



Tamil Nadu Police Housing Corporation Limited
(A Government of Tamil Nadu Undertaking)
(An ISO 9001: 2015 Certified Company)
No. 132, E. V. R. Salai, Kilpauk, Chennai – 600 010.



Lr. No. CE/Plg/F&RS/4284/2022

Dated:28.09.2022

To

The Director,
Tamil Nadu Fire & Rescue Services Dept.,
No. 17, Rukmani Lakshmipathy Salai,
Egmore, Chennai - 600 008.

Sir,

Sub: TNPHC–Fire & Rescue Service department - Announcement made by the Hon'ble Chief Minister of Tamil Nadu on 10.05.2022 - Construction of 40 Firemen quarters at Perumbakkam in Chengalpattu District - Detailed estimate proposal - Sent – Approval requested – Regarding.

Ref: 1. Hon'ble CM Announcement during Budget demand on 10.05.2022.
2. Director/F&RS/Ch C. No: 8361/E3/2022, Dated: 07.07.2022.
3. G.O. Ms.No.475 Home (Pol. X) Dept, Dated:09.11.2021.

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It is informed that the Hon'ble Chief Minister of Tamil Nadu during Budget Demand on 10.05.2022 has made an announcement that 40 Nos of Firemen quarters at Perumbakkam in Chengalpattu District will be constructed at a cost of ₹1520.00 lakhs.

Subsequently, the Director/F&RS vide ref. 2nd cited has requested to send the detailed estimate for the above work for getting administrative and financial sanction from the Government.

Accordingly, the detailed estimate is prepared and enclosed herewith. The detailed estimate, new type design and tentative layout are enclosed herewith.

Sl. No	Name of Work	Amount ₹ in lakhs	Remarks
1.	Construction of 40 Nos of Firemen quarters at Perumbakkam in Chengalpattu District	1691.00	1.The land is identified in S.No.520,521, No:11, Perumbakkam Village, Tambaram Taluk, Chengalpattu District having a total extent of 31000 Sqm. 2.The District Collector/Chengalpattu District has issued enter upon permission in the name of F&RS Department. 3. The land comes under primary residential zone. 4.The site is feasible for construction.

In this regard, the following details are furnished.

- The detailed estimate is prepared based on PWD schedule of rates for the year 2022-2023 for the increased plinth area of 750 sq ft as per G.O. 3rd cited and works out to ₹1691.00 lakhs which exceeds the announcement amount by ₹171.00 lakhs.
- The excess amount is due to the following reasons:
 - Initially the rough cost estimate for the construction of 40 Firemen quarters at Perumbakkam in Chengalpattu District was sent by TNPHC officials for ₹1520.00 lakhs based on PWD plinth area rates for the year 2021-2022. Now the PWD schedule of rates has been revised for the year 2022-2023.
 - Further, the estimate is prepared for the basic needs and essential items which are mandatory to complete the project in full shape.

Hence it is requested that necessary administrative and financial sanction for **₹1691.00 lakhs** against the announcement amount of ₹1520.00 lakhs may be obtained from the Government and communicated to us to proceed further in this regard.

Encl: Detailed estimate- 1set

28/9/2022
Chief Engineer(i/c)
28/9

GENERAL ABSTRACT

NAME OF WORK: Construction of 40 Nos. of Firemen quarters (Stilt + 5 floors) at Perumbakkam Chengalpet District.

SL. No	QTY	DESCRIPTION	RATE	Unit	Amount
		MAIN WORKS			
1	1.00	40 Nos. Fire man PC/HC quarters (Stilt + 5 floors)	100531755.25	1 unit	100531755.25
		Development works			
			SUB - TOTAL - I Rs.		100531755.25
2	1.00	RCC circular sump	1622546.12	1 unit	1622546.12
3	1.00	Cement Concrete Road	2159864.96	1 unit	2159864.96
4	1.00	compound wall	525970.40	1 unit	525970.40
5	1.00	Lift	10360989.60	1 unit	10360989.60
6	1.00	Genset	1232346.56	1 unit	1232346.56
7	1.00	External and internal Electrical	1897844.85	1 unit	1897844.85
8	1.00	Panel board & Lightening arrester	1078254.80	1 unit	1078254.80
9	1.00	Borewell	651068.40	1 unit	651068.40
10	1.00	External water supply	865340.62	1 unit	865340.62
11	1.00	Paver block & Rain water harvesting	959604.57	1 unit	959604.57
12	1.00	Street light	400262.80	1 unit	400262.80
13	1.00	Lettering & Numbering	229260.00	1 unit	229260.00
14	1.00	Fire fighting and Column Guard	3662650.00	1 unit	3662650.00
			SUB - TOTAL - II Rs.		126177758.93
15		GST at 18.0% (GST at 9% + CGST 9%)			22711996.61
			SUB - TOTAL - III Rs.		148889755.54
16		Labour Welfare fund @ 1%	L.S		1261777.59
17		Provision for Unforeseen tems,Contingencies and petty supervision charges at 2.5 %	L.S		3722243.89
18		Supervision Charges @ 5%	L.S		7444487.78
		Price escalation Charges @ 5%	L.S		7444487.78
19		For the year 2022-2023	SUB - TOTAL - IV Rs.		168762752.58
20		Surveying of boundires and demarking of blocks etc	L.S		50000.00
21		Soil Investigation charges	L.S		50000.00

SL. No	QTY	DESCRIPTION	RATE	Unit	Amount
22		Structural design and consultancy charges	L.S		75000.00
23		Provision for consultancy charges for Fire Fighting arrangements	L.S		40000.00
24		Provision for consultancy charges for electrical arrangements	L.S		45000.00
25		Providing Foundation stone laying and inaugural function	As per PWD norms		13000.00
26		Advertisement charges for Tenders	LS		50000.00
GRAND TOTAL Rs.					169085752.58
SAY				16.91	Crores

[Signature]
Chief Engineer (i/c)

26/2/19

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**Name of Work:-Construction of 40 Nos.of Firemen quarters (Stilt + 5 floors) at Perumbakkam
Chengalpet District.**

ABSTRACT

Sl. No.	Qty	Description	Rate	Unit	Amount
1.1		Earth work excavation in all soils (including refilling)			
	1063.440	a. 0 to 2 mt.	247.31	Cum.	262999.35
	478.000	b. 2 to 3 mt.	258.53	Cum.	123577.34
1.5		Earth work excavation for Open foundation (excluding refilling)			
	386.000	a. 0 to 2 mt.	116.88	Cum.	45115.68
	78.500	b. 2 to 3 mt.	128.10	Cum.	10055.85
2.1	165.320	Filling C.S. sand	1520.94	Cum.	251441.80
3.1	80.000	C.C.1:5:10 for Foundation & Basement	4833.22	Cum.	386657.60
3.2	273.230	P.C.C. 1:2:4 for Foundation & Basement and other similar works	6452.29	Cum.	1762959.20
6.2	158.000	Brick work in C.M. 1:5 (F& B) using chamber Burnt bricks of size 23 x 11.4 x 7.5 cm (9" x 4 1/2"x 3")	6795.12	Cum.	1073628.96
7.2	59.850	Supply and fixing of Bituminous filler pad , 20 mm tk. for expansion joint	719.00	Sqm.	43032.15
9.2		Brick work in C.M. 1:6 using chamber Burnt bricks of size 23 x 11.4 x 7.5 cm (9" x 4 1/2"x 3")			
	149.980	a. In Ground Floor/Stilt floor	6863.88	Cum.	1029444.72
	178.000	b. In First Floor	7029.87	Cum.	1251316.86
	178.000	c. In Second Floor	7195.86	Cum.	1280863.08
	178.000	d. In Third Floor	7361.85	Cum.	1310409.30
	178.000	e. In Fourth Floor	7527.84	Cum.	1339955.52
	188.000	f. In Fifth floor	7693.83	Cum.	1446440.04
	60.000	g. In sixth floor	7859.82	Cum.	471589.20
10.2		Brick partition work in C.M. 1:4 using chamber Burnt bricks of size 23 x 11.4 x 7.5 cm (9" x 4 1/2"x 3") 114 mm tk (B.P.)			
	34.000	b. In Ground Floor/stilt floor	868.28	Sqm.	29521.52
	375.000	c. In First Floor	887.20	Sqm.	332700.00
	375.000	d. In Second Floor	906.12	Sqm.	339795.00
	375.000	e. In Third Floor	925.04	Sqm.	346890.00
	375.000	f. In Fourth Floor	943.96	Sqm.	353985.00
	747.000	f. In Fifth floor	962.88	Sqm.	719271.36
11.2		Brick work in C.M. 1:4 using chamber Burnt bricks of size 23 x 11.4 x 7.5 cm (9" x 4 1/2"x 3") 75 mm tk (B.P.)			
	140.000	b. In First Floor	619.32	Sqm.	86704.80
	140.000	c. In Second Floor	631.77	Sqm.	88447.80
	140.000	d. In Third Floor	644.22	Sqm.	90190.80
	140.000	e. In Fourth Floor	656.67	Sqm.	91933.80

Sl. No.	Qty	Description	Rate	Unit	Amount
	140.000	f. In Fifth Floor	669.12	Sqm.	93676.80
12.1		Brick partition in C.M. 1:4 using country bricks of size 22 x11x5cm 50 mm thick			
	6.000	a. In Ground Floor	411.94	Sqm.	2471.64
	5.000	b. In First Floor	420.24	Sqm.	2101.20
	5.000	c. In Second Floor	428.54	Sqm.	2142.70
	5.000	d. In Third Floor	436.84	Sqm.	2184.20
	5.000	e. In Fourth Floor	445.14	Sqm.	2225.70
	12.000	f. In Fifth Floor	453.44	Sqm.	5441.28
13.1	16.490	Filling with Excavated Earth	40.65	Cum.	670.32
14.1		Cuddappa slab 20 mm tk.			
	2.000	a. In Ground floor	563.35	Sqm.	1126.70
	92.500	b. In First floor	568.27	Sqm.	52564.98
	92.500	c. In Second floor	573.19	Sqm.	53020.08
	92.500	d. In Third floor	578.11	Sqm.	53475.18
	92.500	e. In Fourth floor	583.03	Sqm.	53930.28
	92.500	e. In Fifth floor	587.95	Sqm.	54385.38
15.2		Cuddappa slab 40 mm tk.			
	1.000	a. In Ground floor	597.15	Sqm.	597.15
	32.000	b. In First floor	607.00	Sqm.	19424.00
	32.000	c. In Second floor	616.85	Sqm.	19739.20
	32.000	d. In Third floor	626.70	Sqm.	20054.40
	32.000	e. In Fourth floor	636.55	Sqm.	20369.60
	32.000	f. In Fifth floor	646.40	Sqm.	20684.80
16.1		Precast Jally ventilator 50mm tk.			
	4.000	a. In Ground Floor	3075.00	Sqm.	12300.00
	172.000	Granular Sub-base with Graded Material (Table:- 400-1) - Plant Mix Method (Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete - for Grading V Material as per MORT&H Rev. V specifications No.111,112,401,900.	1572.15	Cum.	270409.80
	172.000	Wet Mix Macadam (Table 400-13) (Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density, Complete as per MORTH Rev. V Specification	1864.04	Cum.	320614.88
21.2		Teak wood Wrought & Put up			

Sl. No.	Qty	Description	Rate	Unit	Amount
	5.103	a. T.W. over 2 m & below 3 m	125878.00	Cum.	642355.43
	2.138	b. T.W. below 2 m length.	113678.00	Cum.	243043.56
21.3	130.000	PVC Door frame & shutter	3325.00	Sqm.	432250.00
22.3	198.000	T.W. double leaf shutters for cup board/ ward robes	4319.00	Sqm.	855162.00
23.3	162.000	S&F of Magnetic door catches	52.00	Each	8424.00
25.0	652.000	M.S.Holdfast	9.60	Each	6259.20
26.0	78.180	Flooring in C.C.1:5:10	4833.22	Cum.	377861.14
27.1	1.000	B.w. in C.M. 1:4 for staircase steps Chamber burnt bricks 23 x 11.2 x 7 cm.	7418.60	Cum.	7418.60
28.0	199.000	Floor plastering in C.M. 1:4, 20 mm tk.	529.75	Sqm.	105420.25
30.0	307.620	Ellispattern	459.80	Sqm.	141443.68
31.0	52.000	Weathering course	3805.61	Cum.	197891.72
33.0	18466.890	Plastering in C.M. 1:5, 12 mm tk.	259.48	Sqm.	4791788.62
34.0	163.000	Plastering in C.M. 1:4, 12 mm tk.	266.00	Sqm.	43358.00
35.0	6464.240	Spl. Ceiling plastering in C.M. 1:3, 10 mm tk.	298.75	Sqm.	1931191.70
36.0		Cement mortar Border in C.M. 1:5, 12 mm tk.			
	188.000	a. 150 mm wide	83.61	Rmt	15718.68
	679.000	b. 75 mm wide	54.52	Rmt	37019.08
	246.000	c. 50 mm wide	40.60	Rmt	9987.60
37.1	3748.000	White washing 3 coats (slaked)	47.21	Sqm.	176943.08
39.0	18099.000	M.s Grills	70.15	Kg.	1269644.85
40.0	600.000	Painting - New "wood work"	240.31	Sqm.	144186.00
41.0	879.000	Painting - New "iron work"	142.15	Sqm.	124949.85
45.0	29.000	Stucco plastering 12 mm tk.	328.29	Sqm.	9520.41
46.0	82.000	S & F 20 mm dia Alu. Hanger Rod	58.00	Rmt	4756.00
47.0	82.000	S & F Alu Towel rail 75 cm long	95.00	Each	7790.00
48.0	82.000	S & F 5 pin Coat stand	55.00	Each	4510.00
49.0	644.000	S & F chromium plated 8 guage Picture Hook	1.50	Each	966.00
50.1		Precast slab 50 mm tk.in C.C. 1:3:6		Sqm.	
50.2	399.000	Providing precast Kerb stone in C.C. 1:3:6, 450 x 300 x 150 mm	264.42	Rmt	105503.58
50.3	40.000	Supply and planting avenue trees	364.59	Each	14583.60
50.4	40.000	Providing Tree guard	903.38	Each	36135.20

Sl. No.	Qty	Description	Rate	Unit	Amount
50.5	1.000	Supplying, Fabricating and erection of M.S Scheme Name board	19473.21	Each	19473.21
52.0		PVC Water supply (ASTM)			
	1627.000	a. 32 mm dia	259.34	Rmt	421946.18
	296.800	b. 25 mm dia	241.73	Rmt	71745.46
	84.000	c. 20 mm dia	236.95	Rmt	19903.80
52.1	240.000	G.I Pipe 20mm dia for Hot water line (Fully Concealed in walls)	318.87	Rmt	76528.80
53.1	82.000	Wash basin	3406.02	Each	279293.64
53.3	59.000	C.I. Steps (5 kg)	30.00	Each	1770.00
54	120.000	Brass tap (with ISI mark)	206.00	Each	24720.00
56.1	2.000	S & F of Orissapan - in G.F.	3409.98	Each	6819.96
56.2	40.000	S & F of Orissapan - other than G.F.	5305.96	Each	212238.40
57	40.000	S & F of E.W.C.(white)	7252.85	Each	290114.00
59.2	24.000	Gully Trap using chamber burnt bricks of size 23x11.4x7.5cm	2063.68	Each	49528.32
60.0	244.000	PVC Nahani trap (4way/2way)	160.00	Each	39040.00
69.0	200.000	15 Amp. Power plug	135.00	Each	27000.00
72.0	290.000	Box type Fibre Fan hook	33.90	Each	9831.00
74.0	170.000	Charges for fixing of "Fan"	571.20	Each	97104.00
		Street Light			
	3.000	Supply and erection of hot dip galvanized 7.0 mtrs. Free standing Double Arm bracket 8 sided octogonally continuously tapered structure pole as per IS-875 with following provisions. CER No.29/2021-2022	34902.50	Nos	104707.50
	4.000	Supply and fixing of 80W LED street light luminaire complete on 7.0 Mtrs. octagonal pole including supply and fixing of lamp . The sample luminaire shall be got approval by the officials of the TNPSC	11890.00	Nos	47560.00
	3.000	Coil earth to street light poles with No.8 SWG GI wire of 11.5 mtrs of length in which 10 mtrs of total length compressed in to a coil of one meter length (75 mm to 100 mm dia) connected suitable with hexagonal earth bolt of size 8 mm in to 25 mm welded on the pole at one end with a coil position fixed on the earth. SD-74	245.00	Rmt	735.00
76.0	150.000	8 SWG wire	26.29	Rmt	3943.50
77.3	80.000	S&F of TV/Telephone line Socket	77.01	Each	6160.80
77.4	1156.000	S&F of 20mm dia PVC pipe for TV/Telephone line	87.66	Rmt	101334.96
78.0	26.000	Earthing Station IS3043 (Type I)	2921.60	Each	75961.60
78.a	344.000	Supply and run of 2 of No.8 copper wire for earth connections. Data M (CER.No.110/2020-21)	156.00	Rmt	53664.00

Sl. No.	Qty	Description Page 5	Rate	Unit	Amount
	3.000	Supply and fixing of SMC fuse box (IP 65 rating) containing 1 No. 32 A 4 way terminal block, 1 No. 10 A, 10 KA TPN MCB with suitable clamps fixed to the pole with lockable arrangements iron supports with necessary earth connections for controlling the flood lights on the poles Including cost of timer, contactor and necessary interconnection with 4sqmm opper wire labour charegs for fixing in all etc . CER No.29/2021-2022	3151.50	Nos	9454.50
	3.000	Supply and erection of 63 Amps capacity floor mounting panel board (Cubical type) with bus bar chamber made up of 14/16 SWG MS sheet for 3 phase 4 wire system with 20mm x 3mm tin coated copper flats for phases and neutral; cable chamber, switch chamber and with 2 Nos. 25mmx3mm tinned copper flat for the earth bus on the rear side of the panel board; necessary interconnections by copper flat of suitable sizes; suitable PVC colour sleeves for the interconnecting copper flats / rigid copper wire; earth connections to all swithces / bus bar by copper flats of suitable sizes from the earth bus; hylam sheet separation between bus bar and swithces; 1set LED pilot lamps with switches, fuse units, suitable angle iron frame size of 40mmx 40mmx 6mm with powder coated painting over one coat of red primer and with numbering; superscription of cables sizes, capacity of switches etc and incorporating the following:	46526.00	Nos	139578.00
		CER No.29/2021-2022			
	15.000	supply and fixing of 40 mm dia GI pipe fixed to the octagonal street light pole with MS clamps up to the fuse box in the pole for the drawal of 4 core 16 sqmm / 25 sqmm Al. cable. . CER No.29/2021-2022	555.00	Nos	8325.00
		Supply and laying of cables of following sizes in a trench to be excavated at a depth of 0.75 metre putting 0.15 metre layer of sand and covering the cab;le completely with bricks and sand and refilling the earth to make good			
	105.000	a) 3.5 c x 25 sq mm aluminium PVC / XLPE armoured cable SD-204	551.00	Rmt	57855.00
	45.000	b) 4 c x 16 sq mm aluminium PVC / XLPE armoured cable SD-203	487.00	Rmt	21915.00
	81.000	c) 4 c x 10 Sq mm aluminium PVC / XLPE armoured cable . SD-202	443.00	Rmt	35883.00
	75.000	d) 2c x 10 Sq mm aluminium PVC / XLPE armoured cable . SD-198	423.00	Rmt	31725.00
		Supply and providing cable galnd of following sizes of XLPE armoured LTUG Aluminium cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete			
	65.000	a) 3.5 c x 25 sq mm aluminium PVC / XLPE armoured cable glandSD-186	407.00	Nos	26455.00
	6.000	b) 4 c x 16 sq mm aluminium PVC / XLPE armoured cable gland-SD-183	282.00	Nos	1692.00
	86.000	c) 4 c x 10 Sq mm aluminium PVC / XLPE armoured cable gland SD-184	290.00	Nos	24940.00
	47.000	d) 2c x 10 Sq mm aluminium PVC / XLPE armoured cable gland SD-182	269.00	Nos	12643.00

Sl. No.	Qty	Description Page 6	Rate	Unit	Amount
		Supply and providing cable end termination of following sizes of XLPE armoured LTUG Aluminium cable with necessary aluminium cable sockets by crimping etc. with electrical			
	74.000	a) 3.5 c x 25 sq mm aluminium PVC / XLPE armoured cable end termination SD-235	320.00	Nos	23680.00
	12.000	b) 4 c x 16 sq mm aluminium PVC / XLPE armoured cable end termination-SD-236	350.00	Nos	4200.00
	92.000	c) 4 c x 10 Sq mm aluminium PVC / XLPE armoured cable end termination SD-237	290.00	Nos	26680.00
	14.000	d) 2 c x 10 Sq mm aluminium PVC / XLPE armoured cable end termination	160.00	Nos	2240.00
86.0	800.000	Anti termite treatment	34.00	Sqm.	27200.00
112.0	40.000	S & F of Exsaust Fan 300 mm dia	2336.00	Each	93440.00
238.0	248.283	Anticorrosive treatment for steel grills	4755.50	MT	1180709.81
4.1.1		Standardised concrete Mix M30 Grade Concrete			
	430.000	a. In Foundation and basement	8458.03	Cum	3636952.90
	202.000	b. In Ground Floor	8582.99	Cum	1733763.98
	213.850	c. In First Floor	8829.17	Cum	1888118.00
	213.850	d. In Second Floor	9075.35	Cum	1940763.60
	213.850	e. In Third floor	9321.53	Cum	1993409.19
	213.850	f. In Fourth Floor	9567.71	Cum	2046054.78
	196.000	g.In fifth floor	9813.89	Cum	1923522.44
	206.000	h.In sixth floor	10060.07	Cum	2072374.42
	622.040	Supplying and filling stone dust	333.45	Cum.	207419.24
	382.000	Plastering with CM 1:3, 12mm with WPC	286.21	Sqm	109332.22
18.1		Formwork using M.S.Sheet			
	1043.530	a.For Column footings,plinth beam,Grade beam,Raftbeam,Raft slab etc.,	881.39	Sqm	919756.91
	7327.680	b.Plain surfaces such as Roof slab,floorslab,Beams,lintels,lofts,sill slab,staircase,portico slab and other similar works	982.08	Sqm	7196367.97
	1967.520	c.For Square and rectangular columns and small quantities	1178.50	Sqm	2318722.32
	1259.000	d.Vertical wall	1080.29	Sqm	1360085.11
	134.000	f.Curved surface	1473.12	Sqm	197398.08
21.6		R.C.C.Door frames of size 100 x 75mm with one edge grooves size 't' x 20 mm using M30 grade (with out vibrating charges)			
		a. 900 x 2100 mm	2858.96	Each	

Sl. No.	Qty	Description	Rate	Unit	Amount
		c. 1200 x 2100 mm	3402.27	Each	
		c. 1000 x 2100 mm	2880.89	Each	
		d. 750 x 2100 mm	2821.40	Each	
		Teak wood "Window" & Ventilator Shutter with 4mm thick pin headed glasses			
		a. Window: 135 cm ht.	3659.42	Sqm.	
		b. Window: 120 cm ht.		Sqm.	
		c. Window: 105 cm ht.	3858.29	Sqm.	
		d. Ventilator: (90 x 60 cm)	2856.35	Sqm.	
		d. Ventilator: (75 x 75 cm)	2203.28	Sqm.	
22.3.2		MDF board (18mm thick) double leaf shutters with TW frame for cup board/ ward robes.	2208.35	Sqm	
		T.W. frame & TW styles & rails with BWR double leaf shutters for cup board/ ward robes including two coat enamel paint & one coat primer.	4319.62	Sqm	
22.8		MDF board door shutters (35mm thick) exterior grade both side laminated with external lipping.			
		a. 1000X2100mm.	2796.03	Sqm	
		b. 900X2100mm.	2841.95	Sqm	
		c.1200X2100mm.		Sqm	
		TW panelled single door shutter without brass fittings.			
	72.900	1000X2100mm without Brass fittings-(Single leaf)	5112.27	Sqm	372684.48
29.8	859.000	Glazed tiles using Grout (Tile Joint Filler), C.M 1:2, 10mm tk	1417.06	Sqm	1217254.54
29.9	210.000	Floor ceramic tiles (Anti-skid) using Grout (Tile Joint Filler).	1391.53	Sqm	292221.30
38.6	11225.000	One coat white cement for new walls and other similar works.	64.16	Sqm	720196.00
43.0	248.283	Fabrication of Mild steel / RTS grills (without cement slurry) for all sizes of rods.	90322.80	MT	22425615.75
44.6	230.330	PVC SWR 110 mm dia with ISI mark type- A for Rain water down fall pipe	353.71	Rmt	81470.02
52.4	891.020	20mm dia PVC water supply ASTM pipe (fully consealed in walls)	238.94	Rmt	212900.32
53.4	44.000	S&F of C.I Manhole cover 60 x 60 cm (50kg weight)	1864.00	Each	82016.00
58.3		PVC SWR pipe (Soil line) with ISI mark - type 'B'.			
	1042.000	a. 110 mm dia.	735.27	Rmt	766151.34
	820.000	b. 75 mm dia.	617.97	Rmt	506735.40
58.4	524.000	Supplying, Laying & Concealing the 50mm dia PVC (SWR) pipe with ISI mark type - 'B' with relevant specials.	120.10	Rmt	62932.40

Sl. No.	Qty	Description Page 8	Rate	Unit	Amount
		Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990. (PVC Box , Fire Retarded Box) For Coastal only			
	447.000	a. Light point with ceiling rose	1618.00	Each	723246.00
	410.000	b. Light point without ceiling rose	1619.00	Each	663790.00
	40.000	c. Calling bell point with Buzzer/Calling bell	1649.00	Each	65960.00
65.1	165.000	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990 for Fan point.(PVC Electrical Box)	1672.00	Each	275880.00
66.1	39.000	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990 for Staircase Light Point.(PVC Electrical Box)	3034.39	Each	118341.21
	287.000	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990 for 5 amps 5 pin plug socket point @ Switch Board Itself.	830.16	Each	238255.92
68.2	405.000	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990 for 5 amps 5 pin plug socket point @ Convenient Places.(PVC Electrical Box)	1119.90	Each	453559.50
	170.000	Supply and delivery of 48" (1200 mm) Fan with ISI mark with Eletronic Dimmer	1552.70	Each	263959.00
	240.000	Run of 2 Wires of 4 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990.	266.00	Rmt	63840.00
	1480.000	Run of 2 Wires of 2.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark confirming IS: 694:1990.	226.00	Rmt	334480.00
	120.000	4 x 4 Sq mm copper PVC insulated unsheathed single core cable for 3 phase EB service connection	271.08	Rmt	32529.60
44.2		Rain water harvesting using defunct borewell and providing perforated cover slab			
	16.000	a). Providing pit	2107.68	Each	33722.88
	102.000	b) Augering 30cm dia	503.19	Rmt	51325.38
	16.000	Providing Rain water Harvesting well ring of circular shape of 1m dia, 60cm depth (30cm depth 2 Nos), 50mm thickness using Standardised concrete mix M30 including cost steel fabrication, labour charges, cost of material moulding, curing and hire charges for tools and plants etc., all complete and as directed by the departmental officers.	757.44	Nos	12119.04
344.2	82.000	S&F of Bevelled edge mirror 500 x 400 x 5.5mm	398.30	Each	32660.60
383	40.000	S&F of Cuddapah sink 600 x 600 x 200mm	1020.00	Each	40800.00

Sl. No.	Qty	Description	Rate	Unit	Amount
383.1	256.000	Providing single nosing to the edges of Granite slab [PWD SR]	195.70	Rmt	50099.20
384	40.000	S&F of PVC flushing cistern	1786.45	Each	71458.00
238.1	16.910	Anticorrosive treatment for window grills	2954.25	MT	49956.37
	6304.000	Plastic Emulsion PAINT including primer for outer walls (Two coat)	239.05	Sqm	1506971.20
		Painting with two coat of plastic Emulsion paint over one coat of smartcare primero Acrylic primer for superior quality etc. all complete.	245.16	Sqm	
38.4.1	11225.000	Two coat of OBD over one coat white cement for inner walls	130.34	Sqm	1463066.50
		Supplying & fixing of Stainless steel Hand Rails for Staircase.	5536.00	Sqm	
	189.000	Providing wooden Melamine polish for new wood work	1483.02	Sqm	280290.78
	144.980	Supply and Laying of Granite tile of 10mm thk (wall Cladding) in C.M 1:2 Incl. Cost of Materials, Labours etc., all Including (Ruby Red) for lift potion	1795.06	Sqm	260247.80
379.4	2583.000	Supplying and laying of Vertified Tiles (Ivory)	1564.81	sqm	4041904.23
s	842.240	Concrete designer tiles flooring	1516.02	Sqm	1276852.68
	267.000	Supplying and fixing of 100mm dia GI pipe	987.90	Rmt	263769.30
	82.000	Supplying and fixing of CP Angle valve Stop cock including cost of all materials and all labour charges etc complete	776.00	Each	63632.00
	278.300	Supplying and fixing of PVC corner beeding including cost of all materials, labour charges etc., all complete.	125.34	Rmt	34882.12
	48.000	Supplying and fixing in position of UPVC Ventilator louvered ventilator type for all sizes SR 2022-2023 p-66	8106.00	Sqm	389088.00
	454.000	Supplying and fixing in position of UPVC window of casement type(open) for all sizes SR 2022-2023 p-65	7482.00	Sqm	3396828.00
		Supplying and fixing of solid core flush door shutter of thickness 35mm			
	213.000	i. door size 0.900 m x 2.100 (Single Leaf)	3088.84	Sqm	657922.92
		S & F of Granite tile of size 2'x 1', 10mm Thick For (jet black)			
	20.000	b. In First floor	1119.47	Sqm	22389.40
	20.000	c. In Second floor	1121.93	Sqm	22438.60
	20.000	d. In Third floor	1123.88	Sqm	22477.60
	20.000	e. In Fourth floor	1125.83	Sqm	22516.60

Sl. No.	Qty	Description	Rate	Unit	Amount
	20.000	f. In Fifth floor	1130.75	Sqm	22615.00
	162.000	S & F of 15mm dia Engineering Polymer Tap (long body) for coastal area only	259.00	Each	41958.00
	82.000	S & F of 15mm dia Engineering Polymer Tap short body tap for coastal area only	248.00	Each	20336.00
	66.000	Supplying and delivery of "Godraj Nav-tal Ultra XL+" lock of approved quality etc., all complete as directed by the departmental officers (The Lock and key quality should be got approved by Executive Engineer before use) (Qtn)	814.02	Each	53725.32
	834.000	Finishing the top of Terrace floor with one course of solar reflective Ceramic tiles with base concrete	1723.24	Sqm.	1437182.16
	35.000	Supply and fixing of 80 mm dia UPVC Pipes of best approved quality, with ISI mark including cost of materials, specials, labour charges and conveyence and fixing in position etc., all complete in all respects complying with relevant standard specification and as directed by the departmental officer.Below GL TWAD SOR.P.No.24	502.50	Rmt	17587.50
	175.000	Supply and fixing of 65 mm dia UPVC Pipes of best approved quality, with ISI mark including cost of materials, specials, labour charges and conveyence and fixing in position etc., all complete in all respects complying with relevant standard specification and as directed by the departmental officer. TWAD SOR.P.No.24	356.00	Rmt	62300.00
		supplying and Fixing of following size GM gate valve as per IS Standard specification and as directed by the departmental officer.			
	4.000	a) 80mm dia Butterfly valve (Qtn)	3450.00	Nos	13800.00
	4.000	b) 80 mm G.M Non return valve TWAD SR 2022-2023 page No.45	4013.00	Nos	16052.00
	10.000	c) 65 mm dia GI union TWAD SR 2022-2023 page No.45	632.00	Nos	6320.00
	5.000	d) 65mm GM Wheel valve with Brass (Qtn)	4550.00	Nos	22750.00
	4.000	e) 40mm Non return valve for Borewell (Qtn)	3530.00	Nos	14120.00
	30.000	Supply and fixing of 40 mm dia UPVC pipe of best approved quality, with ISI mark including cost of materials, specials, labour charges and conveyence and fixing in position etc., all complete in all respects complying with relevant standard specification and as directed by the departmental officer. TWAD SR 2022-2023 page No.24	174.10	Rmt	5223.00

Sl. No.	Qty	Description Page 11	Rate	Unit	Amount
	80.000	Supply and fixing of 50mm dia UPVC Pipes of best approved quality, with ISI mark including cost of materials, specials, labour charges and conveyance and fixing in position etc., all complete in all respects complying with relevant standard specification and as directed by the departmental officer.(above GL)	381.86	Rmt	30548.80
	4.000	Supply and fixing of MS bore well clamp set of size 80mm best approved quality including cost of bolts, nuts, labour charges and conveyance etc., all complete. TWAD SR 2022-23 P.No.44	572.00	Nos	2288.00
	1213.590	Supply and Laying Rubber Moulded Hydraulic Pressed Paver Block 83 mm thick including labour charges for laying etc (as per DB/1469/2018)	648.88	M ²	787474.28
	86.000	Supply and fixing of 9 watts LED bulb (qtn)	135.00	Each	11610.00
	354.000	Supply and fixing of 4' 18 watts LED Tube Light	691.50	Each	244791.00
	76.000	Supply and fixing of Bulk Head fitting suitable for 12W LED Bulb	517.00	Each	39292.00
		Supply, fixing of 30W LED street light etc.,	4029.53	Each	
	76.000	Supply and fixing of 12 watts LED bulb (qtn)	170.00	Each	12920.00
	25.000	Supply and fixing of 25 W LED street light fitting with 19 mm dia pipe (class b) with 1 No. 19 mm GI bend complete on the existing post / wall with 16 A aerial fuse unit on MS plate with PVC unsheathed Cu, leads with MS clamps and aluminium painting with flu.tubes.	3366.53	Each	84163.25
		Providing one coat of Wallputty for new plastered surface	98.65	Sqm	
	1.000	Supply and erection of 125 Amps Capacity floor mounting panel board (Cubical type)	40500.00	Each	40500.00
	1.000	Supply and fixing of TNEB meter board suitable for 3 phases connection made up of suitable angle iron frame work of size 3 feet x 2 feet using angle iron size 1 1/2" x 1/4" rigidly fixed on wall covered with hylem sheety of size 3 feet of 12 mm thickness with necessary bolt and nuts supports and supply and fixing of 3 Nos 200 A fuse unit (500 V) 1 No. Neutral link copper earth flat of size 12' x 1/4 " with inter connection of EB meter to fuse unit by 25 sq mm PVC insulated copper wire with earth connection complete.- SD-131	8174.00	Each	8174.00
		Supply and laying of the following sizes of PVC / XLPE armoured aluminium LTUG cable in the trench to be excavated at a depth of 0.75 meter putting 0.15 mt. Layer of sand and covering the cable completely with brick and sand and refilling the earth to make good			
	90.000	i 3.5 c x 185 sq mm SD-211	1351.00	Rmt	121590.00

Sl. No.	Qty	Description	Rate	Unit	Amount
	3.000	ii 3.5 c x 120 sq mm SD-209	1044.00	Rmt	3132.00
		Supply and fixing of brass cable gland for the following sizes of PVC / XLPE armoured cables with earth connection.			
	12.000	i 3.5 c x 185 sq mm cable gland SD-193	666.00	Nos	7992.00
	8.000	ii 3.5 c x 120 sq mm cable gland SD-191	595.00	nos	4760.00
		Supply and providing cable end termination for the following sizes of PVC XLPE armoured LTUG Aluminium cable with necessary aluminium cable sockets by crimping etc. with electrical connection complete.			
	12.000	ii 3.5 c x 185 sq mm end termination SD - 242	539.00	Nos	6468.00
	8.000	ii 3.5 c x 120 sq mm end termination SD-240	509.00	Nos	4072.00
	40.000	Supply and fixing of MS cable box of suitable size on wall for the entry of 4 x 10 sqm / 3.5c x 25 sqm with cable gland suitable for the above size with earth connection.- CER No.189/2019-20	700.00	Nos	28000.00
	120.000	Supply and run of 25mm x 3mm copper flat from the earthing to the metering panels and also for interconnecting the earthings SD-76	467.00	Rmt	56040.00
	30.000	Supply and run of 25mm x 6mm copper flat from the earthing to the metering panels and also for interconnecting the earthings SD-77	880.00	Rmt	26400.00
	1.000	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, copper tube, having single prong at top, with 85 mm dia 3 mm thick copper base plate including holes etc. complete as required(- MR). CER No.189/2019-20	700.00	Nos	700.00
	1.000	Supply, installation, testing & commissioning of 100mm dia cast iron earth electrode with flange of 2.4 metre long buried in ground, including filling with Bentonite powder and RCC manual cover. MR CER No.189/2019-20	2500.00	Each	2500.00
	2.000	Supply and fixing of twin arm suitable for 100 W BC lamp / 6 W LED lamp type aviations lamp fitting with lamps on suitable 20 mm GI pipe on the parapet wall of the terrace of the building. CER No.189/2019-20	5354.00	Each	10708.00

Sl. No.	Qty	Description	Rate	Unit	Amount
	1.000	Supply and fixing of twin arm suitable for 100 W BC lamp / 6 W LED lamp type aviations lamp fitting with lamps on suitable 20 mm GI pipe on the parapet wall of the terrace of the building	72100.00	Each	72100.00
	7.000	Supply and run of 50 mm dia GI pipe on wall (B class) for the drawal of earth bus (25 mm x 3 mm) copper flat from the earth pit. The pipe shall be laid upto a height of 6 m from the ground level to avoid theft of copper. The earth bus shall be painted in green colour (From each earth pit a seperate run of size 25 mm x 3	250.00	Rmt	1750.00
	2.000	Preparation of necessary electrical drawings for approval by CEIG, submission of drawings for approval, arrange for the inspection of the Electrical Inspectorate officials and obtaining Safety Certificate for availing supply and commissioning the installations.	30000.00	Job	60000.00
	1.000	Supplying and fixing of Aluminium TNPHC Emblem of 30" height with approved coloured powder coat in finishing matt cost of materials necessary drilling holes, packing cement mortar, supporting the letter cement base bolts and fixing charges etc., complete and as directed by the departmental officers	8600.00	Nos	8600.00
	82.000	Supplying and fixing of Aluminium TNPHC Emblem of 12" height with approved coloured powder coat in finishing matt cost of materials necessary drilling holes, packing cement mortar, supporting the letter cement base bolts and fixing charges etc., complete and as directed by the departmental officers.	980.00	Nos	80360.00
	20.000	Supplying and fixing of 6" height Aluminium letters with approved coloured powder coat in finishing matt cost of materials necessary drilling holes, packing cement mortar, supporting the letter cement base bolts and fixing charges etc., complete and as directed by the departmental officers	600.00	Nos	12000.00
	240.000	Supplying and fixing of 5" dia plastic foam plate of 3mm thick with 3"height number with approved colours etc., complete and as directed by the departmental officers.	165.00	Nos	39600.00
	2.000	supply and fixing of 24"x 8" size plastic foam name plate with vinyl cutting letter with approved colours etc., complete and as directed by the departmental officers.	600.00	Nos	1200.00
	74.000	Supplying and fixing of 8" dia plastic foam plate of 3mm thick with 3"height number with approved colours etc., complete and as directed by the departmental officers.	350.00	Nos	25900.00
	176.000	supply and fixing of 20"x 5" size plastic foam name plate with vinyl cutting letter with approved colours etc., complete and as directed by the departmental officers	350.00	Nos	61600.00
		Lift Arrangements			

Sl. No.	Qty	Description	Rate	Unit	Amount
	2.000	Design Engineering Supply, Fabrication, Erection, Testing, commissioning and handling of 13 persons (884 kg) capacity Passenger lift as per the following Technical Specifications (G+5 floor) PWD SR	2057100.00	Nos	4114200.00
	1.000	Design Engineering Supply, Fabrication, Erection, Testing, commissioning and handling of 13 persons (884 kg) capacity Passenger lift as per the following Technical Specifications .(G+5 floor) PWD SR	3036000.00	Nos	3036000.00
		Annual Maintance Charges for the lift supplied and installed for the period of four years after the free warranty period of one year including all to complete etc .			
		For first one year (Free Service)		Nos	
	3.000	For Second one year @ 5% of the Lift value	254655.00	Nos	763965.00
	3.000	For Third one year @ 5% of the Lift value	254655.00	Nos	763965.00
	3.000	For Fourth one year @ 5% of the Lift value	254655.00	Nos	763965.00
	3.000	For Fifth one year @ 5% of the Lift value	254655.00	Nos	763965.00
		Supplying, Fixing and testing and commissioning of MCB in a sheet steel enclosure with earth connection on surface / recess including interconnection, painting etc.			
	3.000	a. 40 A TPN 10 kA MCB	1499.00	Nos	4497.00
	3.000	b. 10/20/32A DP MCB	1024.00	Nos	3072.00
	3.000	c. 63A TPN MCB	1955.00	Nos	5865.00
		Supply and fixing of 25 mm x 3 mm tin coated copper flat on wall with necessary supports for termination of earth connection in the lift machine room.Electrical	562.00	Rmt	
		Fire Fighting Arrangements			
	1.000	MOTOR DRIVEN MAIN PUMP Supply, erection, testing and commissioning of electric motor driven pump suitable for automatic operation rated for 2280 LPM at head of 88 M, high efficiency, volute type with cast iron casing,bronze impeller pump coupled to a squirrel cage induction motor of suitable HP, totally enclosed fan cooled. The operating voltage is 415 v 3 phase 50 Hz. The pumpset is of foot mounted type including all accessories such as standard coupling, coupling guard, common base plate, foundation bolts, anti vibration pads and including connected civil works with required materials etc.	425000.00	Nos	425000.00

Sl. No.	Qty	Description	Rate	Unit	Amount
	1.000	DIESEL ENGINE DRIVEN PUMP Supply, erection, testing and commissioning of main diesel engine driven pump of horizontal centrifugal type suitable for automatic operation rated for 2280 LPM at 88m head, volute type with cast iron casing bronze impeller. The pump shall be coupled to a suitable industrial diesel engine of suitable BHP. The engine shall be of continuously rated for the pump load. The engine shall be of direct injection four stroke six cylinder, water cooled. The pump accessories include extra fittings such as coupling, coupling guard, baseplate, foundation vibration damping arrangement, daily servicing tank with semi rotary pump, bolts etc. Accessories for engine include instrument panel with rpm indicator, AmMetre, oil pressure gauge, starter pressure switch and standard fuel tank, tool kit, battery system float switch indicator (UG sump). All inter	665000.00	Nos	665000.00
	1.000	JOCKEY PUMP Supply, erection, testing and commissioning of mono block jockey pump rated for 180 LPM at 90 M head. The pump shall be of high efficiency volute type with cast iron casing, bronze impeller pump coupled to a squirrel cage induction motor of suitable HP. The operating voltage is 415V 3 phase 50 Hz. The pump set is foot mounted with all accessories such as standard coupling, coupling guard, base plate, foundation plate, antivibration pads and bolts etc. including connected civil works for bed size suiting the pump etc complete. (pump Kirloskar) and made functional.	220000.00	Nos	220000.00
	1.000	BOOSTER PUMP Supply installation testing and commissioning of 900 Lpm Pump at terrace level approved and instructed by the engineer in charge operating voltage is 415 v 3 phase 50 Hz. The pumpset is of foot mounted type including all accessories such as standard coupling, coupling guard, common base plate, foundation bolts, anti vibration pads and including connected civil works with required materials etc. up to 15 HP	85000.00	Nos	85000.00
	1.000	MOTOR CONTROL CENTRE supply, erection testing and commissioning of MV panel board made out of 16 SWG thick CRCA sheet steel duly rust inhibited, zinc passivated, and painted with approved colour epoxy paint on a coat of zincromatic primer. Fully compartmentalised with hinged and earthed front doors, name plate, heavy duty rubber gaskets, removable gland plates made of 3mm thick sheet steel etc, including mounting the following switch gears for controls for Electric, Diesel & Jockey pumps.	325000.00	Nos	325000.00
	1.000	Booster pump panel supply, erection testing and commissioning of MV panel board made out of 16 SWG thick CRCA sheet steel duly rust inhibited, zinc passivated, and painted with approved colour epoxy paint on a coat of zincromatic primer. Fully compartmentalised with hinged and earthed front doors, name plate, heavy duty rubber gaskets, removable gland plates made of 3mm thick sheet steel etc, including mounting the following switch gears for controls for booster pumpset	29850.00	Nos	29850.00

Sl. No.	Qty	Description	Rate	Unit	Amount
		CABLES supply ,laying and clamping of 1No. XLPE sheathed armoured/unarmoured heavy duty power cable conductors of best conductivity aluminium/Copper 1.1KV grade , strictly conforming to IS:1554(Part-I) 1964 of the following sizes using factory made heavy gauge GI/painted M.S clamps not exceeding 60cms , making good the damages ,colour washing etc. as required.			
	10.000	A. 3C x 50 sqmm Aliminium (Main Pump Connection)	575.00	Rmt	5750.00
	5.000	b.3C x 10 sqmm Aliminium (Jockey Pump Connection)	250.00	Rmt	1250.00
	10.000	C.12C x 2.5 sqmm Copper (Diesel Pump)	625.00	Rmt	6250.00
	15.000	D.2C x 1.5 sqmm Copper (Pressure Switch connection)	185.00	Rmt	2775.00
	5.000	E. Booster pump Connection pumproom to terrace	250.00	Rmt	1250.00
		Supply and drawing bare copper conductors of the following sizes along with wiring / cables and giving connections as required for pumps, panels etc.			
	15.000	a. 25 x 3mm GI strips	467.00	Rmt	7005.00
	10.000	b. 8 SWG GI Wire	147.00	Rmt	1470.00
	5.000	CABLE TRAY Supplying and fixing of perforated G.I.sheet(GI should be hot dip galvinised) cable tray with neccessary angle iron suspension supports, anchor fasteners etc. complete. Maximum height of suspension shall not exceed 500 mm.Size of the tray is 150mm x 50mm and 2mm thick.	675.00	Nos	3375.00
	18.000	CABLE TRAY Supplying and fixing of perforated G.I.sheet(GI should be hot dip galvinised) cable tray with neccessary angle iron suspension supports, anchor fasteners etc. complete. Maximum height of suspension shall not exceed 500 mm.Size of the tray is 50mm x 50mm and 2mm thick.	375.00	Nos	6750.00
	12.000	EXHAUST PIPE Exhuast pipe for Diesel engine of 100 mm dia with mineral wool insulation, accoustic suppression with aluminum sheet.	4250.00	Rmt	51000.00

Sl. No.	Qty	Description Page 17	Rate	Unit	Amount
		ABOVE GROUND PIPING Supply ,laying testing and commissioning of MS "B" class pipe (Heavy) pipe with all specials like Tee, Elbow, reducer etc. The pipe should confirm to IS 1239 with required attachments .The pipes shall be painted with two or more coats of red colour enamel paint over two coats of anti corrosive primer. Pipes to be clamped with structural steel supports such as MS channels, angles, flats, rods with anti corrosive paint coated as required at site with anchor fasteners, clamps, threaded rods, nuts, bolts, washers etc. where ever required.			
	9.000	a. 250mm dia MS "B" class pipe (Heavy)	4950.00	Rmt	44550.00
	5.000	b. 200mm dia MS "B" class pipe (Heavy)	3950.00	Rmt	19750.00
	5.000	Supplying, laying, fitting and fixing , testing and commissioning of MS "B" class pipe (Heavy) pipe line confirming to IS 1239 including earth work excavation in all class of soil to the depth as per requirements of standard and refilling and compacting the trench. The pipes shall be anti corrosive wrapping treated. Wrapping material shall consist of three layers of high molecular high density polyethylene, three layers of polymerized bitumen and one layer of polyesters (total seven layers). Wrapping is applied over two coats of anti corrosive rubber modified bituminous primer of density 0.92 gm/cu cm and viscosity of 500 to 1000 cps applied at 150 gms per Sq.MC. b. 150mm dia MS "B" class pipe (Heavy) (Below GL)	3750.00	Rmt	18750.00
	10.000	150mm dia MS "B" class pipe (Heavy) (Above GL)	3250.00	Rmt	32500.00
	10.000	D. 100mm dia MS "B" class pipe (Heavy)	2150.00	Rmt	21500.00
	10.000	E. 80mm dia MS "B" class pipe (Heavy)	1750.00	Rmt	17500.00
	10.000	F. 50mm dia MS "B" class pipe (Heavy)	995.00	Rmt	9950.00
	10.000	G. 25mm dia MS "B" class pipe (Heavy)	425.00	Rmt	4250.00
		BUTTERFLY VALVE Supply, installation, testing and commissioning of Butterfly valves, lever operated cast iron body flanges drilled to IS 1538 PN 1.6 grade complete , as per IS 780 etc complete with following sizes.			
	2.000	a. 200 mm dia BUTTERFLY VALVE	19500.00	Nos	39000.00
	4.000	b. 150 mm dia BUTTERFLY VALVE	13500.00	Nos	54000.00
	4.000	C. 100 mm dia BUTTERFLY VALVE	8250.00	Nos	33000.00
	6.000	d. 80 mm dia BUTTERFLY VALVE	6900.00	Nos	41400.00
	4.000	e. 50 mm dia BUTTERFLY VALVE	4750.00	Nos	19000.00
		BALL VALVE Providing and fixing Ball valve PN 20 with hard chrome plated ball inside PTFE (Teflon) seat & ring			
	12.000	a. 25 mm BALL VALVE	1800.00	Nos	21600.00

Sl. No.	Qty	Description Page 18	Rate	Unit	Amount
	4.000	b. 15mm BALL VALVE	1450.00	Nos	5800.00
		NON RETURN VALVE Supply installation ,testing & commissioning of non return valve of following sizes with out by pass			
	2.000	a. 200mm dia NON RETURN VALVE	27500.00	Nos	55000.00
	1.000	b. 100mm dia NON RETURN VALVE	16500.00	Nos	16500.00
	1.000	c. 80mm dia NON RETURN VALVE	9500.00	Nos	9500.00
	1.000	d. 50mm dia NON RETURN VALVE	5900.00	Nos	5900.00
	3.000	AIR VESSEL TANK Supply ,installation ,testing & Commissioning of air vessel made of mild steel of 200MM dia with automatic air release cock, 25mm dia drain valve and shut off. The vessel shall be 120cm. in height etc. complete as approved and directed by the engineer.	2250.00	Nos	6750.00
	1.000	AIR VESSEL TANK Supply ,installation ,testing & Commissioning of air vessel made of mild steel of 200MM dia with automatic air release cock, 25mm dia drain valve and shut off. The vessel shall be 120cm. in height etc. complete as approved and directed by the engineer.	18500.00	Nos	18500.00
	225.000	MS STRUCTURAL WORKS Providing and fixing M.S structural work fabricated from standard sections e.g. M.S. rounds, angles, channels, plates including cutting to size, welding, drilling with concrete drilling bits and fixing dash fasteners in RCC structural members as directed by Engineer-in-charge including cutting and making good the walls, ceilings and floors (for pipe	135.00	Kg	30375.00
	4.000	PRESSURE SWITCH Supply, installation, testing pressure switch bellow type for the automatic operation,as approved and instructed by the engineer in charge.	3250.00	Nos	13000.00
	5.000	PRESSURE GAUGE Supply installation testing and commissioning of pressure gauge oil type 4 inch dial as approved and instructed by the engineer in charge.	2750.00	Nos	13750.00
		FOOT VALVE Supply installation ,testing & commissioning of non return valve of following sizes with out by pass arrangement ,Ball type with cast iron body flanges drilled etc complete as required.			
	2.000	a., 250mm Dia FOOT VALVE,	65000.00	Nos	130000.00
	1.000	b. 80mm Dia 250 Dia FOOT VALVE	9500.00	Nos	9500.00
	1.000	PRIMING TANK Supply installation ,testing & commissioning of PVC 2 Layer black of capacity 1000 Lit with required accessories.	15500.00	Nos	15500.00
	12.000	HYDRANT VALVE Supply installation ,testing and commissioning of Single/Double Headed Hydrant valve confirming to IS 5290 with ISI mark of 63mm dia oblique type with instantaneous hose coupling adaptor etc	7250.00	Nos	87000.00

Sl. No.	Qty	Description Page 19	Rate	Unit	Amount
	1.000	FIRE BRIGADE Supplying ,installation of Gun-metal 4-way fire brigade inlet connection of 4 nos. 63mm dia instantaneous type male coupling with built in check valves and 150mm dia flanged outlet complete with bolts, nuts and rubber insertions as per I.S:904. (to be connected to static tank). with required M.S. Cabinet.	9750.00	Nos	9750.00
	2.000	b.4way Inlet FIRE BRIGADE For 8 blocks stilt floor	15650.00	Nos	31300.00
		HOSE CABINET Supplying ,installation of hose cabinet to accommodate two pieces of hose reel of 15 M length along with one pair of male and female coupling and one/two branch pipe. The cabinet shall be made out of 18SWG MS sheet with glass front and hinged door for Internal OR external hydrants			
	2.000	a. Hose cabinet of External type (Double Door & to accomodate Two hose and the Branch Pipe) stilt floor	6000.00	Nos	12000.00
	12.000	b. Hose cabinet of External type (Single Door & to accomodate One hose and the Branch Pipe) for 8 blocks (1 floor 1 No)	4950.00	Nos	59400.00
	14.000	Supply ,installation, testing and commissioning of Controlled Percolating (CP) Hose ISI marked (IS:8423) 63 mm dia x 15 m long complete with instantaneous type S.S. 63 mm dia, ISI marked Male & Female couplings (IS:903) bound and riveted to hose pipe with copper rivets and 1.5 mm copper wire. (For external & Internal hydrants)	5250.00	Nos	73500.00
	12.000	FIRE HOSE REEL Supply ,installation, testing and commissioning of Fire Hose Reel (as per ISI) wall mounted, swinging type 18 SWG MS sheet, fitted with 20 mm dia x 30 M long, high pressure hose with 5 mm outlet nozzle with all necessary fixing materials complete.	9250.00	Nos	111000.00
	12.000	BRANCH PIPE Supply ,installation ,testing and commissioning of short branch pipe with 63mm female instantaneous inlet made of gun metal, male threaded outlet, complete with hexagonal based nozzle heavy quality conforming IS 903 etc as approved and directed by the engineer	2650.00	Nos	31800.00
	40.000	Supply installation testing & commissioning of 19mm nominal bore quartzoid bulb type sprinkler of Tyco/HD make, K factor 5.6, Crome Finish, suitable for operating at 68degree C. The fixing shall be done as per IS specification and as instructed by Engineer	425.00	Nos	17000.00
	24.000	DRY CHEMICAL POWDER TYPE Supply and fixing of dry chemical powder type (ABC Type) of 6 Kg capacity, Pressurized with nitrogen, mfgd to IS:13849 with ISI mark fitted with pressure gauge, GM cap nozzle complete with initial charges and installation brackets and screws with ISI marks etc. complete as approved and instructed by the engineer in charge	3250.00	Nos	78000.00

Sl. No.	Qty	Description	Rate	Unit	Amount
	4.000	Supply and fixing Co2 type(2Kg) fire extinguisher new seamless cylinder with powder coated finish, made out of Manganese steel with initial fills, hose, wall brackets, nuts, bolts etc as complete with ISI mark confirming to IS: 2878 as approved and instructed by the engineer in charge.	6500.00	Nos	26000.00
	2.000	Supply, Erection, Testing and Commissioning of 120 Watts Amplifier w/Power supply unit battery charger 16 Zone switcher control and Microphone with required rack.	4750.00	Nos	9500.00
	12.000	Supply, Erection, Testing and Commissioning of 6 Watt Box Speaker units.	2900.00	Nos	34800.00
	30.000	CABLES Supply and laying of 2c X 1sq.mm FRLS flixable Cable with 25mm pvc condit pipe including cost of materials and labour charegs in all etc	150.00	Rmt	4500.00
	2.000	ZONE PANEL Supply installation testing and commissioning of conventional type C & I panel having capacity to connect zone panel with necessary indications, solid - state circuitary with visual front and alarm display.The panel should have facility to attach stand by power system using batteries with all necessary attachments as required and directed.	27500.00	Nos	55000.00
	12.000	HOOTERS Supply installation, testing and commissioning of 12W,electronic hooters (sounders) with accessories for sounding the alarm when activated.	1750.00	Nos	21000.00
	12.000	MANUAL CALL POINT Supply installation testing and commissioning of Manual Call points of break glass type with hammer and chain.	1650.00	Nos	19800.00
	4.000	Conventional Smoke Detector Supply installation testing and commissioning of Manual Call points of break glass type with hammer and chain.	1950.00	Nos	7800.00
	20.000	CABLES Supply and surface laying of 2c X 1.5sq.mm shielded FRLS armoured cable including cost of materials and labour charegs in all etc	185.00	Rmt	3700.00
		Drilling of Borewell anywhere inculding transportation from one place to another place in alluvial soil or sedimentary starts mud circulation method 150 mm dia of clay and sand or sand stone shale pebbles boulders etc., by first taking a pilot bore of 165 dia (6 " to 8 ") by direct or reverse rotary mud and circulations method using contractors rig, fuel, labour driling betonite mud and water required for drilling at the site shown and as directed by departmental officers (Cal1x drills are e used)			
	70.000	a) Drilline of borewell in upto 60m page.No.302 TWAD SR 22-23	1689.60	m	118272.00
	70.000	Reaming from 140/150 mm dia pilot bore to 300 mm dia bore as directed by the departmental officers. page.No.305 TWAD SR 22-23	347.60	m	24332.00
		a) Drilline of borewell in upto 60m	374.50	m	

Sl. No.	Qty	Description Page 21	Rate	Unit	Amount
	70.000	Supply and delivery of 200mm OD of PVC casing pipes (6kg/cm ²) as per IS 12818 11992 of approved quality for borewells with average wall thickness of 11mm and inner/outer threaded ends in standard length of 3m including transporting charges to site of work and all other taxes etc., all complete as directed by the departmental officers. (The PVC casing pipe should be got approved.) P22 -SR.22-23	1113.20	m	77924.00
	70.000	Supply and delivery of 150mm OD of PVC casing pipes (6kg/cm ²) as per IS 12818 11992 of approved quality for borewells with average wall thickness of 11mm and inner/outer threaded ends in standard length of 3m including transporting charges to site of work and all other taxes etc. P22 -SR.22-23	644.50	m	45115.00
	70.000	Supply and delivery of 150mm OD ribbed screen pipes (6kg/cm ²) as per IS 12818 11992 of approved quality for borewells with average wall thickness of 8.0mm and inner/outer threaded ends in standard length of 1m to 8mm both in horizontal and vertical cutting including transporting charges to site of work and all other taxes etc., all complete as directed by the departmental officers. P22 -SR.22-23	1004.50	m	70315.00
		Labour Charges for inserting PVC casing pipes assembly (with slots or without slots) in the drilled hole including jointing the pipes with PVC Couplers with Cement paste etc., complete supply and packing the annular space with pebbles of size quality as approved by the department officials TWAD SR 2022-23 P.No.304			
	70.000	i) 150mm dia casing pipes assembly	369.80	m	25886.00
		ii) 200 mm dia casing pipes assembly	336.25	m	
	2.000	Supplying and fixing of 160mm dia PVC end cap for borewell of best approved quality with ISI mark confirming to IS specifications including cost of materials conveyance to site and labour charges for fixing in position etc. all complete. TWAD SR 2022-23 P.No.27	144.30	Nos	288.60
	16.000	Charges for developing the borewell for the entire depth with air compressor of 300cfm capacity [Minimum 8 hours] including transportation, labour and fuel charges for compressor and conducting yield tests by V-notch method etc., all complete as directed by the departmental officers. TWAD SR 2022-23 P.No.305	1937.10	Hour	30993.60

Sl. No.	Qty	Description Page 22	Rate	Unit	Amount
	4.000	Supply and delivery of clear water vertical wet type submersible pumpset suitable for 150mm dia borewell conforming to IS 8034/2002 as amended thereafter and BEE 3 Star Rated capable of discharging noted LPM against 75 LPM x 175m head of water column due to all causes. The pump shall be with stainlesssteel shaft and dynamically balanced Bronze or Cast SS impeller, brass screws and CI FG 200 grade pump bowl/diffuser with ISI mark. The pump shall be directly coupled to a continuous rated two pole suitable wet type vertical squirrel cage induction motor as per IS 9283 /1995 as amended thereafter, suitable for operation in AC three phase 415 V+/- 10%, 50HZ. +/- 5 % TWAD SR 2022-23 P.No.102	32526.00	each	130104.00
	2.000	Labour charges for the erection of submersible pumpset in borewell/openwell including fixing and jointing submersible cable with proper clamps upto the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto 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 preventor, water level guard and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumpset and trial run for 10 days. TWAD SR 2022-23 P.No.308	11056.10	each	22112.20
	2.000	Supplying and fixing of Star Delta starter conforming IS13947 of approved make suitable for three phase for submersible Pumpset with ISI mark including volt meter and ammeter, cost of all materials, labour charges for fixing and giving connections etc. all complete and as directed by the departmental officer. For 6 HP TWAD SR 2022-23 P.No.113	15147.00	each	30294.00
		Supplying, laying, fixing and jointing the following UPVC pipes as per D- 1785 of schedule 40 of wall thickness not less than the specified in IS 4985 Suitable for plumbing by threading of wall thickness including the cost of suitable PVC/GI specials GM Specials like Elbow , tee reducers ,plug , union , bend, coupler, nipple/ GM gate valve, check and wheel valve etc. wherever required below Ground level including necessary earth work excavation, refilling the trenches to alignment and gradient cost of teflon tape and redoing the chipped of masonry etc. as directed by the departmental officers. (The pvc pipe should be got approved from the Executive Engineer before laying).			
	70.000	a) 50 mm dia UPVC pipes	274.68	rmt	19227.60

Sl. No.	Qty	Description Page 23	Rate	Unit	Amount
	4.000	Supply and Delivery of Openwell Pumpset with ISI mark IS 8034 without Panel Board of capacity 900 LPM X 60 M of electric motor pump set with accessories at bore well for three phase operation etc., all complete and as directed by the departmental officers. (The brand of pumpset should got approved by the Executive Engineer before erection). TWAD SR.p.nO.107/ 2022-2023	79534.00	each	318136.00
	4.000	Labour charges for the erection of 10 HP submersible pumpset in Borewell/open well including fixing and jointing submersible cable with proper clamps upto the starter to required depth and also fixing of riser pipes to the required depth valves erection clamps, pressure gauges upto 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 preventor, water level guard and laying and jointing the cables and twin earthing as per IE rules etc., complete and testing the pumpset and trail run for 10 days.	8131.20	each	32524.80
	4.000	Supplying and fixing of Star Delta starter confirming IS13947 of approved make suitable for three phase for submersible Pumpset with ISI mark including volt meter and ammeter, cost of all materials, labour charges for fixing and giving connections etc. all complete and as directed by the departmental officer. For 10 HP TWAD SR.p.no. 2022-2023	14832.00	each	59328.00
	70.000	Supplying of 3 core 6 sqmm PVC insulated and sheathed flat type copper L.T. cable confirming to IS 694/1990 with ISI marking with including cost of all materials etc., all complete complying with relevant standard specifications and as directed by the departmental officers. TWAD SR.p.no.107/ 2022-2023	261.00	rmt	18270.00
	70.000	Labour charge for laying of 3 core 6 sqmm PVC insulated and sheathed flat type copper cable etc., all complete and as directed by the departmental officers.	270.00	rmt	18900.00
	120.000	Supplying and laying 3 core 4 sqmm FLAT COPPER CABLE with ISI mark including cost of all materials specials etc. all complete.	199.00	rmt	23880.00
	60.000	Labour charges for laying 3 core 4 sqmm FLAT COPPER CABLE with ISI mark including cost of all materials specials etc. all complete.	193.00	rmt	11580.00
	90.000	Supply and delivery of 12mm thick nylon rope including cost of materials and labour charges etc., complete as directed by the departmental officers. PWD SOR.P.No.105	61.80	Rmt	5562.00
		Supply and delivery at site and fixing of SFRC manhole cover with frame with locking arrangement			
	2.000	a. 600mm x 600mm	2701.00	Nos	5402.00

Sl. No.	Qty	Description Page 24	Rate	Unit	Amount
	41.000	Supply and Fixing of CP two way bib cock with health faucet TWAD SR 2022-2023 page No.160	2189.40	Nos	89765.40
	41.000	CP Shower Arm with Overhead shower rose	1319.40	Nos	54095.40
		ELECTRICAL ARRANGEMENTS			
	40.000	Supply and fixing of vertical type 4 way triple pole and neutral MCB sheet steel enclosure with bus and neutral link and earth link and with 1 no. 63A/100 A TPN 10 KA MCB type as incoming 1 No. 63 A 4 pole 30 mA ELCB and 12 nos. 20A/32A, 10 KA SP MCB as outgoing with busbar and double door arrangements in flush with wall/ on surface and making good of the concealed portion with earth connection.	14633.00	Nos	585320.00
	40.000	Supply and fixing of manually operated phase changer board with 3 Nos. 63 A (L & T / Selzier make) 63 A switch in single suitable MS encloser (3 way) with RYB indication lamps including all interconnections and earth connection. CER No.188/2019-20	3639.00	Nos	145560.00
	40.000	Supply and fixing of 20 Amps DP plug and socket in sheet enclosure with 32 A DP MCB in flush with wall with earth connection (AC plug) (Legrand (MDS) / Hager (L & T) make) SD-140	1839.00	Nos	73560.00
	15.000	Providing and fixing G.I. tape 25 mm x 6 mm thick on porcelian insulators on parapet or surface of wall for lightning conductor complete as required (For horizontal run) (The jointing arrangements between the flats and also between the flats and the final rod should be got approved by the Departmental Officers. CER No.188/2019-20	153.00	Rmt	2295.00
	25.000	Providing and fixing G.I. tape 25 mm x 6 mm thick on porcelian insulators on parapet or surface of wall for lightning conductor complete as required (For vertical run) (The jointing arrangements between the flats and also between the flats and the final rod should be got approved by the Executive Engineer) CER No.188/2019-20	169.00	Rmt	4225.00
	10.000	Earthing as per the ISI specification with an earth electrode of 2.1 mtr 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 40mm RCC cover / CI cover slab for the brick masonry - (SD 233)	2703.00	each	27030.00
	2.000	Plate earthing with copper plate of size 600 x 600 x 3 mm as per the ISI specification with an earth electrode of 2.1 mtr 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. - Data L For computer earthing	7846.00	each	15692.00

Sl. No.	Qty	Description Page 25	Rate	Unit	Amount
	525.000	Supply and fixing of 2' 10 W batten(mirror light) LED fitting complete with all accessories on wall / ceiling with PVC unsheathed copper leads from terminal to the fitting Data Q	525.00	Each	275625.00
		LIFT SHAFT WIRING			
	18.000	Wiring for lift well light point and socket outlet with 2 x 1.5 sqmm FRLS PVC insulated stranded copper conductor of 1100V grade along with 1 x 1.5 sqmm FRLS PVC insulated stranded copper conductor cable as earth wire on surface MS conduit including providing and fixing MS switch box, 2 Nos. 5A single way flush type switch for (controlling light point and socket Outlet), 1 No. 5A 5 Pin shuttered socket outlet with flush type switch and making necessary connections etc. as per specification.	1123.95	each	20231.10
	18.000	Wiring with 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming to IS: 694/1990, 1.1 K.v. grade cable with continuous earth by means of 1.5 sqmm PVC insulated single core multi strand fire retardant flexible copper cable with ISI mark conforming to IS: 694/1990, 1.1 k.v . grade cable in MS heavy duty pipe with suitable size MS box of 16 g thick concealed and covered with 3mm thick laminated hylem sheet controlled by 5 amps flush type switch including circuit mains cost of all materials, specials etc., all complete.	830.25	each	14944.50
		Panel board			
	4.000	Supply and erection of 250 Amps capacity floor mounting type metering panel board (Cubical type) with bus bar chamber made up of 16 SWG MS sheet for 3 phase 4 wire system with 40 mm x 6 mm tin coated copper flats for phases and 20 mm x6 mm for neutral; cable chamber, switch chamber and with 2 Nos. 25 mm x 3mm tinned copper flat for the earth bus on the rear side of the panel board; necessary interconnections by copper flat of suitable sizes; suitable PVC colour sleeves for the interconnecting .	152300.00	Each	609200.00
		Supply and erection of 100 Amps capacity floor mounting / wall mounting panel board (Cubical type) with bus bar chamber made up of 16 SWG MS sheet for 3 phase 4 wire system with 25mm x 3mm tin coated copper flats for phases and neutral; cable chamber, switch chamber and with 2 Nos. 25mmx3mm tinned copper flat for the earth bus on the rear side of the panel board; necessary interconnections by copper flat of suitable sizes; suitable PVC colour sleeves for the interconnecting copper flats / rigid copper wire; earth connections to all swithces / bus bar by copper flats of suitable sizes from the earth bus; hylam sheet separation between bus bar and swithces; 1set LED pilot lamps with switches, fuse units, suitable angle iron frame size of 40mmx 40mmx 6mm with powder coated painting over one coat of red primer and with numbering; superscription of cables sizes, capacity of switches etc and incorporating the following:			

Sl. No.	Qty	Description Page 26	Rate	Unit	Amount
		Incoming: 1 no. 100 A TPN 15KA MCCB with all protective devices Outgoings: 4 nos. 63A TPN 15KA MCCB with all protective devices. Dummy provision - 1 No.			
		1set LED pilot lamps with fuse units, switches and interconnections. Inter connections to the bus bar by 25mm x 3mm TC copper flat for phases and neutral from 100A TPN MCCB the bus interconnection by SWG No.6 TC copper for the phases and neutral from the 63A TPN MCCB; 6mm thick hylam sheet separation between bus bar chamber and switches chamber; insulators for the support for the bus; superscribing on the panel board the size, capacity of cable, switches, location etc. 2 nos. metallic danger boards. - Data AS	55127.00		
		Supply and erection of 200 Amps capacity floor mounting / wall mounting panel board (Cubical type) with bus bar chamber made up of 16 SWG MS sheet for 3 phase 4 wire system with 25mm x 6 mm tin coated copper flats for phases and 25mm x 3 mm neutral; cable chamber, switch chamber and with 2 Nos. 25mmx3mm tinned copper flat for the earth bus on the rear side of the panel board; necessary interconnections by copper flat of suitable sizes; suitable PVC colour sleeves for the interconnecting copper flats / rigid copper wire; earth connections to all switches / bus bar by copper flats of suitable sizes from the earth bus; hylam sheet separation between bus bar and switches; 1set LED pilot lamps with switches, fuse units, suitable angle iron frame size of 40mmx 40mmx 6mm with powder coated painting over one coat of red primer and with numbering; superscription of cables sizes, capacity of switches etc and incorporating the following:			
		Incoming: 1 no. 200 A FP 15KA MCCB with all protective devices 1 No. 100 A FP 15 KA MCCB with all protective devices Outgoings: 4 Nos. 100 A 15 KA 4 P MCCB 6 nos. 63A TPN 15KA MCCB with all protective devices. Dummy provision - 1 No.			
	1.000	1set LED pilot lamps with fuse units, switches and interconnections. Inter connections to the bus bar by 25mm x 6 mm TC copper flat for phases and 25 mm x 3 for neutral from 200A MCCB; interconnection from 100 A FP/ TP MCCB to the bus by 25 mm x 3 mm copper flats for phases and neutral ; interconnection by SWG No.6 TC copper for the phases and neutral from the 63A TPN MCCB; 6mm thick hylam sheet separation between bus bar chamber and switches chamber; insulators for the support for the bus; superscribing on the panel board the size, capacity of cable, switches, location etc. 2 nos. metallic danger boards. - Data AT	86591.00	Each	86591.00
		GENSET			

Sl. No.	Qty	Description Page 27	Rate	Unit	Amount
		Supply, installation, testing and commissioning of 62.5 KVA Diesel Generator set complete with all accessories like engine, alternator, batteries with leads control panel, base frame, antivibration mounts, residential silencer, 400 litres fuel tank, intake & exhaust piping, fuel oil motor operated pump, other miscellaneous accessories for the total set including test trial run at load for 8 hrs at factory (inclusive of consumable oil etc) necessary control wiring for battery charger etc., annunciation etc. as per specifications give below.			
	1.000	Erection, Testing and commissioning of 62.5KVA Diesel generator set. PWD SR 2022-2023	558600.00	Each	558600.00
		Providing suitable foundation for accomodating the 125 KVA DG set.	60000.00	Job	
		Insulation for the residential silencer (supply of residential silencer to be included under item for DG Sets)			
	1.000	Insulation for the residential silencer (supply of residential silencer to be included under item for DG Sets) CER No.186/2019-20	6270.00	Each	6270.00
	1.000	Supply and installation of M.S. cable adopter box (made of 14 SWG sheet steel) with suitable copper bus extension link from alternator. The adopter box shall have tinned copper bus bar of suitable size for phases and neutral with suitable holes for cable termination (1R x 3.5 core, 185 Sq.mm). Necessary rubber gaskets between alternator and cable box shall be provided to avoid vibration between adopter box and alternator. CER No.186/2019-20	24040.00	No	24040.00
		For block			
		EXHAUST PIPE			
	10.000	Supply and installation of MS exhaust pipe of suitable thickness with 100mm dia upto 5m from the silencer complete with necessary supports, brackets etc. The supports shall have at intervals of not more than 2.5m.	339.30	m	3393.00
		For block	339.30	m	
	30.000	Supply and installation of MS exhaust pipe of suitable thickness with 125 mm dia complete with MS wall / ceiling support, etc.	2756.00	m	82680.00
		For block	2756.00	m	
	10.000	Supply and insulation of exhaust pipe thermal insulation lagging with mineral wool as per IS 3677 / 1973 reinforced with chicken mesh and cladded with aluminium sheet of 26 SWG and 50mm thick with 64 Kg/Cu. Mtr. Density.	197.00	m	1970.00
		For block	197.00	m	

Sl. No.	Qty	Description Page 28	Rate	Unit	Amount
	1.000	Supply and installation of stainless steel rain hood / rain cap / bend at top of the exhaust pipe to prevent rain water entry to exhaust pipe with provision of drain plug in the system.	4245.00	Set	4245.00
		SUPPLY AND CLAMPING OF CONTROL CABLES			
	52.000	Supply and clamping of 4 core 2.5 sq. mm PVC sheathed and armoured copper cable from alternator to the proposed DG panel on wall / in the hume pipe with necessary glands and crimping at both ends. CER No.186/2019-20	323.00	m	16796.00
	140.000	Supply and fixing of rubber round column guard of size 550mm height x 75mm (two corners each 75mm) x 10 mm thick on the existing R.C.C Columns corner surface in stillt area with reflective stickers, including cost of all materials, labour charges for fixing in position including necessary fixtures etc., all complete in all respect complying with relevant standard specifications and drawings and as directed by the departmental officers. (The material/brand should be got approved from Executive Engineer before use) SER No.27/2021-2022	350.00	Nos	49000.00
	10.000	Supplying and fixing of Convex Mirror 60cm dia with plastic caver and fixing in position using 50mm dia "B"GI class pipe at a height of 1.50m painted with Enamel painted framed on bottom with couch screws including cost of all materials, labour charges for fixing in position including necessary fixtures etc., all complete in all respect complying with relevant standard specifications and drawings and as directed by the departmental officers. (The material/brand should be got approved from Executive Engineer before use) SER No.27/2021-2022	4350.00	Nos	43500.00
	133.500	Supply and fixing of Rubber (Heavy Duty) speed Breakers of size 500mm x 425mm x 75 mm and existing concrete roads of required capacity and quality to resist the impact of vehicle transport inside a residential campus including cost of all materials, labour charges for fixing in position including necessary fixtures including necessary packing with concrete mix M30 grade so as to with stand the heavy vehicales traffic etc., all complete in all respect complying with relevant standard specifications and drawings and as directed by the departmental officers. (The material/brand should be got approved from Executive Engineer before use) SER No.27/2021-2022	2500.00	Rmt	333750.00
	1.000	Solar On Grid / Grid Tie Inverter as per MNRE Standards, 3 Phase. 1 Nos of 12 KW. This is including of Array Junction box, combiner Box wherever	120000.00	Each	120000.00
	*	Total			126177758.93

SPECIFICATION

FOUNDATION	COLUMN/BRICK
SUPERSTRUCTURE	BRICK WORK IN C.M 1:6
ROOF	R.C.C. SLAB WITH SUITABLE REINFORCEMENT AND PROTECTED H.P. TILES OVER WEATHERING COURSE MILD SLOPE TO BE PROVIDED.
JOINERY	WOODEN FRAME/ R.C.C./STEEL/PVC.
FLOORING	GRANITE TILE FLOORING FOR ALL ROOMS. ANTISKID CERAMIC TILE FLOORING FOR BATH & WC WITH GLAZED TILES TO THE HEIGHT OF 1.5M
KITCHEN	GRANITE TILE
HERTH SLAB	CUDAPPAH SINK
SINK	IN R.C.C. / CUDAPPAH
CUPBOARD SLAB	INNER-OBQ WITH ONE COAT OF PRIMER
PAINTING	OUTER-PLASTIC EMULSION PAINT WITH ONE COAT OF PRIMER
O.H.T	R.C.C WITH R.C.C COVER SLAB.

AREA STATEMENT

	SQ.M	SQ.FT
STILT FLOOR AREA		
BUILDING AREA		
E.B ROOM,PUMP & SECURITY ROOM	168.63	1815
ENTRANCE LOBBY,STAIRCASE & LIFT	260.19	2801
	428.82	4616
PARKING AREA	403.86	4347
TOTAL STILT FLOOR AREA	832.68	8963
PER FLOOR AREA		
PLINTH AREA	504.80	5434
BALCONY-(28.32 SQ.M)HALF AREA	14.16	152
ENTRANCE VERANDAH-(31.44 SQ.M)HALF AREA	15.72	169
	534.68	5755
COMMON AREA		
STAIRCASE,LOBBY&LIFT(161.12 SQ.M)HALF AREA	80.56	867
TOTAL AREA	615.24	6622
FIRST FLOOR AREA	615.24	6622
SECOND FLOOR AREA	615.24	6622
THIRD FLOOR AREA	615.24	6622
FOURTH FLOOR AREA	615.24	6622
FIFTH FLOOR AREA	615.24	6622
TOTAL FLOOR AREA	3076.36	33,114
HEAD ROOM AREA	72.67	782

AREA STATEMENT (PER UNIT)

PLINTH AREA PER UNIT (INCLUDING BALCONY HALF AREA & ENTRANCE VERANDAH HALF AREA)	66.85 SQ.M
AREA PER UNIT 66.85 SQ.M (720 SQ.FT.) (EXCLUDING COMMON AREA)	
COMMON AREA PER UNIT - 10.07 SQ.M	
AREA PER UNIT INCLUDING COMMON AREA - 76.92 SQ.M (828 SQ.FT.)	

PLINTH AREA PER UNIT (INCLUDING BALCONY FULL AREA & ENTRANCE VERANDAH FULL AREA)	70.58 SQ.M (760 SQ.FT.)
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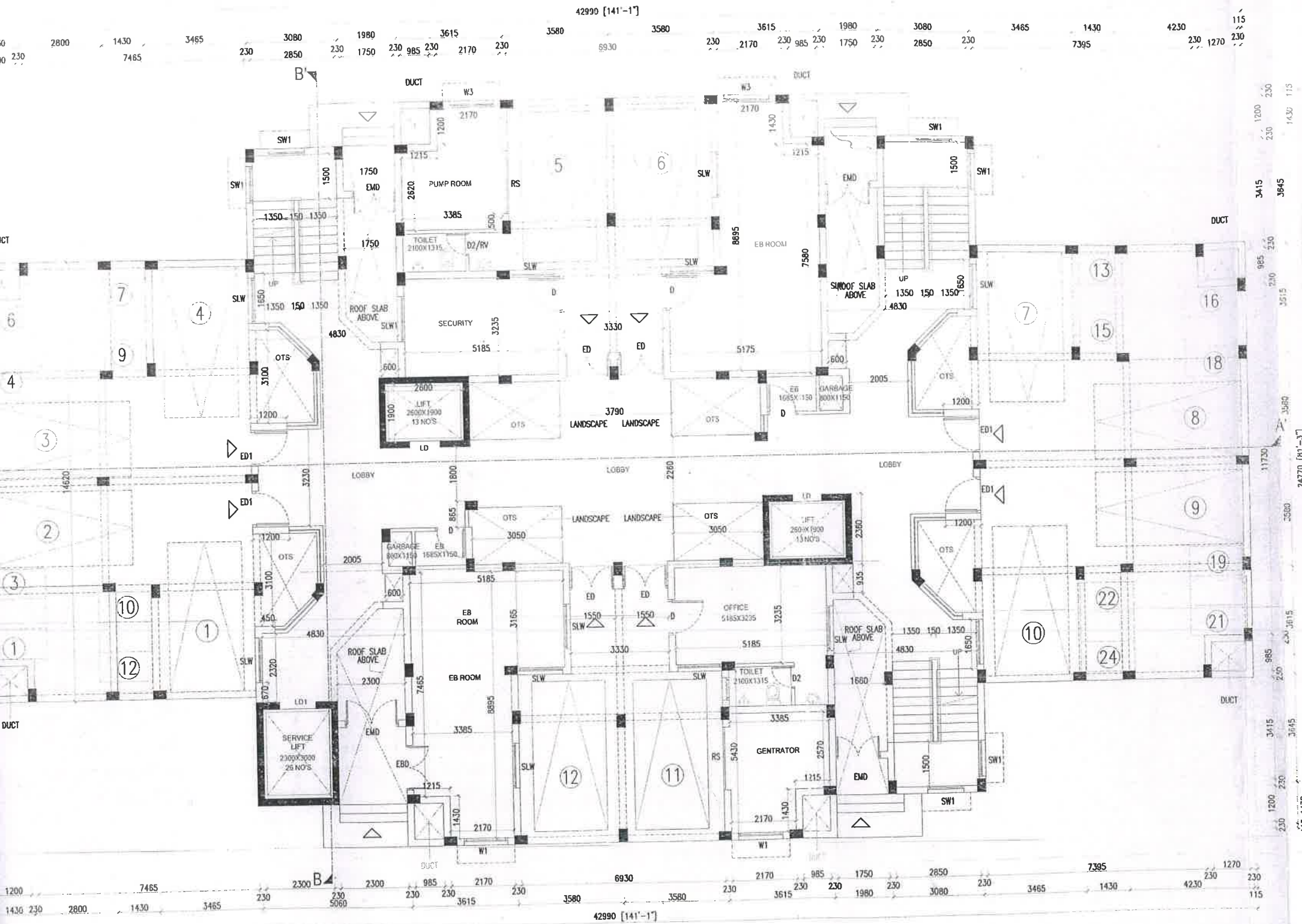
NOTE: ROOF HEIGHT - 2.85m

STILT FLOOR PLAN	PROPOSED PC/HC QTRS (40 IN 1)
SCALE 1:100	SHEET NO.
(ALL dimensions in meters)	N
DWG. NO.	TOWN/TALUK
	DISTRICT CHENNAI

Assistant Architect	AEE (Arch. Sec.)	EE (Planning)
SE (CC)	Chief Engineer	Chairman cum MD

TAMILNADU POLICE HOUSING CORPORATION LTD.
NO.132, E.V.R.SALAI, KILPAUK, CHENNAI - 600 010.

STILT FLOOR PLAN



/ TENTATIVE /

SCHEDULE OF JOINERY

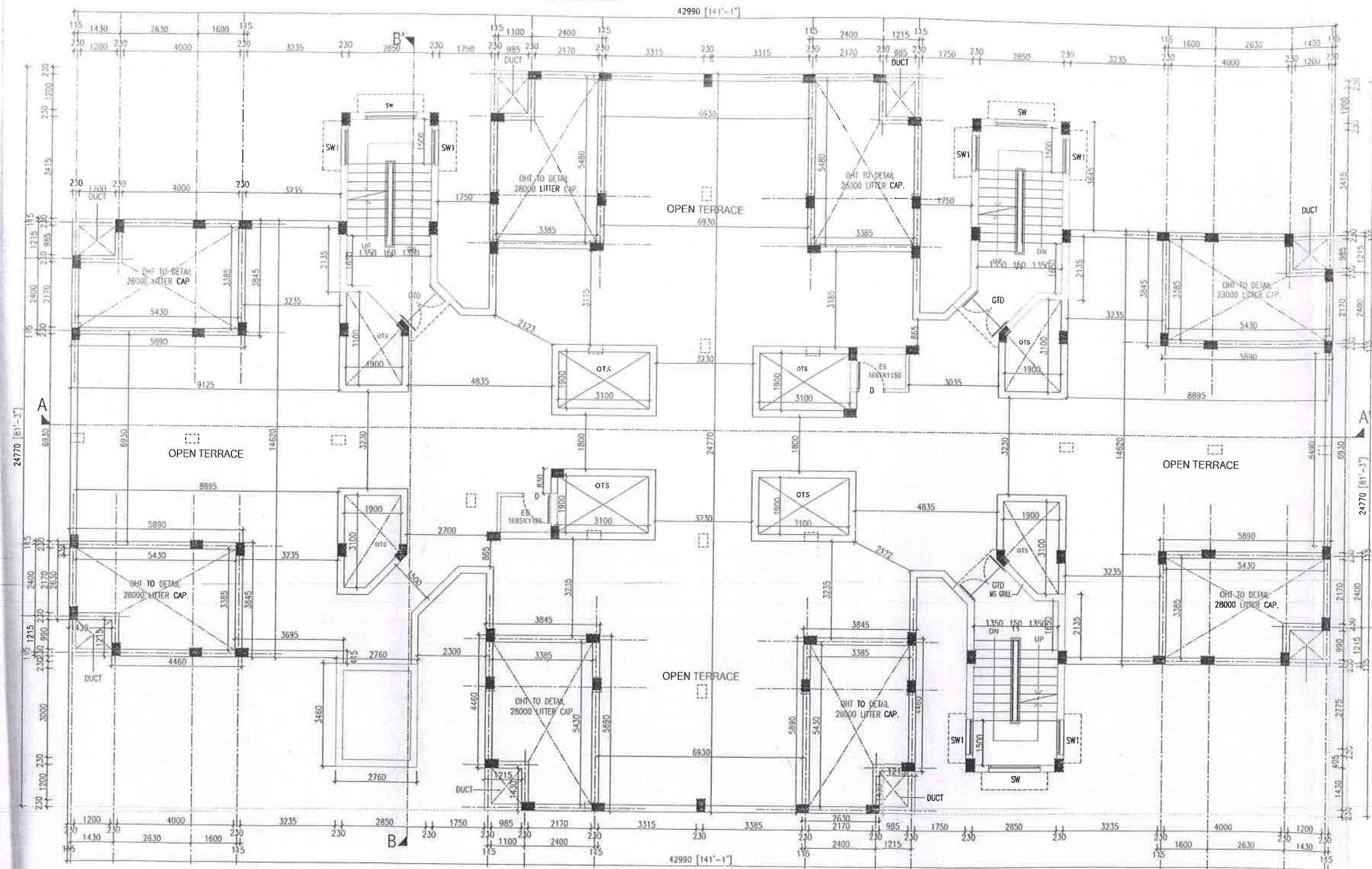
TYPE	DESCRIPTION	SIZE	TYPE	DESCRIPTION	SIZE
SW	STAIRCASE WINDOW MS WINDOW WITH GRILL	1800X1350	ED	ENTRY & EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1500X2100
SW1	STAIRCASE WINDOW MS WINDOW WITH GRILL	1200X1350	ED1	ENTRY & EXIT DOOR TEAK WOOD SHUTTER	1200X2100
SLW	PVC SLIDING WINDOW	1500X1350	EMD	EMERGENCY EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1500X2100
FW	FRENCH WINDOW	1500X1800	EMD1	EMERGENCY EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1800X2100
RV	PVC SLIDING WINDOW WITH GRILL & EXHAUST FAN	1100X1050	EBD	EB DOOR TEAK WOOD DOUBLE SHUTTER	1800X2100
LD	UPVC VENTILATOR WITH MS GRILL WITH EXHAUST FAN	750X750	GD	MS GRILL DOOR	1000X2100
LD1	LIFT DOOR FOR PASSENGER	1000X2100	MD	MAIN DOOR DOOR TEAK WOOD SHUTTER	900X2100
LD2	LIFT DOOR FOR SERVICE	1200X2300	D	DOOR TEAK WOOD SHUTTER	750X2100
GSD	GRILL STAIRCASE DOOR	1500X2100	D1	DOOR TEAK WOOD SHUTTER	750X2100
RS	ROLLING SHUTTER	2100X2100	D2,D2/RV	PVC SOLID DOOR / ROOF LEVEL VENTILATOR	1000X2100
			O	KITCHEN OPEN	1800X1350
			W	MS WINDOW WITH GRILL	1800X1350
			W1	MS WINDOW WITH GRILL	1500X1350

EXECUTIVE ENGINEER
CHENNAI DIVISION
T.N.P.H.C. Ltd.
Avadi, Chennai - 600 051

Gauthi V.
29/8/2019
29/10/2019
AEE

Chief Engineer

Tamilnadu Police Housing Corporation Ltd.
Chennai - 600 010



TERRACE FLOOR PLAN

SPECIFICATION

FOUNDATION	COLUMN/BRICK
SUPERSTRUCTURE	BRICK WORK IN C.M 1:6
ROOF	R.C.C SLAB WITH SUITABLE REINFORCEMENT AND PROTECTED H.P TILES OVER WEATHERING COURSE MILD SLOPE TO BE PROVIDED.
JOINERY	WOODEN FRAME/ R.C.C/STEEL/PVC
FLOORING	GRANITE TILE FLOORING FOR ALL ROOMS. ANTISKID CERAMIC TILE FLOORING FOR BATH & WC WITH GLAZED TILES TO THE HEIGHT OF 1.5M
KITCHEN	GRANITE TILE
HERTH SLAB	CUDAPPAH SINK
SINK	IN R.C.C / CUDAPPAH
CUPBOARD SLAB	INNER-OB D WITH ONE COAT OF PRIMER
PAINTING	OUTER-PLASTIC EMULSION PAINT WITH ONE COAT OF PRIMER
O.H.T	R.C.C WITH R.C.C COVER SLAB.

AREA STATEMENT

STILT FLOOR AREA	SQ.M	SQ.FT
BUILDING AREA		
E.B ROOM,PUMP & SECURITY ROOM	168.63	1815
ENTRANCE LOBBY,STAIRCASE & LIFT	260.19	2801
	428.82	4616
PARKING AREA		
TOTAL STILT FLOOR AREA	832.68	8963
PER FLOOR AREA		
PLINTH AREA	504.80	5434
BALCONY-(28.32 SQ.M)HALF AREA	14.16	152
ENTRANCE VERANDAH-(31.44 SQ.M)HALF AREA	15.72	169
	534.68	5755
COMMON AREA		
STAIRCASE,LOBBY&LIFT(161.12 SQM)HALF AREA	80.56	867
TOTAL AREA	615.24	6622
FIRST FLOOR AREA	615.24	6622
SECOND FLOOR AREA	615.24	6622
THIRD FLOOR AREA	615.24	6622
FOURTH FLOOR AREA	615.24	6622
FIFTH FLOOR AREA	615.24	6622
SIXTH FLOOR AREA	615.24	6622
SEVENTH FLOOR AREA	615.24	6622
EIGHTH FLOOR AREA	615.24	6622
NINTH FLOOR AREA	615.24	6622
TENTH FLOOR AREA	615.24	6622
ELEVENTH FLOOR AREA	615.24	6622
TWELFTH FLOOR AREA	615.24	6622
THIRTEENTH FLOOR AREA	615.24	6622
FOURTEENTH FLOOR AREA	615.24	6622
TOTAL FLOOR AREA	8613.36	92714
HEAD ROOM AREA	72.67	782

AREA STATEMENT (PER UNIT)

PLINTH AREA PER UNIT	
(INCLUDING BALCONY HALF AREA & ENTRANCE VERANDAH HALF AREA)	66.85 SQ.M
AREA PER UNIT 66.85 SQ.M (720 SQFT.)	
(EXCLUDING COMMON AREA)	
COMMON AREA PER UNIT - 10.07 SQ.M	
AREA PER UNIT INCLUDING COMMON AREA - 76.92 SQ.M	
(828 SQ.FT.)	

PLINTH AREA PER UNIT	
(INCLUDING BALCONY FULL AREA & ENTRANCE VERANDAH FULL AREA)	70.58 SQ.M (760 SQ.FT)

NOTE: ROOF HEIGHT - 2.85m

TERRACE FLOOR PLAN

SCALE 1:100	SHEET NO. 02	N
(All dimensions in metres)		
DWG NO.:		

Assistant Architect	AEE (Arch. Sec.)	EE (Planning)
SE (CC)	Chief Engineer	Chairman cum MD

TAMILNADU POLICE HOUSING CORPORATION LTD.
NO.122, ENNA ROAD, CHENNAI - 600 010

SCHEDULE OF JOINERY

TYPE	DESCRIPTION	SIZE	TYPE	DESCRIPTION	SIZE
SW	STAIRCASE WINDOW MS WINDOW WITH GRILL	1800X1350	ED	ENTRY & EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1500X2100
SW	STAIRCASE WINDOW MS WINDOW WITH GRILL	1200X1350	ED1	ENTRY & EXIT DOOR TEAK WOOD SHUTTER	1200X2100
PVC	PVC SLIDING WINDOW	1500X1350	EMD	EMERGENCY EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1500X2100
PVC	PVC SLIDING WINDOW	1500X1800	EMD1	EMERGENCY EXIT DOOR TEAK WOOD DOUBLE SHUTTER	1800X2100
KW	UPVC SLIDING WINDOW WITH GRILL & EXHAUST FAN	1100X1050	EBD	EB DOOR TEAK WOOD DOUBLE SHUTTER	1800X2100
V/EX	UPVC VENTILATOR WITH MS GRILL WITH EXHAUST FAN	750X750	GD	MS GRILL DOOR	1000X2100
LD	LIFT DOOR FOR PASSENGER	1000X2100	MD	MAIN DOOR DOOR TEAK WOOD SHUTTER	1000X2100
LD1	LIFT DOOR FOR SERVICE	1200X2300	D	DOOR TEAK WOOD SHUTTER	900X2100
GSD	GRILL STAIRCASE DOOR	1500X2100	D1	DOOR TEAK WOOD SHUTTER	750X2100
RS	ROLLING SHUTTER	2100X2100	D2,D2/RV	PVC SOLID DOOR / ROOF LEVEL VENTILATOR	750X450
			O	KITCHEN OPEN	1000X2100
			W	MS WINDOW WITH GRILL	1800X1350

EXECUTIVE ENGINEER
CHENNAI DIVISION
T.N.P.H. CLD
Avadi, Chennai

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29/8/22
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