade to all the exterior surfaces over a coat of primer as per manufacturer's specifications including providing necessary scaffolding, curing , etc. complete. If additional coats are required to obtain uniform finish, the same shall be carried out at no extra, cost as directed by Engineer In Charge.	SQM
25.5	WATER PROOF CEMENT PAINT Providing and applying 2 coats of water proof cement paint of	SQM

	SNOWCEM INDIA make and of required shades on all surfaces and heights to give an even shade after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material, scaffolding and labour complete	
25.6	SANDTEX MATT Providing and applying 2 coats of Sandtex matt paint of SNOWCEM INDIA make and of required shades on all surfaces and heights to give an even shade including a primer coat of snowcem plus after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material, scaffolding and labour complete	SQM
25.7	SYNTHETIC ENAMEL PAINT OVER WALL Providing and applying 2 coats of synthetic enamel paint 1st quality of approved manufacturer and of required shades on wall to give an even shade including a priming coat after thoroughly brushing the surface free from mortar dropping and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material , scaffolding and labour complete	SQM
25.8	SYNTHETIC ENAMEL PAINT OVER STEEL SURFACE Providing and applying 2 coats of synthetic enamel paint 1st quality of approved manufacturer and shades on steel surface to give an even shade including two coats of red oxide primer after thoroughly brushing the surface free from rust and other foreign matter and also including preparing the surface even and sand papered smooth etc., all material and labour complete	SQM
26.0	Providing and fixing MS grill fabricated from MS flat/square bar as per approved design including painting with two coats of red oxide and two coats of synthetic enamel paint.	KG
27.0	Providing and fixing MS ladder fabricated from MS angle and plain rod as per approved design including painting with two coats of red oxide and two coats of synthetic enamel paint.	KG
28.0	DOORS, WINDOWS, VENTILATORS	
28.1	ALUMINIUM GLAZED DOOR/ FIXED GLAZING WITH 12MM GLASS: Providing and fixing Aluminium glazed door/ fixed glazing with 25 micron coloured anodised aluminium section minimum wall thickness of not less than 2 mm with extruded built up section of approved make and weight ratio joints mitred ad joint with heavy duty aluminium pressure die cast cleats with fins to match the section of frames conforming to approved section and shutter conforming to approved sections and glazed with 12 mm thick glass fixed to shutter with aluminium snap beading and neoprene / PVC gaskets/CP brass/stainless steel screws and fixed to the wall with requisite rawl plugs and screw or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions, at top , bottom and sides with requisite PVC/neoprene felt/polysulphide sealant/silicon sealant etc all complete as per architectural drawing. Aluminium anodised shop front (Doors & fixed glazing) with frames at top & bottom and at two ends of INDAL make or equivalent with section no. 9205 of size 101.5 x 44.45x 3 with weight of 2.342 kg/m.Round acrylic handle and locking arrangement to be provided for main door.	SQM
28.2	HYDRAULIC FLOOR SPRINGS Providing and fixing double action hydraulic floor springs and pivot of approved brand (HARDWYN/ EVERITE) conforming to IS:6315 for	NOS

	aluminium doors. Rate to include cutting of floors as required, embedding in floors and cover plates etc complete as per specifications.	
28.3	<p>ALUMINIUM PANELLED DOOR</p> <p>Providing and fixing 25 micron colored anodised single leaf aluminium door with minimum wall thickness of not less than 2 mm , joints mitred and jointed with heavy duty aluminium pressure die cast cleats with fins to match the section of frames conforming to INDAL section 9221 or equivalent section (Jindal/Hindalco) and shutter conforming to INDAL section 9200, 9201, 9202 and 9240 or equivalent section (Jindal/Hindalco) , fully panelled with 9 mm thick prelaminated 3 layers medium density (exterior grade) particle board Grade-1, type -II conforming to IS:12823 bonded with phenolformaldehyde synthetic resin of approved brand and manufacturer fixed to shutter with aluminium snap beading and neoprene / PVC gasket / CP Brass /stainless steel screws fixed to the wall with requisite rawl plugs and screw or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions, at top , bottom and sides with requisite PVC/neoprene felt/polysulphide sealant/silicon sealant etc all complete as per architectural drawing.</p> <p>Aluminium door section of INDAL make or equivalent make with the following section :</p> <p>Main frame on all sides - 9221 -101.5 x 44.45 x 2.5 of weight 1.975 kg/mtr Shutter vertical frame- 9202 - 50 x 44.5 x 2.5 of weight 1.202 kg/mtr. Shutter top frame - 9201-50x44.5x2.5 of weight 1.299 kg/mtr Shutter middle frame - 9129-50x45x2.5 of weight 1.292 kg/mtr Shutter bottom frame - 9200-100x44.5x2.5 of weight 1.974 kg/mtr Door handle -5140 - 100x 30 x 2.5 of weight 0.988 kg/mtr Glazing clip - 4660 - 17.8 x 17.6x 1.3 of weight 0.169 kg/mtr</p>	SQM
28.4	ALUMINIUM WINDOWS	
28.4.1	<p>ALUMINIUM WINDOWS (OPENABLE)</p> <p>Providing and fixing 25 micron colour anodised aluminium glazed windows with 4 mm glass & extruded built up section of wall thickness not less than 1.5 mm and approve make with glass panel fixed to side - hung shutter with aluminium snap beading and neoprene / PVC gasket / CP Brass /stainless steel screws fixed to the wall with requisite rawl plugs and screw or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions, at top , bottom and sides with requisite PVC / neoprene felt / polysulphide sealant/silicon sealant including heavy duty handle cum locking arrangement etc all complete as per architectural drawing and the direction of Engineer In-charge.</p> <p>Aluminium door section of INDAL make or equivalent make with the following section :</p> <p>Outer frame - 2082 -34 x 44.45 x 28.5x 2 of weight 0.554 Kg/mtr Shutter frame- 4124 - 34 x 44.5 x 28.5x 1.5 of weight 0.494 kg/mtr Mullion -9139- 57 x 34 x 25x2 of weight 0.810 kg/mtr Cleat angle - 2081 - 50 x 50 x 4.9 of weight 1.177 kg/mtr Glazing clip : 4125 - 31x 17.5 x 1.2 of weight 0.184 kg/mtr</p>	SQM
28.4.2	Same as above but Aluminium sliding windows	SQM
28.5	<p>ALUMINIUM LOUVRED VENTILATOR</p> <p>Providing and fixing colour anodised aluminium ventilator with extruded built up section of wall thickness not less than 1.5 mm and approve make glazed with 4 mm thick opaque glass louver 100mm wide .</p>	SQM
28.6	<p>ALUMINIUM DOOR/FIXED GLAZING WITH 8MM GLASS</p> <p>Providing and fixing 25 micron coloured anodised aluminium fixed glazing/aluminium door with 8 mm glass extruded built up section of</p>	SQM

	<p>wall thickness not less than 1.5 mm and approve make with glass panel fixed with Aluminium snap beading/ Neoprene / PVC gasket/CP Brass /stainless steel screws and fixed to the wall with requisite rawl plugs and screw or with fixing clips or with expansion hold fastners including necessary filling up of gaps at junctions, at top , bottom and sides with requisite PVC / neoprene felt / polysulphide sealant/silicon sealant all complete as per architectural drawing and the direction of Engineer In-charge.</p> <p>Aluminium section of INDAL make or equivalent make with the following sections :</p> <p>Outer frame - 2082 x 34x 44.5 x 28.5 x 2 of weight 0.554 kg/mtr</p> <p>Mullion - 9139 - 57 x 34x 25 x 2 of weight 0.810 kg/mtr</p> <p>Cleat angle - 2081- 50 x 50 x 4.9 of weight 1.177 kg / mtr</p> <p>Glazing clip- 4125- 31 x 17.5 x 1.2 of wt. 0.184 Kg/mtr</p> <p>Bottom 900mm height shall be with 9mm thick both side prelaminated NOVOPAN board. The door shall be provided with aluminium handle, towerbolt, locking arrangement etc. complete.</p>	
29.0	<p>STEEL WINDOWS</p> <p>Supply, fabrication and fixing of MS glazed windows using approved Z sections with 4mm plain glass including providing grill with 12mm square bar @100mm c/c , painting with two coats of red oxide primer and two coats of synthetic enamel paint, handle , stay arrangement etc. complete.</p>	SQM
30.0	<p>ROLLING SHUTTER</p> <p>Supply, fabrication and fixing of MS rolling shutter of the following specifications including grill window of 300 mm height at eye level for visibility even in closed position.</p> <p>Code: Conforming to IS 6248 – 1979</p> <p>Type: Self Coiling type (manual)</p> <p>Curtains: Interlocking cold rolled lath section of 0.8 mm thickness.</p> <p>Lock plate : MS sheet of 3.15 mm thick reinforced with MS angles of 35 x 35 mm.</p> <p>Guide channel : MS sheets of 3.5 mm thick</p> <p>Bracket Plate : MS Sheet of 0.9 mm thick</p> <p>Hood Covers : MS sheet of 0.9 mm thick</p> <p>Locking handle : To be provided suitably.</p> <p>Rate shall include providing and fixing holdfasts and painting two coats of enamel paint of approved make and shade over two coats of zinc phosphate primer.</p>	SQM
31.0	Grill in rolling shutter	SQM
32.0	DISPLAY SHELVING	
32.1	<p>DISPLAY SHELF</p> <p>Providing & fixing in position 12 mm thk plain galss of Modi Guard/ Asahi make with polished edges in the grooves between the 25 mm thick exterior grade MDF board planks at 375 mm c/c & 300 wide. The vertical members of the MDF planks are at every 1200 mm c/c. The exposed surface of the MDF board shall be finished with 1.5 mm thick lamination of approved colour & combination of colours with teak wood beadings on edges. The approved brand for the lamination shall be Formica/greenlam/Sundek. Type II as per attached drawing.</p>	SQM
32.2	Providing and fixing display shelving type I as per attached drawing.	SQM
33.0	MISCELLANEOUS	
33.1	Providing & fixing MS fan hooks with 16 mm dia MS bar bent to shape with hooked ends in RCC Slab during laying including painting the exposed portion	NOS

33.2	MORTICE LOCK Providing & fixing GODREJ or equivalent make six lever lock (Cylindrical/ Round Head) including all necessary hardware etc.	NOS
33.3	DOOR CLOSER Providing and fixing door closer of Hardwin/Everite make size no. 2	NOS
33.4	STRUCTURAL STEEL WORK FOR SERVICE BAY	MT
	Supplying, erecting and fixing in position Pre- fabricated structures at all elevations for service bay using structural steel sections conforming to IS: 2062 , including cutting, welding or bolting, supply of bolts/nuts/washers etc., complete as per drawings including surface preparation and applying one coat of red oxide Primer before erection and two coats of synthetic enamel paint as per specification after erection and all materials and labour complete. (No welding is permitted at site). The rate quoted shall include cost of bolts, nuts, washers, welding and electrodes and any other consumables required for completing the work.	
33.5	Supply , erection and fixing of corrugated asbestos cement sheet of Everest make or approved equivalent for service bay including supply and fixing of bitumen/GI washer, J bolt etc.	SQM
33.5.1	For roof	SQM
33.5.2	For side sheet including gable end	SQM
33.6	GYP SUM BOARD FALSE CEILING Providing and fixing Gyp board false ceiling with required accessories INDIA GYP SUM make including painting with two coats of plastic emulsion paint	SQM
	PLUMBING AND SANITARY WORK	
34.0	WATER CLOSETS	
34.1	EUROPEAN TYPE Supplying and fixing coloured vitreous china European type water closet comprising of the the following accessories including cutting and making good the walls & floors wherever required complete as directed by Engineer In Charge A) Coloured (pastel colour) vitreous china pedestal type European water closet with P or S trap of Hindware sanitary ware standard model or equivalent approved make as per the direction of Engineer In Charge. B) 15mm NB brass angle valve as per ISI of approved brand as per the direction of Engineer In Charge C) 15 mm NB CP inlet connection with Brass unions at the ends. D) Commander make or equivalent matching colour polypropylene seat cover with necessary brass hinges and rubber bushes etc E) WC connector with neoprene rubber etc F) 10 litres capacity low level plastic cistern of matching colour parry slimline make or approved equivalent with necessary fittings, brackets, screws, etc all complete.	NOS
34.2	INDIAN WATER CLOSET Supplying and fixing coloured vitreous china Orissa Pan type water closet comprising of the the following accessories including cutting and making good the walls & floors wherever required complete as directed by Engineer In Charge A). Coloured (pastel colour) vitreous china 580 mm orissa pan water closet of Hindustan sanitaryware or any equivalent make with P or S trap B) 10 litres capacity hi-grade engineering plastic low level flushing cistern of matching colour parry slimline make , model no 8068 or approved equivalent make with necessary fittings, brackets , screws etc. all complete	NOS

	<p>C) 32 mm PVC flush pipe 10Kg/sq.cm quality of approved length with necessary fittings, clamps etc</p> <p>D) 15 mm NB CP inlet connections with brass union at the ends</p> <p>E) 15mm NB brass angle valve as per ISI of approved brand as per the direction of Engineer In Charge</p> <p>F) WC connector with neoprene rubber</p>	
35.0	<p>URINALS</p> <p>Supplying and fixing Urinal coloured vitreous china flat back large cat no 60002 of Hindustan Sanitary or equivalent approved make with CP flush valve, CP spreader, cp pipe connection, CP waste coupling , CP Brass bottle trap, 32 mm PVC waste line of required length etc. all complete as per the direction of Engineer In Charge</p>	NOS
36.0	<p>URINAL DIVISION PLATE</p> <p>Providing and fixing 1200 x 450 x 20 mm size granite partition plate between urinals including cutting masonry/concrete surface to required size, fixing the division plate on the ceramic tiles by means of SS clamps, nuts & bolts, polishing all exposed surface etc all complete as directed by Engineer In Charge.</p>	NOS
37.0	<p>HAND WASH BASIN</p> <p>Providing and fixing coloured (pastel colours) wash basins of size 550 x 400 without pedestal Including the following accessories as per list of approved makes enclosed:</p> <ul style="list-style-type: none"> -15mm brass CP stop cock -1 No . -15mm CP connections from the above stop cock to pillar cock - 1 No. -32mm dia waste coupling, CP brass chain and rubber stopper. -30mm bottle trap with cleaning eye, extension piece and wall flange. -Providing and fixing brass CP 13mm half turn pillar cock. <p>Rate to include supply, painting and fixing of necessary CI brackets with nuts and bolts and fixing the wash basin with all necessary connections in walls.</p>	NOS
38.0	<p>MIRROR</p> <p>Providing and fixing bevelled edge mirror of superior glass of 6 mm thick of indo asahi/modi float or any other equivalent make, 3mm thick felt backing or 6 mm asbestos sheet or with wooden beads allround of specified size and fixed with wooden plugs with CP brass screws and cup washers etc all complete as directed by Engineer In Charge</p>	SQM
39.0	<p>SOAP TRAY</p> <p>Providing and fixing readymade CP brass soap tray near wash basin with CP brass screws of approved make.</p>	NOS
40.0	<p>TOILET PAPER HOLDER</p> <p>Supplying and fixing of 150 x 150 mm pastel coloured toilet paper holder of Hindustan Sanitary ware or equivalent approved make at required position and elevation as directed. Rate to include making good the chases in walls after fixing the above.</p>	NOS
41.0	<p>TOWEL RAIL</p> <p>Providing and fixing CP brass towel rail mounted on walls. Including all accessories, fixed and anchoring etc. complete as directed of make Model No.1576 classic line from PARKO.</p>	NOS
41.1	<p>TOWEL RING</p> <p>Providing and fixing CP towel ring mounted on walls including all accessories, fixed and anchoring etc. complete as directed of make Model No.1576 classic line from PARKO</p>	NO
41.2	HEALTH FAUCET	NOS
42.0	STOP COCKS AND BIB COCKS	

	Providing and fixing in position CP brass stop cocks and bib cocks of heavy type ISI marked of approved make.	
42.1	15mm dia stop cocks	NOS
42.2	15mm dia bib cocks	NOS
43.0	CONCEALED GI PIPING Providing & fixing following size medium grade GI pipes of TATA/JINDAL make conforming to IS-1239 concealed in the walls and under the concrete floors including making chases in the walls or concrete floors,fixing with clamps at every 1m c-c, necessary tees, bends, elbows, plugs, nipples, unions, testing of pipelines for leaks upto a pressure of 6 Kg/sq cm , painting the pipes with hot bitumen, and making chases of the walls good after piping complete.	
43.1	15 mm nominal bore	RMT
43.2	20 mm nominal bore	RMT
44.0	EXPOSED GI PIPING Description same as above but Providing, laying and fixing GI medium grades pipes in open on brick or RCC surface with the help of MS 'U' clamps at every 1 m and at every turn.	
44.1	15 mm nominal bore	RMT
44.2	20 mm nominal bore	RMT
44.3	25 mm nominal bore	RMT
45.0	Providing & fixing following size brass full way gate valve ISI marked & of Leader/GG make or approved equivalent as directed by Enginner In Charge	
45.1	25mm dia	NOS
45.2	15mm dia	NOS
46.0	WATER TANK Supplying and installation of HDPE water tanks Sintex / Fusion / Polycon make of 1000 litre capacity including 300 mm high brick masonry pedestal of 230mm thick in CM 1:5, providing 75mm thick RCC 1:2:4 slab with reinforcement 8mm tor @150mm c/c, lifting the tank , making all necessary GI connections to inlet, outlet, and overflow nozzles and cleaning the tank before commissioning.	NOS
46.1	Same as above - 2000 Lts	NOS
47.0	PVC SOIL / WASTE /RAIN WATER PIPES Supplying and laying the following size PVC pipe of 4KG/sqcm pressure rating including plain or door type bends, shoes, offsets, clamps junctions, tees, etc, complete .	
47.1	165 mm dia	RMT
47.2	110 mm dia	RMT
47.3	80mm dia	RMT
48.0	NAHANI (FLOOR) TRAP Providing and fixing PVC floor trap of self cleansing design conforming to IS specs with 100mm inlet, 75mm outlet and 150mm CP hinged grating of 6mm thick with rim. Rate shall include making all necessary leak proof connections etc .	NOS
49.0	STONE WARE PIPES Providing and laying 150mm dia. salt glazed stoneware pipes conforming to IS 651 Grade-A including bends, tees etc, excavation of trenches, 100 mm thick PCC 1:4:8 bedding, providing PCC 1:2:4 haunches @ 0.5mc/c , filing the joints with tarred gasket, plastering with 1:3 cement mortar smoke testing of joints,backfilling the trenches with excavated earth,	RMT

	watering, ramming etc., complete.	
50.0	GULLY TRAP WITH CHAMBER Providing and fixing square mouth gully trap including constructing 300 X 300 MM internal size brick masonry chamber with 230mm thick brick masonry in 1:5 cement mortar, excavation, 75mm thick PCC 1:4:8 bed, plastering with neat cement finish, Medium duty CI cover with frame etc. complete.	NOS
51.0	Providing and constructing following size inspection chambers with 230mm thick brick masonry in 1:5 cement mortar, excavation, 75mm thick PCC 1:4:8 bed, plastering with neat cement finish, Medium duty CI cover with frame etc. complete.	
51.1	600 x 600 mm (Internal dimensions) with 750 mm depth	NOS
51.2	450 x 450 mm (Internal dimensions) with 600 mm depth	NOS
52.0	SEPTIC TANK Prpoviding & constructing septic tank of internal size 1200x2000x1800mm depth with excavation ,PCC1:4:8 100mm thick bed , 345/230mm thick brick masonry wall in CM 1:5 ,RCC1:2:4 100mm thick slab with 8mm tor steel @150c/c both way , 115mm thick baffle wall with RCC beam at bottom ,12mm thick smooth cement plaster with water proofing compound inside and exposed outside portion, providing 600mmx600mm size medium duty CI cover, providing 75mm dia PVC vent pipe etc. Complete.	NOS
53.0	SOAK PIT Providing and constructing soak pit of 2.5m dia (internal) and 2m depth as per drawing.	NOS
	ELECTRIFICATION	
54.0	POINT WIRING FOR LIGHT/FAN WITH MODULAR PLATE SWITCHES ANCHOR ROMA/MK /HAVELLS Providing and laying point wiring in concealed conduits for the following points using specified 1100V grade PVC insulated,FRLS multistranded 3 x 1.5 sqmm copper conductor wires. Rate to include supplying, laying and securing in position in roof slabs and brick walls or concrete columns 25 mm dia rigid PVC conduits of approved make with necessary accessories and junction boxes/pull boxes. Providing and fixing in the brick walls flush type metal switch boxes of approved make shade and sufficient size to accommodate all 6A Modular switches / 3 pin socket, screws, holders. ceiling roses and the fan regulator wherever required. Rate to include wall chasing and rough plastering. Providing and fixing single pole 5A modular plate switches of MK or ANCHOR ROMA/HAVELLS make of approved colour . One switch shall be provided for each light and fan point. Rate to include providing main circuit wiring from DB to switch boards with 2.5 sqmm copper wire also.	NOS
55.0	Same as above but for 5A socket controlled by one 5A switch on the same lighting board	NOS
56.0	Same as above but for 5A socket controlled by one 5A switch independently mounted including providing wiring with 3 runs of 1.5 sqmm pvc insulated copper wire through PVC conduit	NOS
57.0	Same as above but for 5/15A socket controlled by 15A switch independently mounted including providing wiring with 2 runs of 2.5 sqmm and 1 run of 1.5 sqmm PVC insulated copper wire through PVC conduit	NOS
58.0	Same as above but for for AC point with 2 runs of 4 sqmm (P&N)and 1 run of 2.5 sqmm (earthing) PVC insulated , FRLS multistrand copper cable	NOS

	in 25 mm dia PVC conduit from MCBDB to 20 A powersocket. The conduit shall be partly/fully concealed in all types of wall, ceiling etc complete with all accessories, wiring, termination, connected civil works, rough plastering etc including supply and fixing of 20A industrial socket controlled by 20A SPMCB of MDS/HAVELS make.	
59.0	Supply, laying , and commissioning of wiring using following sizes of PVC insulated , FRLS, unsheathed, multistranded copper wire drawn in PVC conduits. Rate to include supply of 16 GI fish wire, conduits & accessories, wiring, terminations etc complete	RMT
59.1	4 runs of 10 sqmm and 1 run of 6 sqmm copper wire in 40 mm dia PVC conduit from panel to Distribution boards.	RMT
59.2	4 runs of 6 sqmm and 1 run of 4 sqmm copper wire in 32 mm dia PVC conduit from panel to Distribution boards.	RMT
60.0	<u>CEILING FANS</u> Supplying and fixing of the ceiling fans of Crompton/GE/Polar with detail as below : Sweep :1400 mm Colour :white Bearing type :Double ball bearing Down rod :clear 300 mm long Regulator : Electronic type ANCHOR ROMA/MK Accessories :Screws, wall nuts etc.	NOS
61.0	<u>EXHAUST FANS</u>	
	Supply, fixing and commissioning of following size Exhaust fans including bird louvers, frame works and other civil works like chipping and making the surface good etc	
61.1	300MM DIA	NOS
61.2	230MM DIA	NOS
62.0	<u>LIGHT FIXTURES</u> Supply, fixing and commissioning of following light fittings. Rate to include all accessories, interconnection of wires from ceiling rose to the fittings and lamps , copper choke etc. complete.	
62.1	1 x 36 W tube light fitting with lamp Philips make cat no. TCS 19/136 HPF or equivalent .	NOS
62.2	1 x 60W spot light luminaire with 1 meter track including lamp Philips make cat no. DGN 451 or equivalent for display shelving	NOS
62.3	1 x 60 W Bulk head luminaire including lamp Phillips cat no. NXC 101 or equivalent (Outside building).	NOS
62.4	Angle holder Anchor make including lamp 60W (Toilets).	NOS
62.5	1 x 36 W tube light fitting including lamp Phillips cat no TMS 21/136 HPF or equivalent (stores, service area)	NOS
62.6	2 x 36 W tube light fitting including lamp Phillips cat no TBS 50/236 HPF or equivalent (for false ceiling area)	NOS
63.0	<u>TELEPHONE SOCKET POINT</u> Supply and laying 2 pairs of 0.5 mm dia screened and shielded telephone wire in 20 mm dia PVC conduit partly/fully concealed in types of walls , floor etc complete with all accessories , wiring terminations, connected civil works, rough plastering etc including supply of 16 GI fish wire conduit & accessories etc.	RMT
64.0	Supply, fixing and commissioning 5pairs telephone tag block of Krone type enclosed in suitable MS box. Rate shall include all accessories, connected civil works for fixing the same as per specifications.	NOS
65.0	Supply and installation of modular type telephone socket MK make in a	NOS

	suitable size box concealed to wall including all civil works	
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Sr. NO	DESCRIPTION	UNIT
1.0	Supply and fixing of wall mounting type meter board made out of 16 SWG CRCA sheet steel and single iron with 3 nos 200A Fuse cutouts N.L, 1 no earth link , 1 no neutral link and space for accommodating 1 no. 3 ph, 4 wire KWH meter complete with adequate size of copper wire interconnections, powder coating etc. complete.	NO
2.0	Supply and erection, testing commissioning of floor mounting type cubical panel board made out of 16 SWG CRCA sheet steel with 300 A TPN copper bus bars, interconnections, earthing, powder coating and comprising of the followings as required. TYPE I	NO
	Incomer : 2 nos 125A TP switch fuse unit with HRC fuses for DG and EB with interlocking 1 no 125A TP bus coupler 2 no volt meter with volt meter selector switch, 2 no ammeter with C T & ammeter selector switch, 2 sets of Phase indicating lamp (RYB) Outgoings : 3 nos 63A and 6 nos 32A TP fuse switch unit with HRC fuse 5KVAR capacitor : 2 nos	
3.0	Supply and erection, testing commissioning of floor mounting type cubical panel board made out of 16 SWG CRCA sheet steel with 200 A TPN copper bus bars, interconnections, earthing, powder coating and comprising of the followings as required. TYPE II	NO
	Incomer : 2 nos 125A TP switch fuse unit with HRC fuses for DG and EB 1 no 125A 4 pole change over switch (on line) 2 no volt meter with volt meter selector switch, 2 no ammeter with C T & ammeter selector switch, 2 sets of Phase indicating lamp (RYB) Outgoings : 2 nos 63A and 4 nos 32A TP fuse switch unit with HRC fuse 5 KVAR capacitor : 2 no	
4.0	Same as above but with following details TYPE III Incomer : 2 nos 63A TP switch fuse unit with HRC fuses for DG and EB 1 no 63A 4 pole change over switch (on line) 2 no volt meter with volt meter selector switch, 2 no ammeter with C T & ammeter selector switch, 2 sets of Phase indicating lamp (RYB) Outgoings : 1 no 63A and 3 nos 32A TP fuse switch unit with HRC fuse 5 KVAR capacitor : 1 no	NO
5.0	Supply, installation and commissioning of 63A TPN MCB DB Incomer : 1 no 63 A , 4 Pole isolator Outgoings : 18 nos, 10A/16A/20A SP MCBs	NOS
6.0	Supply, installation and commissioning of 32A TPN MCB DB Incomer : 1 no 32 A , 4 Pole isolator Outgoings : 12 nos, 10A/16A/20A SP MCBs	NOS
7.0	Supply and laying following size PVC insulated, sheathed, armoured cable of approved make	
7.1	3.5CX50 sqmm AL cable	RMT
7.2	3.5CX35 sqmm AL cable	RMT
7.3	4CX16 sqmm AL cable	RMT
7.4	4CX6 sqmm AL cable	RMT
7.5	4CX2.5 sqmm copper cable	RMT
7.6	3CX2.5 sqmm copper cable	RMT
7.7	3CX1.5 sqmm copper cable	RMT
8.0	End termination of following cable with double compression NFLP gland and crimping sockets	

8.1	3.5CX50 sqmm AL cable	NO
8.2	3.5CX35 sqmm AL cable	NO
8.3	4CX16 sqmm AL cable	NO
8.4	4CX6 sqmm AL cable	NO
8.5	4CX2.5 sqmm copper cable	NO
8.6	3CX2.5 sqmm copper cable	NO
8.7	3CX1.5 sqmm copper cable	NO
9.0	End termination of following cable with double compression FLP gland and crimping sockets	
9.1	4CX2.5 sqmm copper cable	NO
9.2	3CX2.5 sqmm copper cable	NO
	YARD LIGHTING	
10.0	CABLE TRENCH	
	Excavation in any type of soil including WBM /asphalt up to 600mm depth and 300mm wide including supply and laying 150mm thick sand on top and bottom of cable, supply and laying bricks laid flat on top, back filling trench etc. Complete.	RMT
11.1	Supplying and fixing NFLP Junction box 150mm x150mm x125mm weather proof out door junction box fabricated out of 18 SWG CRCA sheet of IP 54 category of protection with rubber gasket and having locking arrangement including required connector, 10A SPMCB.	NO
11.2	SUPPLYING & FIXING OF BALIGA/SUDHIR make FLP Junction box 3 way including required connector, 10A SPMCB.	NO
12.0	Yard light pole	
12.1	Supply, fabrication, erection of stepped MS medium yard light pole with single arm of 6.5m height from pedestal as per clause 2.1 and 5.1 of IS 2723 part III and 2713 including providing pedestal of size 0.45mx0.45mx1.2m depth in RCC 1:2:4, excavation, foundation bolt, 450mmx450mmx10mm thick base plate ,painting the pole with two coats of synthetic enamel paint over a coat of red oxide primer, finishing the above ground portion of pole with 12mm thick plaster etc. complete.	NO
12.2	Same as above but with double arm	NO
13.0	Street light fitting	
13.1	Supply of street light fixture of PHILLIPS make cat no. SGP 325 GLA 150/250 W/WIPRO catalogue no WHH99250 , top mounted complete with all accessories choke , acrylic cover etc. complete.	NO
13.2	Fixing of street light fixture including providing 1.5 sqmm copper wire from junction box to top of the pole	NO
14.0	Providing pipe electrode pipe earthing as per IS 3043 and attached drawing including excavation, supplying 50mm dia GI pipe medium quality, filling the pit with alternate layers of charcoal and salt, back filling, constructing chamber 400mmx400mmx400mm internal size with 230mm thick Brick masonry, providing 12mm thick MS plate cover with 50x50x6 MS angle frame etc. complete.	NO
14.1	Providing earth pits with maintenance free Earth Electrodes duly approved by the concerned State Electrical Board/ Electrical Inspectorate as follows. Supply, installation, testing and commissioning of Safe Earth Electrode of ASHLOK make, type T - 50 includig the required special compound, and all civil works installed as per IS: 3043 and provision of 450 mm x 450 mm removable CI cover. Earth test megger report to be submitted after installation	NOS
15.0	Supply and fixing 10 SWG copper wire for earthing connection to pumps, canopy columns etc.	RMT

16.0	Supply and fixing 25x3 copper flat for earth connection of panel	RMT
17.0	Providing and fixing 6mm thick MS chequered plate including making holding arrangements, painting with two coats of red oxide primer and two coats of synthetic enamel paint etc.	KG
18.0	Providing and fixing MS angle/channel supports and edge protection for trench etc. including providing hold fast ,painting with two coats red oxide primer and two coats of synthetic enamel etc.	KG
19.0	Supply and fixing 20mm thick ISI marked rubber mat	SQM
20.1	Transportation of light fittings upto 100 KM.	LS
20.2	Transportation of light fittings > 100 KM.	KM
21.0	Erection of HPCL supplied yard light pole including providing pedestal of size 0.45mx0.45mx1.2m depth in PCC 1:2:4, excavation, 16mm dia foundation bolt, painting the pole with two coats of synthetic enamel paint over a coat of red oxide primer, finishing the above ground portion of pedestal with 12mm thick plaster etc. complete.	NO

PART D: DRIVEWAY

Sr. NO.	DESCRIPTION	UNIT
1.0	Supply and filling murrum in 200mm thick layers including leveling with dozer, watering, Compacting each layer with 8/10 MT road roller to obtain field dry density 92% of MDD, Dressing top layer to the required slope, Testing of murrum sample for OMC&MDD and testing of field dry density by core cutter for checking compaction. Payment will be made only for compacted thickness.	CUM
2.0	RUBBLE SOLING Providing and laying dry trap rubble stone soling 150 mm thick including hand packing, filling the interstices with chips, spalls and binding with grit and selected murrum, watering, compacting by power rolling with 8/10 ton roller complete.	SQM
3.0	WATER BOUND MACCADUM Providing and laying WBM in layers of 75 mm compacted thickness each using well graded stone aggregates of 40 mm to 63 mm size of approved quality. Rate includes spreading metals, hand packing, filling the interstices with spalls, chips, and approved quality binder and rolling each layer with 10 MT power roller with simultaneous watering till the metal is bound by the water binder paste to achieve maximum compaction, finishing the surface to proper grade and level. Rate also to include carrying out the following tests on aggregates and test results to be submitted to EIC before use and shall meet the following strength requirements. LA Abrasion value : 40 % Flakiness Index : 15 %	
3.1	First Layer 75 mm thick	SQM
3.2	Second Layer 75 mm thick	SQM
3.3	Third layer of 75mm thick using 53 to 22.2 mm size stone metal	SQM
4.0	RCC DRIVEWAY	
4.1	Providing and laying 150mm thick RCC driveway with 1:2:4 nominal mix using 20mm and down size crushed stone aggregates in panels using slotted MS channel shuttering, machine mixing, vibrating with screed board vibrator, pond curing for 14 days, vacuum dewatering, finished with power trowelling. Concreting shall be carried out as per IS 456. Rate shall also include providing approved quality polythene paper below the driveway, constructing horizontal and longitudinal vatas with 1:10 CM for curing, levelling depressions if any in the base with 20mm stone aggregates and stone dust. Proper slope to be provided in driveway for easy draining of rain water. Job shall include cutting grooves 4mm wide and 20mm deep by machine and filling the groove with polysulphide compound, providing 12mm thick Shalitek board in the joints between pre cast cover of pipeline trench or top slab of U/G tank and RCC driveway.	CUM
4.2	Same as above item no.3.1 but using M-20 grade ready mix	CUM
4.3	RCC driveway without vacuum dewatering and power trowelling with M-20 ready mix for ramp etc.	CUM
5.0	Providing and laying RCC precast slabs of required size with 1:2:4 nominal mix using 20mm and down size crushed stone aggregates including shuttering, mixing, compacting, pond curing for 14 days etc. as per IS 456, transporting from the place of casting. Reinforcement steel shall be paid separately.	CUM

6.0	STEEL REINFORCEMENT Supply, fabrication and placing in position TMT bars conforming to IS 1786 - Latest edition grade FE 415 as required and directed at site for driveway including cutting, bending, placing in position and tying with 20 SWG binding wire, complete. Quantity shall be measured as per reinforcement drawing and with theoretical weights including all authorized laps, chairs, spacers etc. Unauthorised chairs, spacers and laps will not be measured for payment purpose. Weight of binding wire shall not be considered for payment.	MT
7.1	ASPHALTING Providing & laying 50 mm compacted thickness premix asphalt carpet and 12 mm thick seal coat (total compacted thickness 62mm) on top of WBM surface as per procedure given below.	SQM
	1) Applying a tack coat of hot 80/100 asphalt to it @ 5 kg for 10 sqm. for bituminous surface and 10 kg for 10 sqm for non bituminous surface after thorough cleaning of WBM surface .	
	2) Spreading a layer of premix at the rate specified below in (a) and roll to full compaction with 10 MT roller to the required slope and compacted thickness of this layer shall be 50mm.	
	3) Spreading a layer of seal coat and rolling with 10 MT roller to the required slope and the total compacted thickness shall be 62mm. Asphalt required for seal coat is 6.8 kg for 10 sqm.	
	a)Materials to be used per 10 sqm of 50 mm thick premix asphalt carpet : 20mm stone metal: 0.34 cum 12mm stone metal : 0.17 cum Asphalt 80/100 : 25 Kg (4% by weight of total mix)	
7.2	ASPHALT CONCRETE Surface preparation through cleaning of the exposed surface by wire brush to remove the loose sand, pebbles and any inorganic material. Applying tack coat of 80 /100 bitumen @ 9.5 Kg / 10 sq.m. after surface preparation as per above.(Total Compacted thickness of 137 mm) a. Providing 75mm thick BT concrete using 1Cu.M. of 40mm hard broken granite metal (machine crushed) with 35 Kg. 80 /100 grade Bitumen and 0.13 Cu.M. of 12mm hard broken granite aggregate for 10Sq.M., well mixed in machine mixer in correct proportions including supply of material. Cost of machine mixer, power rolling with 10 tonnes power roller and all labour charges etc., complete in all respects of satisfaction of H.P.C.L. b. Providing 50mm thick Black top surface using 0.27 Cu.M. of 12mm hard broken granite chips (machine crushed) with 25.00 Kg. Of 80/ 100 grade Bitumen per 10 Sq.M. including cost of machine mixing, power rolling with 10 tonnes power roller and all labour charges etc., complete in all respects of satisfaction of H.P.C.L. c. Providing 12mm thk. Black top seal coat using 0.09 Cu.M. of 6mm hard broken granite chips with 10Kg. Of 80 /100 grade Bitumen per 10Sq.M including sprinkling of sand over the black top, supply of material, machine mixing and rolling with 10Ton roller, labour charges etc., to the satisfaction of H.P.C.L	SQM
8.0	PAVER BLOCK	
8.1	Providing and laying approved brand/make 80mm thick cement coloured / grey paving blocks of M 40 grade over a bed of 50mm thick well compacted river sand bed laid over well prepared sub base to the required line and level including all materials, labour, machinery,	SQM

	transportation etc., paving blocks should have chamfered top edges of not less than 4mm and shall be laid and interlocked with a minimum of 2mm gap which in turn packed with river sand, compacting with plate vibrator etc. Complete. Edge restraint with RCC 1:2:4 will be paid separately.	
8.2	Same as above - reflective coloured paver blocks(comtrust/super Make)	SQM
9.0	HUME PIPE Supplying, laying, joining and aligning following size NP2 class RCC Hume pipes conforming to IS-458 Latest Edition below driveway wherever directed. Rate to include joining with cement mortar, excavation up to 700mm depth and providing and laying 100mm thick PCC 1:4:8 bedding, PCC 1:2:4 haunching @ 1m c/c . Test certificates from manufacture shall be submitted and approved by EIC before use.	
9.1	300mm NB	RMT
9.2	225mm NB	RMT
9.3	150mm NB	RMT
10.0	INSPECTION CHAMBER Providing and constructing following size inspection chambers with 230mm thick brick masonry in 1:5 cement mortar, excavation, 75mm thick PCC 1:4:8 bed, plastering with neat cement finish , curing etc. complete. 12mm thick MS plate cover with 35x35x6 angle stiffener and 50x50x6 angle frame shall be paid separately..	
10.1	600mmX600mm internal sizeX 700mm depth	NO
10.2	450mmX450mm internal sizeX 700mm depth	NO

PART E: TANK INSTALLATION AND PIPELINE

Sr. NO	DESCRIPTION	UNIT
1	Transportation of service station tanks of 9KL/16KL/22KL from tank fabricator's workshop in Secunderabad to the retail outlet site including loading, unloading etc. Complete.	NO
1.1	Up to 50KM distance rate per no	
1.2	Beyond 50KM (no differential above 50KM will be considered). Only one way KM will be considered.	KM
2	EXCAVATION	
2.1	Excavation for foundation upto 4m depth below existing ground level in any type of soil except hard rock. Rate to include dressing the sides and bottom, bailing out of water if encountered, shoring, strutting, backfilling after the construction of foundation, compacting by the side of the foundation and disposal of surplus excavated earth within/outside HPCL's premises to an unobjectionable place, as directed by the Engineer in Charge including spreading, watering and compaction, complete	CUM
2.2	Same as above but cutting hard rock by pneumatic hammer and compressor.	CUM
3	PCC	
3.1	Providing and laying PCC 1:4:8 with 40mm and down Size stone aggregates in foundation trenches, including compacting, curing etc. complete.	CUM
3.2	Providing and laying PCC 1:2:4 with 20mm and down Size stone aggregates in foundation trenches, including compacting, curing etc. complete.	CUM
4	R.C.C. 1:2:4	
	Providing and laying RCC 1:2:4,providing steel or plywood shuttering	

	with proper supports, removal of form work as per IS code ,preparing mix using mechanical mixer, compacting using mechanical vibrator, curing with potable water for 14 days etc. complete. Work shall be carried out as per IS 456 latest edition. Rate shall be excluding reinforcement steel which will be paid separately vide item no 5.	
4.1	Bottom raft	CUM
4.2	Top slab (Rate shall be including providing Polythene paper below the slab, providing 12mm thick Shalitek board in joints to separate pieces. Top slab to be cast in 2/3 pieces .9kl 2 piece, 16/22 kl 3 piece)	CUM
5	REINFORCEMENT STEEL WORKS:	
	Supply, fabrication and placing in position TMT bars conforming to IS 1786 - Latest edition grade FE 415 as required and directed at site for driveway including cutting, bending, placing in position and tying with 20 SWG binding wire, complete. Quantity shall be measured as per reinforcement drawing and with theoretical weights including all authorized laps, chairs, spacers etc. Unauthorised chairs, spacers and laps will not be measured for payment purpose.Weight of binding wire shall not be considered for payment.	MT
6	TANK INSTALLATION	
	Installation of HPCL supplied Tanks of following capacity in earth pit /under driveway including providing holding down arrangement, Hydrostatic testing to pressure of 3.5m water column, supplying & filling with water with necessary 50 mm dia pipe & on successful completion emptying out the water from tank , cleaning & drying the inner surfaces with cloth/ cotton waste etc., external doping with two coats tank mastic paint of STP make and hot 30/40 bitumen (total doping thickness 3mm) ,fixing all fittings as required	
A)	22KL	NO
B)	16 KL	NO
C)	9 KL	NO
7	Brick masonry	
	Providing 345mm thick brick wall with bricks having compressive strength of minimum 35 kg/sqcm in cement mortar 1:5 (1 cement: 5 coarse sand) in foundation and superstructure ,plain or curved including providing necessary scaffolding , raking the joints on both faces, curing for 7 days etc. complete.	CUM
8	SMOOTH CEMENT PLASTERING	
	Providing and laying smooth cement plaster of 12mm thick in single coat in 1:3 cement mortar mixed with water proofing compound to interior walls including providing necessary scaffolding, curing etc. Complete.	SQM
9	SAND FILLING	
	Supply and filling coarse river sand in layers of 200mm thickness inside masonry pit /earth pit after tank installation including watering , compaction etc. Complete.	CUM
10	Manhole cover	KG
	Supply, fabrication and fixing of manhole cover of size 900x900 mm with 65x65x6 angle frame and 12mm thick MS plate with 50x50x6 stiffener including painting with two coats of red oxide primer and two coats of synthetic enamel paint. Rate is applicable for any size of manhole cover.	
11	Pump Island	
	Construction of pump island 1m wide with 230mm thick brick masonry in CM 1:5, 12mm thick plastering in Cm 1:4 roughened to receive granite	RMT

	tiles including excavation, 75mm thick PCC 1:4:8 , sand filling and constructing the wall 150mm above the finished driveway level and 600mm below the finished driveway level .	
12	Installation of Dispensing Pumps	
	Installation of MONO/DUAL/MPD pumps on pedestal by providing & fixing MS angle frame 65x65x6 & connecting suction pipe, electrical, earthing connections to the pump etc. complete. Paymnet for the frame will be paid separately as per structural steel rate.	
12.1	Installation MONO pumps	NO
12.2	Installation of DUAL pumps	NO
12.3	Installation of MPD pumps	NO
13	Pipe Lines	
	Supplying & Laying Heavy quality 'B' Class ERW black steel screwed pipeline Conforming to IS 1239 (part I) – latest edition to the required slope & alignment with heavy duty MS fittings like elbows, tees including doping pipe line with 3 coats of 'Shalimastic – HD THIXOTROPIC' of STP cold applied anti corrosive treatment after preparing the surface as per manufacturer specifications. The joints are to be made leak proof by using jointing materials like Litharge, Glycerine, Shellac, Holdite . The pipes laid above ground shall be painted with two coats of synthetic enamel over two coat of red oxide primer of approved quality and shall be color coded as per instruction of EIC. The pipeline shall be tested at a pressure of 5 kg/sqcm.	
A	40mm dia	RMT
B	50mm dia	RMT
C	80mm dia fill pipe	RMT
13.1	Same as above- 'C' Class	
A	40mm dia	RMT
B	50mm dia	RMT
C	80mm dia fill pipe	RMT
14	Laying of HPCL supplied pipeline to the required slope & alignment with heavy duty MS fittings like elbows, tees including doping pipe line with 3 coats of 'Shalimastic – HD THIXOTROPIC' of STP cold applied anti corrosive treatment after preparing the surface as per manufacturer specifications. The joints are to be made leak proof by using jointing materials like Litharge, Glycerin, Shellac, Holdite . The pipes laid above ground shall be painted with two coats of synthetic enamel over two coat of red oxide primer of approved quality and shall be color coded as per instruction of EIC. The pipeline shall be tested at a pressure of 5 kg/sqcm.	
A	40mm dia	RMT
B	50mm dia	RMT
C	80mm dia fill pipe	RMT
15	Supply and fixing ISI marked angular check valve of South Point/Leader/GG make	
15.1	40mm dia	NO
15.2	50mm dia	NO
16	FILL CAP	
16.1	Supply and fixing MS fill cap 80mm dia with locking arrangement including Godrej 6 lever brass lock	NO
16.2	Supply and fixing MS dip cap 40mm dia with locking arrangement including Godrej 6 lever brass lock	NO
17	Supply and fixing 40mm dia vent hood in vent pipe	NO

18	Granite works:	
18.1	Providing and fixing 19 mm thick pre polished water cut black granite slab for pump island top including providing 25mm thk bed cement mortar 1:5 (1 cement : 5 coarse sand) , floating cement slurry and finishing the joints with white cement mixed with matching colour pigment., edge polishing(bull nosing) etc. complete.	SQM
18.2	Providing and fixing 10 mm thick pre polished water cut black granite tiles for pump island dado including providing 12mm thk bed cement mortar 1:4 (1 cement : 4 coarse sand) , fixing the tiles with neat cement paste and finishing the joints with white cement mixed with matching colour pigment.	SQM
19	Pipeline trench:	
	Providing pipeline trench as per drawing with following internal width and 500mm depth including excavation, 100mm thick PCC 1:4:8, 230mm thick brick masonry in 1:5 CM, 12mm thick plastering inside in 1:4 CM, filling trench with sweet river sand, providing 150mm thick RCC 1:2:4 pre cast slab of length 600mm with reinforcement 10mm tor @ 125mm c/c on top and bottom as main steel and 8mm tor ring , curing etc. complete. 35x35x6 angle edging for the slab shall be paid separately.	
19.1	450mm internal width	RMT
19.2	600mm internal width	RMT
20	Transportation of dispensing pumps from Location in Secunderabad to the retail outlet site including loading, unloading etc. Complete.	
20.1	Up to 100KM distance RTKM	NO
20.2	Beyond 50KM RTKM (no differential above 100KM will be considered). Only one way KM will be considered	KM

PART F: DISMANTLING WORKS

Sr. NO	DESCRIPTION	UNIT
1	Dismantling of existing pump island 1m wide and carting away debris etc. complete.	RMT
2	Exhuming under ground tanks with all fittings from earth pit including disconnecting suction pipe, fill pipe, vert pipe , opening man hole cover, excavation, dewatering if encountered, degassing of tank, stacking the tank as directed by EIC etc. Complete. Back filling with sand will be paid separately.	
2.1	9KL tank	NO
2.2	16/14 KL tank	NO
2.3	22 KL tank	NO
3	Dismantling of existing building/structures	
3.1	Dismantling of RCC roof, beam, column including carting away debris	CUM
3.2	Removal of AC sheet from roof or canopy roofing sheet and stacking as directed by EIC and clearing the debris from the premises.	SQM
3.3	Removal of canopy false ceiling / canopy column cladding including scaffolding and stacking as directed by EIC	SQM
3.4	Removal of structural steel and stacking as directed by EIC	MT
3.5	Dismantling of brick masonry/PCC /RR masonry including carting away debris	CUM
3.6	Removal of MS/ Aluminium doors/ windows/fixed glazing and stacking as directed by EIC.	SQM
3.7	Dismantling of RCC driveway 150mm thick using concrete cutter for cutting smooth including carting away debris. Rate to include cutting both	RMT

	side of a trench width 400/600 and removal of debris. Length of the trench shall be considered for payment purpose.	
4	Dismantling of existing pipeline	
A	40mm dia	RMT
B	50mm dia	RMT
C	80mm dia	RMT
5	Dismantling of existing pump including disconnection pipeline, cable etc. complete.	NO

PART G: BORE WELL

Sr. NO	DESCRIPTION	UNIT
1	Drilling 5" dia borewell up to required depth in all kinds of soil including rock using air compressor rig. Rate to include washing with compressor after installation of casing pipe, providing bentonite soil if required etc. completed.	RMT
2	Drilling 5" dia borewell slow rig up to required depth in any type of soil except rock using slow rig method. Rate to include washing with compressor after installation of casing pipe, providing bentonite soil, providing pebbles etc. completed.	RMT
3	Supply and fixing 5" dia HDPE casing pipe 6 KG/SQCM pressure rating	RMT
4	Supply and fixing 5" dia HDPE slotted pipe 6 KG/SQCM pressure rating	RMT
5	Supply and fixing 4" dia HDPE casing pipe 6 KG/SQCM pressure rating	RMT
6	Supply and fixing 4" dia HDPE slotted pipe 6 KG/SQCM pressure rating	RMT
7	Supply and installation of single phase submersible pump of Kirloskar cat no. KU4-0709S discharge range 1.2-8 cum/hr head range 59-10m along with dry run preventor and starter	NO
8	Supply and installation of 32mm NB HDPE pipe with GI nipple at both end	RMT
9	Supply and laying 3CX2.5 sqmm copper flat cable	RMT
10	Carrying out Geological testing for finalisation of location of borewell	NO
11	Supply and installation of single phase 1.5 HP Jet pump with starter	NO
12	Supply and installation of 32mm NB HDPE pipe and 25mm NB HDPE pipe with required accessories for Jet pump.	RMT

PART H: RAIN WATER HARVESTING AND GREEN SCAPING

Sr. NO	DESCRIPTION	UNIT
1	Providing rain water harvesting as per attached drawing. Rate to include providing all materials, bore, etc complete	NO
2	Supply of red earth for gardening	CUM
3	Supply of sand	CUM
4	Supply of manure	CUM
5	Laying of red earth and manure after mixing in 1:1 proportion for lawn	CUM
6	Supply and planting Korean grass for lawn	SQM
7	Supply and plantation of plants like Fig, Casurina, bottle palm etc. Including excavation of pit of size 600mmx600mmx600mm depth, filling the pit with red earth and manure etc.	NO

PART I: DGSET/COMPRESSOR

Sr. NO	DESCRIPTION	UNIT
1	Installation of 15 KVA DG set on AVM pads including shifting from storage yard to DG room, all cable connection, installation of fuel tank, battery connection, etc. complete. Silencer pipe shall be paid separately.	NO
2	Installation of DG panel including all cable connection	NO
3	Liaisoning with EB for arranging enhancement of existing power supply in existing outlet or for arranging new power connection for new outlets	LS JOB
4	Installation of HPCL supplied compressor including fixing of AVM pad	NO
5	Installation of tyre inflator gauge wall mounted model ELGI make with 5m hose including providing 50x50x6 angle post	NO
6	Supply and laying 15mm dia GI pipe conforming to IS 1239 medium.	RMT
7	Supply and fixing MS ball valve 15mm dia	NO

PART J: CANOPY

Sr. NO	DESCRIPTION	UNIT
1	STRUCTURAL STEEL WORK	MT
	Supplying , erecting and fixing in position Pre- fabricated steel structures at all elevations for Canopy using structural steel sections ISMB/ISMC/ISA conforming to IS:2062 , including cutting, welding or bolting, supply of bolts/nuts/washers etc., complete as per drawings including surface preparation and applying one coat of Zinc Phosphate Primer before erection, one coat after erection and two coats of synthetic enamel paint as per specification after erection and all materials and labour complete. (No welding is permitted at site). The rate quoted shall include cost of bolts, nuts, washers, welding and electrodes and any other consumables required for completing the work. Nut bolts shall not be considered for payment. Theoretical weight of steel sections shall be considered for payment.	
1.1	Foundation bolt	KG
1.2	Beams, Columns, Trusses, Plates	MT
2	ROOFING	
2.1	Providing and installing roofing with Tracdek Hi Rib 100 or approved equivalent bare Galvalume high tensile cold rolled steel as per AS 1397 Coating class AZ 150 (minimum 150 gm/sqm Zinc-Aluminium alloy coating mass total of both sides), Yield strength 275 Mpa Thickness of bare metal : 0.42mm ,Total coated thickness : 0.47mm .Approximate mass of completed roofing shall be 4.12 Kg/sqm.Rate shall be including providing ridge piece, horizontal/vertical flashing near illuminated banding .	SQM
2.2	Providing and installing roofing with Tracdek Klippon or approved equivalent bare Galvalume high tensile cold rolled steel as per AS 1397 Coating class AZ 150 (minimum 150 gm/sqm Zinc-Aluminium alloy coating mass total of both sides), Yield strength 275 Mpa Thickness of bare metal : 0.50mm, Total coated thickness : 0.55mm etc. Rate shall include providing ridge piece, horizontal/vertical flashing near the illuminated banding.	SQM
3	Supplying and fixing 20 SWG GI sheet facia including painting with one coat of zinc chromate primer and two coats of 1 st quality synthetic	SQM

	enamel paint on front side . Necessary fascia framework for fastening the sheet to the canopy securely shall be paid separately.	
4	Providing and fixing 20 SWG thick Aluminium Sheet Gutters of required shape in slope with 40 mm x 3 mm MS. Brackets at 1000 mm maximum spacing and 8 mm dia G.I. J or L hooks, bolts and nuts, GI Limpet and bitumen washers, providing nut bolt joint, sealing the joints with silicon sealant testing the gutter for leakage by filling water etc. Complete.	SQM
5	FALSE CEILING	
5.1	Providing & fixing false ceiling system of Trac 150 F exterior grade or approved equivalent of 0.5mm thick galvanized steel with stove enameled coil coated finish inter locking ceiling panels, carriers, suspension system and edge closure as per the following specification. Supplying and installation of exterior grade 150 F ceiling system comprising of 150 mm x 17 mm deep panels roll formed out of 0.5 mm galvanized steel with stove enameled coil coated finish. The panels shall be pre-treated and coil coated on one side in manufacturers' standard colour shades as approved by the Architect/ Engineer in charge. The rear side of the panel shall be given a coat of primer and a wash coat while the finished side shall be given a coat of primer and finish colour coat in polyester paint for a min. dry film thickness of 20 microns, fixed on to the roll formed carriers 34.5 mm x 488 mm deep out of 6 mm thick Galvanised steel with prongs to hold panels in the module of 150 mm at maximum 1.2 mts. C/C. The carriers to be suspended from roof truss by rigid suspension angles as per manufacturer's recommendation. Panels shall be supplied in custom length upto maximum of 5 mts. Job also includes providing ceiling flashing using factory formed 0.5 mm thick Polyester coated galvanised steel material. Rate shall be including providing flashing to cover gap if any between illuminated banding and false ceiling.	SQM
6	CANOPY LIGHTING ELECTRICAL WORKS	
6.1	Supply and laying of 3CX2.5 sqmm size 1100V grade PVC insulated, armoured copper cable in the existing cable duct/clamping on wall/column/structural steel etc. for canopy light /banding light wiring including end termination.	RMT
6.2	Installation, testing and commissioning of canopy light fix PHILLIPS cat No. MPF 921/150 W with CDMTD lamp. Wipro No. WHH91150SL01 OR WHH91150SL02 supplied by HPCL . Rate shall be inclusive of all connecting all accessories, inter connection of wires, chokes etc.	EA
7	PVC PIPE	
7.1	Providing and fixing 6" dia PVC pipes of 6 Kg/sqcm of Prince Make or equivalent make as per IS 4985 for rain water pipes including all fittings like bands , shoes etc., MS fabricated bracket as per requirement etc. All complete as directed by the EIC.	RMT
7.2	Providing and fixing 4" dia PVC pipes of 6 Kg/sqcm of Prince Make or equivalent make as per IS 4985 for rain water pipes including all fittings like bands , shoes etc., MS fabricated bracket as per requirement etc. All complete as directed by the EIC.	RMT

PART K: HOARDINGS

Sr. NO	DESCRIPTION	UNIT
1	Supply, erecting and fixing in position pre fabricated steel structures at all elevations for hoarding boards using structural steel sections SISMB/ISMC/ISA conforming to IS 2062, including cutting, welding or bolting, supply of bolts/nuts/washers etc complete as per drawings. Rate to include painting with two coats of synthetic enamel paint 1st quality over two coats of red oxide primer after necessary surface preparation using wire brush and sand paper. Nut bolts shall not be considered for payment. Theoretical weight of steel sections shall be considered for payment.	MT
2	Supply, fabrication, welding and erection of 18SWG CRCA sheet for hoarding including painting with two coats of synthetic enamel paint 1st quality over two coats of red oxide primer after necessary surface preparation using wire brush and sand paper.	SQM
3	Supply and fixing MS foundation bolt of 25mm dia for hoarding	KG
4	Letter writing of ADVT/TEXT/art work including one coat of Synthetic enamel paint as instructed by HPCL representative	SQM
5	Fixing of HPCL supplied hoarding light fixture including providing 25mm dia MS pipe C class, connecting cables etc.	NOS
6	Transportation of hoarding light fittings from vijayawada RO to the retail outlet site including loading, unloading etc. Complete. rate per trip. Only oneway KM shall be paid. All the fittings to be transported one time only.	NOS