OMALUR TOWNPANCHAYAT SCHEDULE - A Schedule of Rates and Approximate Quantities

a) The quantities here given are those upon which the estimate cost of the work is based but they are subject to alterations, commissions, deduction or additional as provided for in the coditions of this contract and do not necessarily show the actual quantities of work to be done. The unit rates notes below are those government payment for extra or deductions read with the Town Panchayat councils adaptation form and other conditions or specification of this contract and subject to the accepted tender percentage either below, above or at estimate rates a defined in the tender and as shown at the end of Schedule "A"

b) It is expressly understood that measured work is to be taken net-not withstanding any custom to practice to the contrary according to actual quantities when in place and finished according to the drawing or as may be ordered from time by the Assistant Executive Engineer at the cost calculated by measurement or weight at the respective prices with out any additional charge for any necessary or contingent works connected here with. The rates quoted are for works In-SITE and completed in every respect.

Name of Work : Construction Of LPG Crematorium at Salem main Road SF.No. 68 in Omalur Town Panchayat.

Issued Thiru : Chalan no. Dt.

Executive Officer Omalur Town Panchayat Salem District

> Estimate Amount Rs. 134.70Lakh

SI. No.	Probable Qty. in Figures		Description of Work	TNDSS & MORTH Specification No.	Rates in Rupees Words	Unit	Remarks
1			Earth Work Excavation for foundation in all types of soils and sub soils to full depth (such as Soils in Rock / Silt / Light Black Cotton Soil / Ordinary Soil) except in rock requiring blasting but inclusive of shoring, shuttering and bailing out water wherever necessary and refilling the sides of foundation with excavated earth other than sand in layers of 150 mm thick well rammed and consolidated, depositing the surplus earth in places shown by the Departmental Officers with initial lead of 10 m and initial lift of 2 m. Complete as per TNSS 23 & 24, V, VI (S2), VII, 9,10				
1.1	163.00	m3	Soil I depth of 2 mt	TNDSS NO: 23 & 24 VI (S2)		1 m3 (One Cubic Metre)	
1.2	23.00	m3	Soil II depth of 2 mt	TNDSS NO: 23 & 24 VI (S2)		1 m3 (One Cubic Metre)	
2	27.00	m3	Supply delivery and filling of stone dust in Layer of not more than 15cm thick including watering with all layers and consolidation complying with standard specification including cost and conveyance of sand at site and all labour charges and all other incidential charges etc., complete as per Standard Specification TNSS No. 24 & 25.			1 m2 (One Square Metre)	

3	93.00	m3	Plain Cement Concrete of mix 1 : 4 : 8 (One part of Cement four part of sand eight part of aggregates) using 40mm gauge hard broken including cost conveyance of all materials to site including formwork and centering labour charges, transporting and placing in position including shoring, strutting, forming protective bunds, cofferdams bailing out of water labour for mixing compacting, finishing and curing, working at depths, tools and plants and incidental charges such as sheeting, shoring and bracing and their subsequent removal etc., complete as per standard specification. TNDSS NO: 28 V, VI (S2) V,VI (S5A) VII	1 m3(One Cubic Metre)	
4	142.00	m3	Supplying and Filling of U/S Gravel from approved quarry in Layer of not more than 15cm thick including watering with all layers and consolidation complying with standard specification including cost and conveyance of sand at site and all labour charges and all other incidential charges etc., complete as per Standard Specification.	1 m3 (One Cubic Metre)	

5			Supplying and errecting steel centering including necessary supports for plain surfaces for Reinforced Cement Concrete works such as Coloumn footing,Coloumn pedestals,plith beams, grade beams,staircase steps,etc which requires only nominal strutting using mild steel sheetsof size 90mm x60mm and 10Bg stiffened with welded mild steel angles of size 25mm x 25mm x 3mm for boarding, laid over silver oak joists of size 10cm x 6.5cm spaced at about 75cm centre to centre or at suitable intervels etc complete in all floors Complying with standard Specification without Strutting. (TNSS NO or NBC No 30(S) 86 86 A V, VI(S3)VII			
5.1	376.00	m2	BelowGround Level	TNDSS NO: 28 & VI (S2) VI (S5A) VII	1 m2 (One Square Metre)	
5.2	447.00	m2	Ground Floor	TNDSS NO:97 V,VI (S6) VII (S6), VII-3.	1 m2(One Square Metre)	
5.3	222.00	m2	COLUMN		1 m2 (One Square Metre)	

6	11180.00	Kg	Supplying ribbed tor steel rods including cutting cranking fabricating assembling laying in exact position tying with soft steel wire 16 or 18 BWG etc. complete for all RCC Works. as per the design given including cost of steel and binding wire also in all floors as per standard specification. SS86 & 86A, V, VI (S3) (S6) VII.	1 Kg (One Kilo Gramme)	
7			Providing and laying in position, Standardised Concrete Mix M-20 Grade in accordance with IS:456-2000, using 20mm and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/m ³ and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu.m.) 7670 kg. of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS Standards. (No separate payment will be made by the Department for the excess usage of materials).		

7.1	38.00	m3	Below Ground Level		1 m3 (One Cubic Metre)	
7.2	57.00	m3	Ground Floor 0.00 mt to 4.50mt	TNDSS NO: 30 V, VI (S3), VII-3.	1 m3 (One Cubic Metre)	
8	2.00	m3	Reinforced Cement Concrete 1:8:16 (one cement eight fine aggregates and sixteen coarse aggregates) using 20mm size ISS HBG metal including cost and conveyance of all materials to site and including for the mixing, laying and labour charges and all incidential charges such as water providing etc., complete as per standard specification 30 V, VI (S5) VII & 13	TNDSS NO: 30 V, VI (S3), VII-3.	1 m3(One Cubic Metre)	
9			Brick work in CM 1:5 (one cement & five sand) using II class ground moulded bricks of size 9"X43/8"X 23/4" standard specification including finishing, curing,etc., complete complying with standard specification 31 & Similar to 31C V, VI (S5) VII			
9.1	40.00	m3	Below Ground Level	TNDSS NO: 30 V, VI (S3), VII-3.	1 m3 (One Cubic Metre)	
9.2	76.00	m3	Ground Floor	30 V, VI (S5) VII & 13	1 m3 (One Cubic Metre)	

9.3	32.00	m3	First Floor	TNDSS No.31& similar to 31C,V,VI(S5),VII	1 m3 (One Cubic Metre)
10	19.00	m2	Brick partition walls of 10.80cm thickness using best quality country bricks of size 8-3/4" x 4-1/4" x 2-3/4" in Cement Mortar 1:3 (One Cement and Three Sand) using hoop iron reinforcement if found necessary including curing etc. complete and as directed by the departmental officers. (Hoop iron reinforcement will be measured and paid for separately)	TNDSS No.31& similar to 31C,V,VI(S5),VII	1 m2 (One Square Metre)
11	334.00	m2	Special Plastering in Cement Mortor 1:3 Mix (one Cement,, Three sand)10mm thick including cost and conveyance of all materials to site, loading and unloading charges and labour charges for mixing, laying and curing etc. complete. Complying with std. specifications.TNDSS NO: 56, 57		1 m2(One Square Metre)
12	19.00	m2	Weathering course in brick jelly lime concrete using broken brick jelly of size 20mm uniform gauge in pure slaked lime (no sand to be used) to the proportion of brick jelly to lime being 32:12.5 by volume and laid over the RCC roof slab in a single layer of required slope and finished by beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime jaggery water, etc., complete as per standard specification and as directed by the departmental officers.61 V VI, (VIA) 3	TNDSS No.31& similar to 31C,V,VI(S5),VII	1 m3 (One Cubic Metre)

13	240.00	m2	Finishing the top of roof with one course of machine pressed tiles of size 200 mm x 200 mm x 20 mm of approved quality in Cement Mortar 1:3 (One Cement add three sand) 12 mm thick mixed with water proofing compound conforming to ISS at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same cement mortar mixed with red oxide and water proofing compound including curing etc., complete as per standard specification and as directed by the deparmental officers 44 H V, VI, (S5A) VII ,3	TNDSS NO: 56, 57	1 m2 (One Square Metre)	
14	21.00	m2	Paving the floor with pre-polished concrete anti-skid tiles (Required shape and design) of 20mm thick of approved quality and colour laid in Cement Mortar 1:3 (One Cement and Three sand) 20mm thick and pointed with white cement mixed with colouring pigment at the rate of 0.40 Kg. / sq.m., curing, etc., complete complying with standard specification and as directed by the departmental officers. (The make and brand of the tiles should be got approved by Executive Engineer before use on works)	TNDSS No.61,V,VI(S4),III	1 m2(One Square Metre)	

15	188.00	m2	Paving the floor with best approved quality fine polished Kota stone slabs of size 600 x 600 of 18 / 20mm with machine cut edges and matching marble slab not less than 100mm width other than Adanga Marbles as border laid over a cement mortar bed of 20mm thick using cement mortar 1:3 (One cement and three sand) fixing the slabs in true right angles with minimum possible width of joints and pointing the joints with white cement mixed with mathcing colouring pigments and polishing with floor polisher to a high degree of finish etc., The kota stone slabs and other materials to be used shall be got approved by the Executive Engineer concerned before use on work, etc., complete as per standard speicification. 39 A	TNDSS No.61,V,VI(S4),III	1 m2 (One Square Metre)	
16	78.00	m3	Vibrated Plain Cement Concrete 1:2:4 (one cement, two sand and four hard broken stone jelly) using 20 mm gauge hard broken jelly for flooring including laying, consolidating, finishing, rendering the top surface rough to receive the floor, curing, etc. complete complying with standard specification. (The rate is inclusive of necessary planking for panelling wherever necessary and as directed by the departmental officers 30 V, VI (S5) VII & 13	51 (10-1) V, VI (S5) VII, 3	1 m3 (One Cubic Metre)	
17	1269.00	m2	Plastering in Cement Mortor 1:5 Mix (one part of Cement,, five part of sand)12mm thick including cost and conveyance of all materials to site, loading and unloading charges and labour charges for mixing, laying and curing etc. complete. Complying with std. specifications.TNDSS NO: 56, 57	44 H V, VI,	1 m2(One Square Metre)	

18	1377.00	m2	Supplying and Painting the new plastered walls with two coats of Exterior emulsion paint (weather proof) first class quality and of approved colour over a priming coat including thorough scrapping clean removal of dirt etc. complete and including necessary plaster paris putty etc. wherever required.as per (ISI STD) (It mustprovide excellent resistance against the growth of algae and fungi on the walls. And it must offer excellent protection against alkali and UV degradation and the durability period should be 5 years. 61 V, VI (S4) 3	TNDSS NO: 39A		1 m2 (One Square Metre)	
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19	11.00	m2	Supplying and fixing of rolling shutters shall be pull and push type (Mannually operated) made of 18G/3" lathe sections which consist of five main parts such as curtain, lock plate, guide channels rollers and hood cover. These five main parts are made out of special components detailed below: curtain shall be of 18G/3" lath sections cut to required size and filled with heavy cast iron / MS clips. For 8'0"(2.45m) high rolling shutter lath sections provided shall be not less than 37 numbers. Lock plate shall be 10G MS sheet and attached to the side brackets with 20mm square bar.Side brackets shall be of 10G MS plate and cast iron "U" clamps shall be rivetted to the side brackets. Roller shall be of heavy cast iron pullies fitted with heavy duty "C" class 40mm steel pipe and high tensile high carbon coil springs. 2 springs shall be supplied. Side brackets shall be of 10G MS plate and cast iron "U" clamps shall be rivetted to the side brackets. Hood cover shall be of 0.8mm CRCA sheet reinforced with 25mmx25mmx3mm MS angle or gate channel. The rolling shutter in addition to the above should have pulling hook and shall be coated on exposed area with heavy coat of red oxide primer etc., complete.	TNDSS No.61,V,VI(S4),III		1 m2(One Square Metre)	
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20	8.00 r	m2	Supplying and Fixing Solid PVC door shutters (with frame) using 19Gauge 19mm MS square tubes for styles and other frames. 15mm MS square tubes for top.lock and bottom rails. The steel tubes shall be covered with 5mm thick solid PVC sheets. Shutters using 5mm thick solid PVC sheet for panelling shall regigly fixed in position including necessary furniture and fittings. The overall size of styles shall be 50mm x 30mm. The overall size of top rail, lock and bottom rail shall be 50mm x 45mm, with suitable rabate for housing the shutter. (PWD SOR Page No.43 S.I No.125 a)	1 m2 (One Square Metre)	
21	25.00 г	m2	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Louvered Ventilators of from the profile the size of outer frame 60mm x 58mm and shutter profile size of 60 x 78mmboth profiles are reinforced with GI/1mm 125GSM and100% corrosion free, the profile are multi chambered sections with wall thick of 2mm. The EPDM rubber (blackcolour) covered with all over the edges of frame and shutter.The corners and joints should be welded and cleaned.Radiations pin headed glass 4mm thick should be provided inthe louvers. The window should be fixed to the wall with 100% packing with screws and silicon packing all round theframes. The ventilator should be got approved from theExecutive Engineer before use on work PWD SOR page No : 66	1 m2(One Square Metre)	

22	21.00 m2	Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type (open) from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 25GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with spag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown olour glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss. The connecting mechanism between sash and outer frame that enables opening of the window. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The window should be got approved from the executive Engineer before use on work Page No : 65, sl no : 265		1 m2 (One Square Metre)	
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23	13.00	m2	Supplying & fixing door shutters for Solid Core Flush Shutters with Teak ply on both side with teak wood lipping alround 35mm thick, single leaf confirming to IS:12406/1989 with 35x12mm T.W. Lipping on all edges with necessary adhesives and CP screws complying with standard specifications. The rate is inclusive of threee coats of best quality varnish but excluding cost of furniture fittings, such as 300 mm tower bolt 2nos, 200mm towerbolt 1 No. 300mm Aldrop 1 No. Alu handle ornamental type 2 Nos and 1No. Door stopper etc complete. Page No : 42 Sl. No : 121		1 m2(One Square Metre)	
24	27.00	Rm	Supply and fixing of Stainless steel (Salem stainless steel) Door frame (Box section using stainless steel plate of 1.6mm thick) of size 100mm X 60mm with a rebate of 30 / 35mm X 15mm on one side of the frame including supplying and fixing dovetail splayed end stainless steel holdfast etc. PWD SOR Page No: : 44 Sl. no: 131	(TNSS NO or NBC No 61 V VI (54) 3)	1 Rm (OneRunning Metre)	

25	6.00	m2	Manufacturing, Supplying and Fixing of Stainless Steel Hand rails for staircase using 50mm dia 304L Grade Stainless Steel pipe of 1.60mm thick at required locations to a height of 900mm from finished floor level welded to 38mm dia Stainless Steel pipe post of 1.00mm thick as vertical at 900mm centre with 2 Nos. of 25mm dia intermediate horizontal stainless steel pipe of 1.60mm thick in between. The vertical pipe has to be welded to the 100 X 100 X 6mm MS base plate encased in the base concrete. The rate is inclusive of the charges for cutting, bending, welding, grinding, polishing, conveyance, electrical charges, etc. complete PWD SOR Page No: : 57 Sl. no: 131	1 m2 (One Square Metre)	
26	1955.00	Kg	Supply and fixing of M.S Grills for Windows, with one coat of Red oxide Primer including all costs such as welding, grinding and fabrication charges, cost and conveyance of all materials to site etc,complete as per standard specification. including phosphating as per ISI with rust preventive primer & ready to assemble condition for easy installation at site including dismantling making necessary with power drill to the accessories such as supplying and fixing holdfasts, plastic bush inserts receiver runner bottom shock absorbers etc. and Steel Door Complete as Directed by the Departmental Officer.	1 Kg(OneKilo Gramme)	

27	125.00	m2	Painting the new iron works such as steel doors, Windows,Ventilators windows bars,balustrades etc, in all floor with two coats of best approved first quality and colour of synthetic enamel paint of approved quality, colour and brand (to be approved by executive engineer before use on works) over one the existing red oxide priming coat in all floors excluding cost of priming coat etc, complete complying with Standard Specification. (The Make, Quality and colour of paint should be got approved by the engineer in charge before use on works) (TNSS NO or NBC No 61 V VI (54) 3)	1 m2 (One Square Metre)
28	29.00	m2	Painting new wood work with two finishing coats of synthetic enamel ready mixed paint of approved quality and colour over one coat priming coat in all floors including the cost of primer etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)	1 m2 (One Square Metre)

29	52.00	m2	Fabricating supplying and fixing of pre painted galvanium iron sheets with the following specification. The materials should be of PPGI tile profile with a red colour or any other approved design 0.47mm thick 24 guage having width 1050 mm. The sheet should be G.I.base pre painted hot dipped galvanized iron sheet and to be fixed with shelf tapping screws, plastic washer. The washer and screws to be fixed by using minute power machine drilled with out damaging the sheets paint coating to be regular modified polyster coat with zinc coating of Z 120 GSM paint thickness the finish should be terra cotta finish like malabar mangalore tiles finish optional matt finish. The sheet to be fixed with making suitable corrugated, cutting the sheet in to the required ssize and making ornamental designs as per the site condition and as directed by the departmental officers.	1 m2(One Square Metre)	
30	32.00	Rm	Supplying and Fixing in position best approved of BIS quality 110mm P.V.C Rain Water down fall pipe having a pressure of 4Kg / Sq.cm including cost of necessary PVC shoe,PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails etc, and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc, complete. The rate shall be inclusive of cast of removable cast iron grating. The PVc pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3.00mt pipe length etc, Complete Complying with Standard Specifications.	1 Rm (OneRunnig Metre)	

31	30.00	Е	Supply and laying of 3.5 X 35 Sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 metre putting 0.15 mt. Layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good. TWAD page No ; 116	SD NO25	1 No (One Number)	
32	72.00	m2	Dadooing sides of walls with Glazed design tiles of size 150 x 150 x 6mm set in Cement Mortar 1:3 (One cement, three sand) 20mm thick and pointed with the same colour cement including cost and conveyance of all materials, labour charges complete as per standard specification.	SD NO 38	1 m2(One Square Metre)	
33	2.00	Е	Supplying and fixing in positon Indian Water Closet (Oriya type) of size 580 x 440mm white glazed earthern ware of approved quality and brand with "P" or "S" trap conforming to BIS with sand cushion and forming flooring alround the closet using 40mm broken brick jelly in lime concrete 1:2:5 (One lime, Two sand and Five brick jelly) 100mm thick and finishing the top to the required slope and including giving necessary connection to CI soil pipes (including the cost of 100mm dia CI pipe for a length of 600mm) by dismantling brick masonry wall / reinforced cement concrete roof / floor slab and making good the dismantled portion to the original condition with leakages etc., complete complying with standard specifications and as directed by the departmental officers. (The water closet should be got approved by the Executive Engineer before use on works).	SD NO 22	1 NO (One Number)	

34	1.00	Е	Supplying and fixing in position best quality and approved make Indian made white / colour glazed earthernware wash hand basin of size 550 x 400mm (with pedestal / without pedestal) with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylone connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the Executive Engineer before use on works)			1 NO(One Number)	
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35	1.00	Е	Supplying and fixing in position white / colour glazed European Water Closet of best quality and approved make with 100 mm "P" or "S" trap connecting with CI pipe of 100mm dia / PVC pipe of 110mm dia, double flapped rigid PVC black seat and seat cover with CP brass hinges including cost of white cement, cement for packing, spun yarn, teak wood plugs, brass screws, etc., including supplying and fixing 10 litres capacity PVC / 12.5 litres capacity porcelin low level flushing tank with a pair of CI brackets, etc., complete with all fittings such as 15mm brass ball valve with polythene float with brass handle, union, coupling connected by means of 40mm white PVC flush hand using Indian adopter joint including all internal fittings uch as 15mm brass connections, 15mm GM wheel valve, 15mm brass nipple (2 Nos.), 15mm nylon connection, TW plugs, screws and also giving necessary connection to the PVC pipe including cost of 600mm length of 110mm dia PVC pipe and painting the CI brackets with 2 coats of approved paint over one coat of red oxide primer, dismantling the masonry and re-doing the dismantled masonry to original condition etc. complete complying with standard specifications. (The EWC and flushing tank wiht all accessories should be got approved by the Executive Enginer before use on works)			1 NO(One Number)	
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36			Supplying laying and jointing P.V.C pipes (6Kg/SqCm) of approved quality and best variety conforming to I.S.S & with I.S.I mark, of the following sizes including cutting , Fixing to PVC specials using Adhesive but excluding cost of such specials and fixing to wall with necessary teak - Wood Plugs,PVC Clamps and screws,making holes on the wall or drilling holes in roof and making good the dismantled portions to original condition with necessary brick work and plastering wherever necessary with necessary scaffolding charges.	SD NO 10		
36.1	60.00	Rm	25MM dia,PVC pipe		1 RM(One Running Metre)	
36.2	60.00	Rm	20mm dia.PVC pipe	SD NO 141	1 RM (One Running Metre)	
37	1.00	E	Supplying and fixing in position indian make bewelled edge mirror of approved quality and brand of size 600 X 450mm wth necessary plastic back, PVC frame with bottom stand of approved colour with brass screws,rawal plugs etc., complete complying with standard specifications.	SD NO 69	1 NO (One Number)	

38	1.00	E	Supplying and fixing best approved quality Brass C.P / Al anodised Towel rail 600mm. long and 20mm Diameter with brackets of same material including cost of Teak-Wood plugs and C.P.Screws etc., complete complying with standard specifications	SD NO 125	1 NO (One Number)	
39	1.00	Е	Supplying and fixing best approved quality C.P.Soap Tray of size 150mm X 100mm including cost of Teak Woodplugs, brass screws complete complying with standard specifications.	MORTH IV 406	1 NO (One Number)	
40	6.00	E	Supplying and fixing position PVC Nahani Trap of the following sizes with best stainless steel gratings of approved brand and quality, fixed over a bed of brick jelly lime concrete 1:2:5 (One part of lime, two part of sand and five part of 40mm gauge brick jelly) and finished with Cement Mortar 1:3 (One Cement, Three sand) including dismantling masonry works wherever found necessary and making good the dismantled portions to the original condition and giving connection to the CI / PVC pipes, etc., complete complying with standard specification. (The Nahani Trap should be got approved by the Executive Engineer before use on works)		1 NO (One Number)	
41	6.00	Е	Suppling and fixing in position 15mm.diameter brass screw down tap (heavy duty) of approved make conforming to I.S.specifications and quality including cost of shellac , thread etc.complying with standard specifications and including cutting and threading wherever necessary.		1 NO(One Number)	
42			Supply and fixing of following Plumbing G.I.materials			

42.01	10.00	E	15mm dia G.I Tee	1 NO (One Number)
42.02	10.00	Е	15mm dia G.I Elbow	1 NO (One Number)
42.03	10.00	Е	20mm dia G.I coupling	1 NO (One Number)
42.04	10.00	Е	20mm dia G.I Tee	1 NO (One Number)
42.05	10.00	E	20mm dia G.I Elbow	1 NO (One Number)
42.06	10.00	Е	20mm dia G.I Bend	1 NO (One Number)
42.07	1.00	Е	20mm dia G.I union PWD Pg.No:46	1 NO (One Number)
42.08	10.00	Е	25mm dia G.I coupling	1 NO (One Number)
42.09	10.00	E	25mm dia G.I Tee	1 NO (One Number)

42.10	10.00	E	25mm dia G.I Elbow	1 NO(One Number)	
42.11	10.00	Е	25mm dia G.I Bend	1 NO (One Number)	
42.12	1.00	Е	25mm dia G.I union PWD Pg.No:46	1 NO (One Number)	
42.13	10.00	Е	20mm X 15mm dia G.I Reducer	1 NO (One Number)	
42.14	10.00	Е	20mm X 15mm dia G.I Reducer Elbow	1 NO (One Number)	
42.15	10.00	Е	25mm X 20mm dia G.I Reducer	1 NO (One Number)	
42.16	10.00	Е	20mm X 15mm dia G.I Reducer Tee PWD Pg.No:47	1 NO (One Number)	

43			Supplying and fixing in position P.V.C. specials such as plain bend, door bend, plain tee, door tee, offsets, Y- junction, plain or with door of various sizes best quality confirming to I.S.S and providing leakproof joints including fixing to wall and giving connection to the P.V.C, soil stacks, dismadling the brick masonry or R.C.C. floor or Roof slab and redoing the dismandled portion to original condition etc., complete complying with standard specifications.	
43.01	5.00	Е	110mm dia PVC Elbow	1 NO (One Number)
43.02	5.00	Е	110mm dia PVC Tee	1 NO(One Number)
43.03	5.00	Е	110mm dia PVC Door Elbow PWD Pg.No:102	1 NO (One Number)
43.04	5.00	Е	110mm dia PVC Door Tee	1 NO (One Number)
43.05	5.00	Е	110mm dia PVC Door Yee	1 NO (One Number)
43.06	5.00	Е	90mm dia PVC Elbow	1 NO (One Number)

43.07	5.00	E	90mm dia PVC Tee	1 NO (One Number)	
43.08	5.00	Е	90mm dia PVC Door Elbow PWD Pg.No:102	1 NO (One Number)	
43.09	5.00	Е	90mm dia PVC Door Tee	1 NO (One Number)	
43.10	5.00	Е	90mm dia PVC Door Yee	1 NO (One Number)	
44			Supplying and fixing in position best quality P.V.C soil/ waste pipes (4KSC) of various sizes having ISI mark and providing leakproof joints including fixing to the wall with P.V.C/ M.S clamps etc., and making connection to all sanitary fittings, dismandling masonry/R.C.C. works wherever necessary and making good the dismandled portion to the original condition, complying with standard specifications.		
44.1	28.00	Rm	110mm dia PVC 6KSC Pipe	1 RM(One Running Metre)	
45	2.00	Е	Supplying and fixing in position C.I.Manhole covers (light or heavy duty) of 600 X 600mm in size of best approved quality and as per standard specifications etc.,complete.	1 NO (One Number)	

46	3.00	Е	Supplying and fixing PVC ventilating shaft of 110mm dia (having working pressure 4 kg. / sq.cm) with 3 metre height including cost of PVC cylindrical cowl of best approved quality etc., complete complying with standard specifications and as directed by the departmental officers	1 NO (One Number)
47	1.00	Е	Supply and fixing of 1000 lit HDPE Tank ISI make with all accessories such as Tank Nipple, Washer etc,including cost and conveyance of all materials to site etc, complete as per standard specifications. TWAD page No ; 85	1 NO (One Number)
48	1.00	E	Conducting Geophysical survey, quality and quantity test and transportation charges etc, (This includes labour charges in the field, rent of the vehicle for reaching the place, rent of the instrument and excluding charges for the geologist)	1 NO (One Number)
49			Drilling of 150mm dia vertical bores in hard rock formation to any required depth as directed by the departmental officers including labour charges for inserting casing pipe, assembling in the drilled hole, including welding the joints if necessary grouting the casing pipe etc, and including transportation charges for the rig and supporting vehicles from one place to another place.	
49.1	150.00	Rm	Up to 0 to 150m	1 RM (One Running Metre)

49.2	20.00	Rm	151 to 180m	1 RM(One Running Metre)	
50	18.00	Rm	Supply and delivery of unplasticised Casing Shallow PVC casing pipe of the 150mm dia in 3m length with screwed and socket end and centering guide for every 15m length of pipes as per IS / 12818 / 92 and as amended from time to time to suit the borewell upto 80m depth (C.S) with ISI marking including, loading, unloading , freight, stacking and transit insurance charges etc, complete. TWAD page No ; 22	1 RM (One Running Metre)	
51	1.00	Е	Three phase of 50 LPM 175 mtr Head Submersible pumpset TWAD page No ; 98	1 NO (One Number)	
52	1.00	E	Supply and delivery of Three Phase Panel Board - Star Delta with two level Guard and auto start suitable for Submersible pumpsets and accessories including all fittings suitable for Submersible pump sets.Panel Board should be provided as per specification. Rates inclusive of Packing, Loading, Freight, Unloading, Stacking, Transit and Insurance charges etc, complete TWAD page No ; 110	1 NO (One Number)	

53	1.00	Е	Labour charges for the erection of submersible pump set in bore well/open well including fixing and jointing submersible cable with proper clamps up to the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges up to the exterior wall of pump room and erection of panel board consisting of TPICN switches starter, voltmeter, Ammeter, three pilot (indicating) lamps capacitor single phasing preventer, water level guard and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pump set and trail run for 10 days. TWAD page No ; 287		1 NO (One Number)	
54			Supplying and fixing in pisition of the following PVC and G.I specials best approved quality conforming to ISS and providing leak proof joint with PVC adhesive etc., complete complying with standard specification.			
54.01	30.00	Rm	50mm HDPE Pipe (PN 6)		1 RM (One Running Metre)	
54.02	180.00	Rm	40mm UPVC Pipe		1 RM (One Running Metre)	
54.03	1.00	Е	Borewell cove plate		1 NO (One Number)	

54.04	1.00	E	Borewell Clamp	1 NO (One Number)
54.05	2.00	Е	32mm G.I Elbow	1 NO (One Number)
54.06	1.00	Е	32mm G.I Nipple	1 NO (One Number)
54.07	1.00	Е	50mm Non Return Valve	1 NO (One Number)
54.08	1.00	E	32mm G.I Union	1 NO (One Number)
54.09	1.00	Е	32mm Bend	1 NO (One Number)
54.10	1.00	E	32mm PVC fTA	1 NO(One Number)
54.11	1.00	Е	32mmx63mm PVC Reduer	1 NO (One Number)
54.12	10.00	Е	32mm GI pipe	1 NO (One Number)

54.13	2.00	Е	32mm Gate Valve	1 NO (One Number)
54.14	3.00	Rm	20mm GI Pipe	1 RM (One Running Metre)
54.15	2.00	Е	20mm Tap	1 NO (One Number)
55	190.00	Rm	Supplying and fixing of PVC insulated and sheathed 3 core 4sq.mm Flat type Copper cable cofirming to IS 694/1990 and including cost and conveyance of all materials to site and labour charges etc, complete as per standard specification. TWAD page No; 116	1 RM (One Running Metre)
56	417.00	Kg	Supplying, fabricating, erecting structural steel work for roofing welded or bolted type using MS channels, angles, plates and round bars etc. conforming to IS specification including primer coating and enamal painting as per Design given by the departmental officers etc,complete as per standard specification	1Kg (one Kilo Gramme0
57	30.00	Rm	Towards labour charges for laying of pipe line with specials to proper slopes and gradients including all cost and conveyance etc.,complete as per standard specification.	1 RM (One Running Metre)
58	13.00	m3	Refilling with excavated earth after laying the pipes into the trenches including all labour charges etc., Complete as per Standard Specifications.	1m3 (One Cubic meter)

59	1.00	E	Supply and fixing of 2000 lit HDPE Tank ISI make with all accessories such as Tank Nipple, Washer etc,including cost and conveyance of all materials to site etc, complete as per standard specifications. TWAD page No ; 85	1 NO (One Number)
60	4.00	m3	Plain Cement Concrete 1:1.5:3 (one cement, one and half fine aggregates and three coarse aggregates) using 20mm size ISS HBG metal including cost and conveyance of all materials to site and including for the mixing, laying and labour charges etc., complete as per standard specification	1m3 (One Cubic meter)
61	69.00	m3	Providing and laying, spreading and compacting graded stone aggregate to Wet mix macadam 250mm thick specification including premixing the materials with water at OMC in mechannical mix plant carriage of mixed material by tipper to site laying in uniform layers with pavers in sub Base/Base course on wall prepared surface and compacting with vibratory roller to achieve the desired density including cost of material, labour charges, rentals for machinery, fuel and all other incidental charges etc., complete as per clause 406 of MORTH.	1m3 (One Cubic meter)

62	455.00	m2	Supplying and laying Precast Designer Paver Block confirming to IS 1568-2006 specification manufacturing and laying standard of M50 grade 63mm thick (table clauses 5 and 9.14) suitable for bus terminals industrial complexes road on expensive soils etc., including the cost of paver block of size 225mm x 12.50 mm x 80mm and conveyance of materials to work site mentioned in the tender schedule cost of loading and unloading handling during over sand bed of 150mm thick (excluding the cost of sand) conveyance paver block cutter to site and hire charges of vibrators and block cutter operator and labour for leveling the sand to paver block etc., complete ISI 15658-2006.	1m2 (One Square meter)	
63	77.00	Е	Wiring with 2 x 1.5 sqmm (22 /0.3) PVC insulated single core unsheathed copper conductor cable of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories inflush with wall with 3mm thick hylum sheet cover with TW switch box and 5A F.T. switch with continuous earth wire connection of 14 SWG TC wire for making good of the concealed portion with suitable colour for PVC concealed light point / Fan point (For Electronic regulator). etc, complete as per standard specifications. SD 23	1 NO (One Number)	

64	10.00	Е	Wiring with 2 x 1.5 sqmm (22 /0.3) PVC insulated single core unsheathed copper conductor cable of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories inflush with wall with 150 x 100 x 113 mm TW switch box with 3mm hylum sheet cover for 5A 3 pin non inter locking CS plug with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour for concealed PVC plug point.etc, complete as per standard specifications SD 38	1 NO (One Number)
65	15.00	Rm	Supply and run of 2 of 1.5 sqmm (22/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour.etc, complete as per standard specifications SD 54	1 RM(One Running Metre)
66	47.00	E	Supply and fixing of 4 feet LED fitting 20w light LED fitting LED completed as per specification S.I No 15(b) lower end rate and condensor with TW round blocks on wall or ceiling with PVC unsheathed copper leads from terminals to the fitting etc, complete as per standard specification SD 87	1 NO (One Number)
67	2.00	Е	Earthing as per P.W.D. standard with an earth electrode of 2Mtr. Class 'B' GI pipe of dia not less than 32mm complete with necessary masonry work. etc, complete as per standard specifications SD 234	1 NO (One Number)

68	2.00	Е	Supply and fixing of 3 phase 4 wire 4 way ICDB of 32 A per way with 100 A TPN MC switch with suitable trunking box Ms cable entry boxes and internal connection on suitable angle iron frame work with earth connection etc, complete as per standard specifications SD. 175	1 NO (One Number)
69	3.00	E	Supply and fixing of Horizontal type 4 way triple pole neutral MCB distribution board in sheet steel enclosure with 40 A 4 pole MCB isolater as incoming and 12 Nos. 6A to 32 A SP MCB as outgoing in flush with wall and making good of the concealed portion with earth connection. The MCBDB and MCB's should be with the ISI mark etc, complete as per standard specifications SD.179	1 NO (One Number)
70	45.00	Е	Supply and run of 2 of No.8 SWG GI wire for guarding with cradle with No.8 SWG GI wire at the equal interval of 1.5m etc, complete as per standard specifications SD.75	1 NO (One Number)
71	45.00	Е	Supply and run of 4 X 6 sq.mm (84/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V grade on 7/20 Gl bearer wire for service connection mains etc, complete as per standard specifications.SD 68	1 NO(One Number)
72	4.00	Е	Supply and fixing of 300mm (12") sweep AC exhaust fan complete with necessary wall opening and making good of the wall.etc, complete as per standard specifications. SD 115	1 NO (One Number)

73	5.00	Е	Wiring with 2 x 4sqmm (56 /0.3) PVC insulated single core unsheathed copper conductor cable of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with PVC accessories inflush with wall with 150 x 100 x 113 mm TW switch box with 3mm hylum sheet cover for 15A 3 pin non inter locking CS plug with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour for concealed PVC power plug point. etc, complete as per standard specifications. SD 40	1 NO (One Number)
74	50.00	Rm	Supplying and laying of PVC insulated, PVC sheathed, armoured, LTUG cable of size 2 core 10 sqmm Al.cable clamped on walls (SD 210)	1 RM (One Running Metre)
75	2.00	Е	Supplying and fixng of cable gland and termination with earth connection of size 2 core 10 sqmm etc, complete as per standard specification. (SD 182)	1 NO (One Number)
76	2.00	Е	Supply and fixing of TNEB Board suitable for 3 Phases 63A service connection made up of suitable angle iron frame work of size 2 feet x 1 1/2 feet using angle iron of size 1 1/2" x 1 1/2" x 1/4" rigidly fixed on wall covered with hylem sheet of size 2 feet x 1/2 feet of 6mm thickness with necessary bolts and nuts supports and supply and fixing of 3 Nos 63A fuse units(500V) 1 No. Neutral link, copper earth flat of size 1" x 1/4" with inter connection of EB meter to fuse units by 7/16 PVC insulated copper wire with earth connection complete.SD 129	1 NO(One Number)

77	2.00	Е	Supply and fixing of 32 A TPN MC switch on incoming and 3 Nos 32 A DPMC Switch (Front Handle) as outgoing with suitable adoptor box with suitable MS cable entry box trunking boxes and internal connections on internal connections on suitable AI frame work with earth connection etc, complete.SD 172	1 NO (One Number)
78	2.00	E	Supply and fixing of 3 phase 4 wire 4 way ICDB of 16 A per way with 32 A TPN MC switch with suitable MS cable entry boxes trunking box and internal connections on suitable angle iron frame work with PWD earthing etc, complete.SD 173	1 NO (One Number)
79	2.00	E	Earthing as per the ISI specification with an earth electrode of 2.1mt class 'B' GI pipe of dia not less than 40mm, with copper earth plate of size 125mm x 50mm x 6mm, with necessary funneling arrangements with necessary masonry work and with 38mm RCC cover slab for the brick masonry . SD 233	1 NO (One Number)
80	50.00	Е	Supply and run of 2 of 4sqmm (56/0.3) PVC insulated SC unsheathed Cu.Conductor of 1100V Grade in suitable PVC rigid pipe concealed in wall and ceiling with continuous earth wire connection of 14SWG Cu wireand making good of the concealed portion with suitable colour(SD57)	1 NO (One Number)
81	30.00	E	Supplying and Laying of 3 ¹ / ₂ x 50 sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 M putting 0.15 M layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good. [SD 200]	1 NO(One Number)

82	15.00	Е	Supplying of 4 x 10 sq.mm PVC armoured LTUG cable in a trench to be excavated at a depth of 0.75 M putting 0.15 M layer of sand and covering the cable completely with bricks and sand and refilling the earth to make good. [SD 196]	1 NO (One Number)
83	2.00	Е	Supplying and fixing of 1200mm (48") sweep AC ceiling fan complete with regulator with 1M down rod including S & F of fan clamp with side plates and cross arm etc, complete as per standard specifications SD 107	1 NO (One Number)
84	1.00	E	Brick Lining for 300mm thick in furance roof Fibre Li 2800L X 900W X 700H in mmning chamber size, Door operation : Up & Down movement manual operated max operating temparature : 700- 900 Dec Celsius. Etc, complete.	1 NO (One Number)
85	1.00	Е	LPG Burner set with LPG Bank \$ Control Panel: Supply of 4 Nos, 5 Burner with Blower and Fully auto control system like 0,000 Kcal Capacity LPG Fired Ignition, Flame sensor and Auto cut off incorperated in a separate sequence contoller equivalent to Imported Contol system for air and LPG with auto Igniting system and supply of 20 + 20 cylinder bank with pipeline from LPg cylinder bank up to each Burner end by using TATA "c" class grate material pipe with required material etc, complete	1 NO (One Number)
86	1.00	Е	3 hp motor 2no.for use to Id fan & 1hp motor use for wet scrubber Wet Scrubber for gas cleaning system: The system should be enhanced with Stainless steel cylinder and SS ID fan (3hp motor x 2nos. With ISI standard) to avoid rusting, Volume of water should be increased for effective scrubbing.	1 NO (One Number)

87	1.00	Е	Guy Supported Chimney: This is a Cylindrical type MS IS - 2062 quality, 8MM Plate Chimney With two coasted of aluminium Heat Resistance Paint Exrernally, 7000 mm, Long Bottom Cylindrical Chimney. It is Rested on 16mm type MS IS - 2062 Qyality (100 feet Thick Base Flange and Stool Flange 16mm Thick with 12mm Gusset Support, Cylindrical Chimney Mounted on foundation 12nos x 25mm Dia Bolt, Nut Joints, Top 1 Cylindrical Shell Boiler Quality 8mm Plate x 7000mm long base chimney. It is Rested 50mm width base Flange & wind forece curtain MS Flat Set, with Lightening arrestor 25mm x 3mm copper flat earthing, with easy hinges type manual opened manhole door, necessary for pollution control board monitoringm sample ports arrangment ladder assembly with safety guard set 70 feet full height, one sets of detachable platform, over all size: 800mm Dia x 400mm Dia x 21000mm length with necessary all arrangements etc., complete			1 NO(One Number)	
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