



AN ISO 9001 & 14001 COMPANY

TENDER DOCUMENT

NIT No. SRO/CON/ETS/269 dated 23.12.2024

FOR

Tender for Finishing & Electrification works for “Construction of 1116 tenements (G+7 Framed structures) development works at Perumbakkam, Phase - II Scheme in Kancheepuram District, Chennai under JNNURM – Reach – V : Block no. 30, 32 and 41 Balance work ”

VOLUME – IV

Price Bid with Bill of Quantities

TENDER INVITING AUTHORITY

**Engineering Projects (India) Limited
(A GOVT. OF INDIA ENTERPRISE)
Southern Regional Office, Chennai,
3D, EC Chambers, 92, GN Chetty Road
T.Nagar, Chennai- 600 017**

ENGINEERING PROJECTS (INDIA) LTD Southern Regional office, Chennai		
Work:	Finishing & Electrification works for "Construction of 1116 Tenements (G+7) Framed structure and development works at perumbakkam phase -II Scheme in Kancheepuram district chennai Under JNNURM -Reach-V : Block no. 30, 32 and 41 Balance work"	
Abstract		
Sl. No.	DESCRIPTION	Amount (excluding GST) (Rs.)
I	Construction of Tenements -Total A	3,24,61,065.60
II	Electricla work - Total B	37,74,974.29
III	Pavement around the Blocks - Total C	5,39,627.26
IV	Fire Fighting arrangement Total D	12,63,025.65
V	Extra work - Total E	13,74,834.51
	Total (A+B+C+D+E) =	3,94,13,527.31
	Say	3,94,13,527.00

ENGINEERING PROJECTS (INDIA) LTD Southern Regional office, Chennai					
Work:	Finishing & Electrification works for "Construction of 1116 Tenements (G+7) Framed structure and development works at perumbakkam phase -II Scheme in Kancheepuram district chennai Under JNNURM -Reach-V : Block no. 30, 32 and 41 Balance work"				
Price schedule with BOQ					
BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
I	Construction of Tenements				
7	Brickwork in cement mortar 1:6 (One of cement and six of sand) using ground moulded II class chamber burnt bricks of size 9" x 4 3/8" x 2 3/4" for super structure in the following floors including fixing the frames of doors and windows, scaffolding, proper setting curing etc., complete in all respects.				
a)	In Ground Floor	Cum	274.92	5025.36	13,81,571.15
b)	In First Floor	Cum	259.491	5080.65	13,18,383.73
c)	In Second Floor	Cum	259.491	5135.95	13,32,732.54
d)	In Third floor	Cum	227.374	5191.25	11,80,354.14
e)	In Fourth floor	Cum	140.877	5246.54	7,39,116.96
f)	In Fifth floor	Cum	86.497	5301.84	4,58,592.99
g)	In Sixth floor	Cum	54.38	5357.13	2,91,320.89
8	Providing and laying the READY MIX CONCRETE of M-25 Grade using ordinary Portland cement with minium cement content of 370 Kg/m3 .	M3	334.00	5208.94	17,39,785.63
10	Brick Partition wall 12cm thick in cement mortar 1:5 (one of cement and five of sand) using ground moulded II class chamber burnt bricks of size 9"x 4 3/8" x 2 3/4" including fixing the frames of doors and windows, scaffolding and proper setting, curing, finishing etc., complete as directed by the departmental officers				
a)	In Ground Floor	Sqm	572.28	581.72	3,32,909.01
b)	In First Floor	Sqm	747.72	592.78	4,43,230.47
c)	In Second Floor	Sqm	747.72	603.84	4,51,501.00
d)	In Third floor	Sqm	498.48	614.90	3,06,514.36
e)	In Fourth floor	Sqm	249.24	625.96	1,56,014.02
f)	In Fifth floor	Sqm	249.24	637.02	1,58,770.86
15	Providing form work for centering, shuttering etc., for all reinforced concrete work such as Columns	M2	840.00	236.67	1,98,805.32
16	Providing form work for centering, shuttering etc., for all reinforced concrete work like slab, beams, lintels, loft etc., including shuttering, upto 3.00m high using MS sheet of size 90cm x 60cm and BG 10, stiffened with MS angle of size 25mm x 25mm x 3mm laid over silver oak (Country wood) joists of size 10cm x 6.5 cm (Spaced about 91cm center to center) distance and supported by casurina props of size 10cm- 13cm dia (spaced at 75 cm center to center) and removing the same after a specified period without damaging RCC works in all floors etc., complete as directed by the departmental officer. (Slabs, Lintels & Lofts)	Sqm	2420.00	322.93	7,81,488.18
17	Supplying, fabrication and placing in position the following kinds of steel grills for reinforcement for all RCC works and other civil works etc.,	MT	66.00	59785.59	39,45,848.74
18	Providing 7.5 cm thick staircase parapet wall using ground moulded II class chamber burnt bricks of size 9"x4 3/8"x2" 3/4" in cement mortar 1:4 (One of cement and four of sand) and plastering the hand rails portion only with red oxide plastering in cement mortar 1:4 (one of cement and four of sand) 20 mm thick using 9.8kg of red oxide powder per 10M2 and plastering either side of parapet with CM 1:4 (One of cement and four of sand) 20mm thick providing skirting, finishing smooth complete in all respects in all floors	Sqm	96.00	5523.02	5,30,210.02
19	Plastering with CM 1:5 (One of cement and five of sand) 12mm thick including providing band cornice, curing, finishing, etc., complete as directed by the departmental officers	Sqm	28500.00	127.18	36,24,601.50
20	Stucco plastering 12mm thick in cement mortar 1:3 (One of cement and three of chips) using hard blue granite chips of size 10mm and below over the existing plastered surface including proper finishing, curing, etc., complete as directed by the departmental officers.	Sqm	452.00	167.00	75,481.74
21	Special ceiling plastering for all RCC works in cement mortar 1:3 (One of cement and three of sand) 10mm thick including hacking the RCC surface, providing necessary water band using the same mix of mortar wherever necessary proper finishing, curing, scaffolding etc., complete with relevant standard specification	Sqm	5550.00	189.12	10,49,599.35
22	Plastering with CM 1:4 (One of cement and four of sand) 20mm thick including providing band cornice, curing, finishing, etc., complete as directed by the departmental officers	Sqm	230	168.10	38,663.46
23	Cement concrete 1:5:12.5 (One of cement, five of sand and twelve and half of broken brick jelly) using 20mm size broken brick jelly including laying, ramming, curing finishing, etc. complete as directed by the departmental officers	cum	46	3123.15	1,43,665.04
24	Supplying and fixing in position the terracotta jolly of approved size and quality having 8"x8" (20cmx20cmx8cm thick in cement mortar 1:3 (One of cement and three of sand) including cost of jolly proper laying necessary scaffolding wherever necessary curing of cement joints etc. complete as directed by the departmental officers.	Sqm	195	592.78	1,15,591.32

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
25	Supplying and fixing doors with monolithic RCC door frames of size 100mm x 75mm with one edge groove of size 30mm x 20mm in reinforced CC 1:1.5:3 (One of cement, one and half of sand and three of hard broken jelly) including cost of steel and fabrication of reinforcement with 3 Nos. of 6mm MS rod around and using 3mm steel as stirrups at 30cm centre to centre including fixing 3 Nos. of iron brackets of size 100mm x 100mm x 5mm as per drawing 6 Nos. of hold fasts of size 50mm x 165mm x 3mm aluminum sleeves as per drawing 2 Nos. of iron oxidized tower bolt receiver and 6 Nos. hold fast, check nuts as per drawing including moulding with steel mould precasting making the concrete surface smooth curing etc., and GI shutter with 20 gauge GI sheets folded inside required hat section as shown in the drawing, riveting one horizontal stiffener of size as per drawing at the middle of the shutter and two sets of diagonal stiffeners at the top and bottom panels as per drawing including supplying and fixing of 2 Nos. of iron oxidized aldrops of size 300 x 12mm, 2 Nos. of iron	Nos	309	3693.82	11,41,389.14
26	Fabricating, supplying and fixing in position the GI single shutter door of overall size 760mm x 1980mm using all structural steel sections confirming to IS 2062:1999, IS 277:2003 shuttering having thickness 0.80mm} shutter frame all round using Equal leg angles of size 25mm x 25mm x 3mm thick confirming to IS 808:1989, stiffeners 150mm width at top and bottom & 200mm width at centre at rear side, vertical grooves of size ~ 25mm width & ~ 15mm deep at an equal distance varying from ~ 65 to 85mm, machine pressed having minimum 7 grooves in a shutter, suitably welded the Door frame angle and GP sheet shutter door including supply and fixing of 3 Nos. of I.O. medium weight mild steel butt hinges 125mm x 65mm size with IS :1341 mark of MS hold fast 150mm x 25mm x 6mm size confirming of IS:1730 & IS : 2062:1999, 1 No. of I.O. mild steel sliding door bolts - aldrop with IS 281 mark of size 300mm x 16mm, placing the supporting plate of size ~ 330mm x 200mm for resting the aldrop, plate using hot rolled and also provide MS flat of size ~ 330mm (length) x 50mm (breadth) x 3mm thick for sliding bolt portion & ~ 75m x ~ 50mm x 3mm thick for staple portion - placing over the HR sheet, 2 Nos. of I.O. tower bolt of size 200mm x 12mm with IS 204 mark, 2 Nos. of tower bolt receiver using 6mm (MS bars	Nos	156	2623.28	4,09,230.90
27	Fabricating, supplying and fixing the GI Window of overall size 1220 x 1220mm using all structural steel sections confirming to "Steel for General Structural Purpose - IS 2062 : 1999" using Equal Leg angles (IS 808:1989) of size 35 x 35 x 5mm thick for window frames all round including providing 4 Nos. of hold fast 150mm long, providing 11 Nos. of 10mm square steel bars (IS 1732:1989) @ ~ 10mm centers (whereas ~ 125 to 135mm near handle portion for easy hand operation) making window shutter using Galvanised Plain Steel sheet {IS 277:2003 - Plain sheet - Type: Ordinary, Designation : GP, Grade 'O' - 120 GM / Sq.m - sheet thickness 0.63mm}, shutter frame all round using Equal Leg angles (IS 808 :1989) of size 25 x 25 x 3mm thick, each window with three shutters, having vertical grooves of size ~ 25mm width & ~ 15mm deep at an equal distance varying from ~ 65 to 85mm, machine pressed, minimum 4 grooves in each shutter, providing Indian Standard Hot Rolled Steel Tee Bars - "T" section (IS 1173:1978) of size 25mm x 25mm x 3mm for central vertical post - 2 Nos.	Nos	156	1956.39	3,05,197.31
28	Fabricating, supplying and fixing the GI Window of overall size 910 x 1220mm using all structural steel sections confirming to "Steel of General Structural Purpose - IS 2062 : 1999" using Equal Leg angles of size 35mm x 35mm x 5mm thick confirming to IS 808:1989 for window frames all round including supplying and fixing 4 Nos. of hold fast ~ 150mm long, providing 11 Nos. of 10mm square steel bars (IS 1732:1989) @ ~ 100mm centers (whereas ~ 125 to 135mm near handle portion for easy hand operation) shutter using Galvanised Plain Steel Sheet {IS 277:2003 - Plain sheet - Type : Ordinary, Designation : GP, Grade 'O' - 120 GM / Sq.m - sheet thickness 0.63mm}, shutter frame all round using Equal Leg angles (IS 808 :1989) of size 25mm x 25mm x 3mm thick, each window with two shutters, having vertical grooves of size ~ 25mm width & ~ 15mm deep at an equal distance varying from ~ 65 to 85mm, machine pressed, minimum not less than 4 grooves in each shutter, providing Indian Standard Hot Rolled Steel Tee Bars - "T" section (IS 1173:1978) of size 25mm x 25mm x 3mm for central vertical post - 1 No. suitably	Nos	159	1956.39	3,11,066.49
29	Supplying and fixing of factory made PVC rigid panel door with frame made from MS tubes of 19 gauge size of 19mm x 19mm and covered with heat moulded PVC channel of 5mm thick and width of 50mm to form styles and rails. The inner panel should be inserted between the frame with 5mm thick PVC rigid foam sheet welded/sealed to the styles and rails along with 5mmx25mm PVC beading on all and either sides. The vertical tube may be filled with suitable materials to further enhance the screw holding capacity etc., complete in all respects and colour as directed by the departmental officer. Door Size 0.76m x 1.98m	Sqm	472	1645.62	7,76,734.06
30	Supplying and fixing of Oriya type water closet 45cm with 'P' or 'S' trap (White glazed) earthen ware best (IN ALL FLOORS) including concrete packing filling the sink portion with brick jelly lime concrete 32:12 1/2 (Thirty two parts of broken brick jelly and twelve and half of lime (no sand) using 20mm size broken brick jelly and plastering the top of flooring with cement mortar 1:4 (one of cement and four of sand) 12mm thick including plastering the sides of sink portion in cement mortar 1:3 (One of cement and three of sand) 12mm thick mixed with water proofing compound 4 lbs/cft in cement applying one coat of britec solution including curing for the sides and bottom of the sink portion, curing etc., complete as directed by the departmental officers	Nos	152	3933.80	5,97,937.75

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
31	Cement concrete 1:2:4 (One of cement, two of sand and four of hard broken stone), using 10mm gauge hard broken stone for all precast concrete slabs for cupboard planks, side slab for boxing around window and other similar works having 25mm thickness excluding cost and fabrication of reinforcement grills in position shuttering centering but including precasting curing finishing and fixing in position as directed by the departmental officers etc., complete complying with standard specification. (Average rate for all floors)	Sqm	545	1133.58	6,17,799.47
32	Supplying and fixing in position Ferro cement corner slab of size "10" radius and 1" in thickness in bathroom including grooves in the wall	Sqm	7.62	57.38	437.20
33	Providing Ellis Pattern flooring 20mm thick (Ellis pattern) with layer of cement concrete 1:3 (one of cement and three of hard broken stone) (No sand) using hard blue granite chips of size 3mm to 10mm and surface rendered smooth over RCC slab including supplying and fixing 20mm dia GI pipe outlet etc., complete in all respects.	Sqm	4400	329.57	14,50,112.40
34	Weathering course in concrete broken brick jelly 20mm size in pure slacked lime over RCC roof slab the proportion being 32:12 1/2 (Thirty two parts of broken brick jelly and twelve and half of slacked lime) laying to a thickness of 110mm and compacted and well beaten to 80mm by using wooden hand beater of weight not exceeding 2 kg hand beating sprinkling liberally with lime water and a small proportion of solution prepared by soaking kadukkai dry nut powder and jaggery (vellam) and giving required slope and thickness on roof etc. completed as directed by the departmental officers in the 8th floor terrace	Sqm	1298.79	526.43	6,83,719.42
35	Finishing the top of roof slab with one course of pressed tiles 23cm x 23cm x 2cm using cement mortar 1:3 (One of cement and three of sand) mixed with water proofing compound at 2% by weight of the cement and pointing with the same mortar, finishing, curing etc., complete as directed by the departmental officers in 8th floor	Sqm	1357.05	526.43	7,14,389.12
36	White washing two coats using clean shell lime including the cost of lime, gum, brushes and scaffolding etc., complete in all respects as directed by the departmental officers in all floors	Sqm	24000	11.06	2,65,464.00
37	Painting two coats of cement paint of approved quality over one coat of white cement paint primer including the cost of cement paint, brushes scaffolding curing etc. all complete as directed by the departmental officers	Sqm	10500	132.71	13,93,497.00
38	Painting the new iron work with one coat of first class synthetic enamel paint	Sqm	2800	67.46	1,88,899.20
39	Supplying and fixing of 110mm dia PVC pipe of 6kg/cm ² of approved quality confirming to IS 13592/1992 type B with ISI monogram packing the joints with hemp yarn and cement including fixing into walls with necessary wooden plugs and holding down clamps, dismantling and making good of the dismantled portion with necessary connections to the sanitary fittings testing etc. complete in all respects	RM	315	197.96	62,358.66
40	Supplying and fixing of 110mm dia PVC soil pipe of 6 kg/cm ² of approved quality confirming to IS 13592/1992 (type B) of finolex (or) equivalent with ISI monogram packing the joints with hemp yarn and cement including fixing into walls in W/C room with necessary connection to the sanitary fittings, testing etc. complete in all respects in all floors as directed by the departmental officers	RM	98	197.96	19,400.47
41	Supplying and fixing of 75mm dia PVC pipe of 6 kg/cm ² of approved quality confirming to IS 13592/1992 Type-B of finolex or equivalent with ISI monogram packing the joints with hemp yarn and cement including fixing into walls with necessary wooden plugs and holding down clamps, dismantling and making good of the dismantled portion with necessary connection to the sanitary fittings and testing etc. complete in all respects in all floors as directed by the departmental officers	RM	544	131.61	71,594.21
42	Supplying and fixing of 75mm dia PVC pipe of 6 kg/cm ² of approved quality confirming to IS 13592/1992 (type B) of finolex or equivalent with ISI monogram packing the joints with hemp yarn and cement including fixing into walls with necessary connections to the sanitary fittings in bath/WC room, etc. complete in all respects in all floors as directed by the departmental officers from nahini trap to wall.	RM	435	131.61	57,249.05
43	Supplying and fixing of 160mm dia PVC pipe of 6kg / cm ² of approved quality confirming to IS 13592/1992 (type B) of finolex or equivalent with ISI monogram under basement including packing the joints with hemp yarn and cement with necessary wooden plugs and holding down clamps including fixing dismantling and making good of the dismantled portion with necessary connection to the sanitary fittings and testing etc. complete in all respects in Ground floor as directed by the departmental officers	RM	183	230.03	42,095.67
44	Supplying and fixing of 110mm dia PVC rain water down fall pipe 4kg/cm ² confirming to IS with 1 No. of PVC bend/elbow and 1 No. of shoe with necessary clamps couplers gratings, teak wood plug etc. complete including fixing in proper position with solvent cement, making holes in the walls good of the dismantled portion with necessary brick work in CM etc. in all respects as directed by the departmental officers.	RM	275	165.89	45,619.20
45	Supplying of following kinds of PVC pipe specials of approved quality suitable to pipe as per table II IS 14375/1999				
a)	110mm dia PVC vent cowl	Nos.	18.00	131.61	2,368.93
b)	110mm dia PVC single bend with door	Nos.	150.00	131.61	19,741.05
c)	110mm dia PVC double 'Y' with door	Nos.	61.00	131.61	8,028.03
d)	110mm dia PVC single bend without door	Nos.	24.00	131.61	3,158.57

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
e)	75mm dia PVC bend with door	Nos.	150.00	98.42	14,763.60
f)	75mm dia PVC single 'Y' with door	Nos.	150.00	98.42	14,763.60
g)	75mm dia PVC vent cowl	Nos.	36.00	98.42	3,543.26
h)	75mm dia PVC single bend without door	Nos.	36.00	98.42	3,543.26
l)	100x75mm dia Nahini trap with PVC grating	Nos.	154.00	98.42	15,157.30
46	Supplying the following dia PVC pipes of pressure class at 10 kg/cm2 of approved quality having inner dia confirming to IS 13592/1992 as follows at the site of work				
a)	40mm dia PVC pipe	RM	67.50	98.42	6,643.62
b)	20mm dia PVC pipe	RM	5200.00	85.16	4,42,821.60
47	Supplying the following PVC specials of approved quality having inner dia confirming to IS 14735:1999 as follows at site of work				
a)	20mm dia PVC Coupler	Nos.	900.00	66.36	59,721.30
b)	20mm dia PVC elbow	Nos.	1008.00	66.36	66,887.86
c)	20mm dia PVC Tee	Nos.	840.00	66.36	55,739.88
d)	20mm dia PVC nipple with check nut with washer	Nos.	504.00	66.36	33,443.93
e)	20mm dia PVC FTA	Nos.	504.00	66.36	33,443.93
f)	20mm x 15mm dia PVC reducer	Nos.	336.00	66.36	22,295.95
g)	15mm dia PVC tap	Nos.	312.00	329.57	1,02,826.15
h)	40mm dia PVC tee	Nos.	33.00	66.36	2,189.78
l)	40mm dia PVC bend	Nos.	66.00	66.36	4,379.56
j)	40mm dia PVC threaded hex nipple	Nos.	231.00	66.36	15,328.47
k)	40mm dia PVC FTA	Nos.	231.00	66.36	15,328.47
48	Labour charges for cutting and threading and laying and jointing of PVC pipes with necessary specials of following outer dia above ground level etc. (specification as per relevant standards of M.S.)				
a)	20mm dia PVC pipe	RM	5200.00	13.28	69,030.00
b)	40mm dia PVC pipe	RM	67.50	19.91	1,343.79
49	Supply and erection of Rotational Moulded Polyethylene water storage tanks (HDPE Cylindrical vertical type) for out door use having capacity of 500 litres (excluding free board) with ISI mark (marked with tank itself) with top lid with provision of locking including necessary specials and fittings for storing potable water and manufactured with materials which do not impart any taste / odour / any toxic effect and not to contaminate etc., With carbon block content and dispersion in accordance with relevant IS specifications and as directed by the departmental officers. etc. complete (The tank should be got approved from the Executive Engineer before erection).	Nos	78.00	3291.26	2,56,717.89
50	Construction of inspection chamber 0.60M x 0.60 M for the following depth using 23cm thick ground moulded II class chamber burnt brick masonry walls in CM 1:5 (without foundation)				
a)	0.90M depth (Average)	Nos	18.00	3291.26	59,242.59
51	Construction of Inspection chamber 0.60M x 0.60M for the following depth brick jelly cement concrete 1:5:12 1/2 (One of cement and five of sand and twelve and half of broken brick jelly) using 40mm size brick jelly 15cm thick for foundation 23cm thick brick masonry wall in CM 1:5 (One of cement and five of sand) using ground moulded II class chamber burnt bricks and inside plastering with 1:3 (one of cement and three of sand) 12mm thick including channeling, benching etc. and top covered with SFRC (medium duty) cover slab and fixing in position and necessary earth work excavation, refilling the sides of foundation in all soils except hard rock requiring blasting etc. complete in all respects as directed by the departmental officers.				
a)	0.90M depth (Average)	Nos	18.00	3291.26	59,242.59

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
53	Brick partition walls 7.5cm thick using ground moulded II class chamber burnt bricks of size 9" x 4 3/8" x 2 3/4" in cement mortar 1:5 (One of cement and five of sand) in the following floors including scaffolding, proper setting, curing etc., complete in all respects				
a)	In Ground floor	Sqm	66	581.72	38,393.78
b)	In First floor	Sqm	88.5	592.78	52,460.68
c)	In Second floor	Sqm	88.5	603.84	53,439.57
d)	In Third floor	Sqm	59	614.90	36,278.98
e)	In Fourth floor	Sqm	29.5	625.96	18,465.79
f)	In Fifth floor	Sqm	29.5	637.02	18,792.09
54	Supplying and fixing MS grill of approved design & quality including providing one coat of primer with approved priming etc., complete as directed by the department officers in all floors	Kg	16323.00	55.30	9,02,596.61
Total A =					3,24,61,065.60
II Electrical Work					
55	Open earthwork excavation for foundation with all leads and lifts in all soils and sub soils and to the required depth as may be directed except hard rock requiring blasting inclusive of shoring, strutting and bailing out water wherever necessary (Excluding refilling the sides of foundation with excavated earth) in layer of 15cm thick well consolidated depositing the surplus earth in places shown and levelling the site with all leads and lifts etc. complete complying with relevant standard specification Wiring with 2x1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100V grade with ISI mark confirming to IS 694/1990 in suitable PVC rigid pipe 1.8 mm thick with ISI mark concealed in wall and ceiling with suitable size concealed 16 gauge MS switch box covered by laminated hylem sheet 3mm thick for LIGHT POINT including the cost of cable, PVC pipe and specials ceiling rose, flush type 5 amps SP mark switch, PVC junction box, 16gauge MS switch box 100mm x 100mm x 75mm covered by laminated hylem sheet 3mm thick, T.W. plugs, cement, labour and circuit mains etc., complete				
a)	With ceiling rose	Pts.	453.00	564.02	2,55,501.51
b)	Without ceiling rose	Pts.	464.00	564.02	2,61,705.74
56	Wiring with 2x1.5sqmm PVC insulated single core unsheathed copper conductor cable of 1100V grade with ISI mark confirming to IS:694/1990 in suitable PVC rigid pipe 1.8mm thick with ISI mark concealed in wall and ceiling with suitable size concealed 16 gauge MS switch box 300mm x 200mm x 75mm covered by laminated hylem sheet 3mm thick for FAN POINT including the cost of cable PVC pipes and specials, brass screws, ceiling rose, flush type 5 amps SP mark switch PVC junction box 16gauge MS switch box covered by laminated hylem sheet 3mm thick, T.W. plugs, cement, labour and circuit mains etc.,	Pts.	302.00	564.02	1,70,334.34
57	Wiring with 2x1.50 sqmm PVC insulated single core unsheathed copper conductor cable of 1100V grade with ISI mark confirming to IS 694/1990 in suitable PVC rigid pipe 1.8mm thick with ISI mark concealed in wall and ceiling for 5 amps 3pins C.S. plug points PLUG SOCKET at convenient place including the cost of cable, PVC pipes and specials, brass screws , flush type 5 amps 3 pin CS plug socket and switch, labour and circuit main etc.,	Pts.	459.00	671.30	3,08,127.16
58	Wiring with 3 x 1.50 sqmm (22/0.30) PVC insulated single core unsheathed FR copper conductor cable of 1100V grade suitable PVC rigid pipe in wall and ceiling with necessary PVC accessories in flush with wall with 3mm thick hylem sheet cover MS switch box in flush with wall and 5A FT switch (two way) and making STAIRCASE LIGHT POINT.	Nos.	26.00	2461.81	64,006.96
59	Supply and fixing 5 A 3 pin/2 pin COMBINED WALL SOCKET with 5A flush type switch on suitable MS box of size 150mmx100 x75mm in flush with wall and covered 3mm hylem sheet including with necessary connections etc. all complete as directed by the departmental officers	Nos.	312.00	928.98	2,89,841.76
60	Supply and run off 2 x 4 sq.mm PVC insulated single core Fr COPPER CABLE of 1100 MV grade in suitable PVC rigid (1.8mm thick) pipe concealed in wall and concealed with ceiling with continuous earth connections by 1mm of 1.5sq.mm PVC insulated unsheathed copper cable of 1100mm grade and making good of the concealed portion with suitable colour etc. all complete as directed by the departmental officers.	RM	7167.00	116.13	8,32,282.21
61	Supply and fixing off 32A /16 fuse units on suitable TW board with necessary internal connections for controlling the power plug etc. all complete as directed by the departmental officers	Nos.	156.00	371.59	57,968.35
62	Supply and run off 4x16 sq. mm of PVC insulated unsheathed single core FR copper cable of 1100 V grade from TNEB circuit to TNEB meter and from the meter to the 100 ATPN SDF main switch etc. all complete as directed by the departmental officers	RM	13.00	116.13	1,509.65

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
63	Supply and erection of 100 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 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 inter connections by copper flat of suitable sizes; suitable PVC colour sleeves for the inter connecting copper flats/rigid copper wire; earth connections to all switches/bus bar by copper flats of suitable sizes from the earth bus; hylem sheet separation between bus bar and switches 1set LED pilot lamps with switches, fuse units, suitable angle iron frame of size of 40mm x 40mm x 6mm with powder coated painting over one coat of red oxide and with numbering; superscription of cables sizes, capacity of switches, etc., and incorporating the following in coming 1 No 100 Amps TPN SDF with HRC fuse links for incoming, 12 Nos. 32 Amps DPMC switch, 12 Nos. 32A fuse units, 2 Nos. 25mm x 3mm x 15mm copper flats for neutral and earth for outgoings, space provision for TNEB, Energy meter, 1 No. of dummy provision all complete Internal connection by 2 runs of 4 sq.mm PVC insulator unsheathed copper conductor of 1100 V grade from TNEB the 32A DP circuit to the meter and from the meter to MC switch and 1 set LED pilot lamps with fuse, units, switches and inter connections; inter connection to the bus bar by 25mmx3mm T C copper flats for phases and neutral from 100 A TPN SDF to the bus; inter connection by 8 SWG copper for the phases and neutral from the 32 A DP MC switch to the bus; 6mm thick hylem sheet separation between bus bar chamber and switches chamber; insulators for the support for the bus; super scribing on the panel Board the size capacity of cable, switches, location etc. 2 Nos. of metallic danger boards as directed by the departmental officer in all complete. (Except Cubical panel Board).	Nos.	13.00	69673.73	9,05,758.43
64	Supplying and fixing 600x450mm 19mm teak wood plank with supporting reapers 1" x 1.1/2" both sides with painting including cost on wall with necessary bolts and nuts with the following for availing three phase service connection from TNEB for common areas, lift, pump set etc. Including 1) 3 Nos. 100 A fuse units, 2) 1 No. neutral link copper flat of size 25x3x150mm, 3) 1 No. of earth link of copper flat of size 25x3x150mm, and 4) Space provision for 3 phase energy meter etc. all complete as directed by the dept., officers	N1	3.00	5573.90	16,721.69
65	Supply and erection of 100 Amps capacity floor mounting panel board (Cubical type) with bus bar chamber made up of 16 SWG MS sheet for 3 phase 4 wire system with 25mmx3mm 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 inter connecting copper flats/rigid copper wire; earth connections to all switches/bus bar copper flats of suitable sizes from the earth bus; hylem sheet separation between bus bar and switches; 1 set LED pilot lamps with switches, fuse units, suitable angle iron frame size of 40mmx40mmx6mm with painting in two coats of suitable colour over one coat of red oxide and with numbering, superscription of cables size capacity of switches etc and incorporating 1 No.100A TPN SDF with HRC fuse links for incoming, 4 Nos. 63A TPN SDF with HRC fuse link for outgoing and 1 set LED pilot lamps with fuse units, switches and inter connections; inter connection to the bus bar by 25mm x3mm T.C. copper flats for phases and neutral from 100A TPN SDF with HRC fuse links to the bus; inter connection by No.6 SWG copper for the phases and natural from the 63A TPN SDF to the bus; 6mm thick hylem sheet separation between bus bar chamber and switches chamber; insulators for the support for the bus; super scribing on the panel board the size, capacity of cable, switches, location etc. 2 Nos. metallic danger boards etc. all complete as directed by the departmental officers (Except Cubical panel Board).	Nos.	3.00	92898.31	2,78,694.92
66	Supply and clamping of 4 x 16 Sqmm PVC armored LT UG cable from the common panel to the lift machine room etc. all complete as directed by the departmental officers	RM	82.00	188.01	15,416.82
67	Supply and providing cable end termination of 4 x 16 Sq.mm PVC LTUG aluminum armored cable with necessary aluminum cable sockets by crimping etc. with electrical connection complete as directed by the departmental	Nos.	4.00	1114.78	4,459.10
68	Supply and fixing of brass cable gland for 4 x 16 sq. mm PVC armored LTUG cable with earth connection	Nos.	4.00	603.84	2,415.35
69	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/ 100A 4 pole isolator MCB type as incoming and 12 Nos. 20A/32A 10 KA SP MCB as outgoing with bus bar and double door arrangements in flush with wall and making good of the concealed portion with earth connection	Nos.	3.00	9289.83	27,869.48
70	Supply and fixing of 4 way single phase distribution board of 16A per way with 32A DP switch with metal clade of 500 V/side handle with fuse and neutral on suitable angle iron frame work with trucking box, MS cable entry box and 20mmx3mmx100mm copper flat for earth connection etc. all complete as directed by the departmental officers	Nos.	163.00	928.98	1,51,423.74
	Lift Machine Room / Lift Shaft				
71	Supply and fixing of 25mm x 3mm x300mm tin coated copper flat on the wall for use as earth bus in the lift machine room	Nos.	3.00	6224.18	18,672.55
72	Supply and fixing of 32 A TPN MC switch and 32 A DPMC switch on suitable angle iron frame work with MS cable entry boxes at both ends with earth connection by No.8 SWG copper in the lift machine room	Nos.	3.00	464.49	1,393.47
	Earthing				
73	Supply and run of 25mmx3mm GI flat from the earthing to the cubical panels and also for inter connecting the earthings and for the earth bus from the metering panel to the lift machine room	RM	130.00	78.53	10,208.25

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
74	Supplying and run of 8 SWG copper wire on walls/below ground level with necessary 'U' nails, earth work excavation and refilling etc. including the cost of all materials complete	RM	82.00	7.74	634.68
75	Earthing as per the ISI specification with an earth electrode of 2.1 mts class 'B' GI pipe of dia not less than 40mm with copper earth plate of size 25mmx50mmx6mm with necessary funneling arrangements with necessary masonry work and with 40mm RCC cover/CI cover slab for the brick masonry etc. all complete as directed by the departmental officers	Nos.	11.00	1974.09	21,714.96
	Change-over arrangements				
76	Supply and fixing 100A 4 pole change-over switch on suitable angle iron frame work with cable box at both ends and with earth connection etc. all complete	Nos.	3.00	7431.87	22,295.60
77	Supply and fixing of 100A TPN sheet double break switch with HRC fuse and neutral on suitable angle iron frame work with MS cable entry boxes and with earth connection only etc., all complete	Nos.	3.00	6967.38	20,902.13
78	Supply and clamping of 3.5 x 50 Sq.mm PVC armored LTUG cable from the main switch for common service to the change over switch and from the change over switch to the common 100A panel etc. all complete	RM	57.00	371.59	21,180.74
79	Supply and providing cable end termination of 3.5x50 Sq.mm PVC LTUG Aluminum armored cable with necessary aluminum cable sockets by crimping etc. with electrical connection complete.	Nos.	6.00	1161.23	6,967.35
80	Supplying and fixing of brass cable gland for 3.5x50 sq.mm PVC armored LTUG cable with earth connection etc. all complete as directed by the departmental officers	Nos.	6.00	1161.23	6,967.35
	TOTAL B =				37,74,974.29
III	<u>Pavement around the Blocks</u>				
1	Earthwork excavation for foundation with all leads and lifts in ordinary soils and to the required depth etc., complete in all respects.	Cum	38.19	96.22	3,674.60
2	Filling in foundation with river sand in layers not exceeding 15cm thick well watered rammed and consolidated complying with relevant standard specification including the cost of supplying river sand	Cum	40.50	1164.55	47,164.11
3	Filling the lowlying areas to the required formation level using approved quality of earth etc	Cum	78.75	138.24	10,886.40
4	Refilling with selected excavated earth other than sand complying with relevant standard specifications for refilling in foundation and basement	Cum	24.00	77.42	1,858.03
5	Cement concrete 1:5:10 (one of cement, five of sand and ten of hard broken stone) using 40mm size	Cum	8.87	3313.38	29,373.09
6	Supplying and laying the machine made 50mm thick interlocking concrete paver block made out of M20 grade concrete of approved design	Sqm	316.40	658.03	2,08,196.14
7	Brickwork in cement mortar 1:5 (one of cement and five of sand) using ground moulded II class chamber burnt bricks of size 9" x 4 3/8" x 2 3/4"				
a)	In Foundation & Basement	Cum	37.50	4971.17	1,86,418.80
8	Plastering with CM 1:5 (one of cement and five of sand) 12mm thick	Sqm	248.34	127.18	31,583.63
9	Painting two coats of cement paint of approved quality over one coat of white cement paint primer including the cost of cement paint, brushes scaffolding curing etc	Sqm	154.26	132.71	20,472.46
	Total C =				5,39,627.26
4	Fire Fighting arrangement				
1	Supply and Installation of 100 GPM Fire fighting pumpset 30m head monoblock type with CI impellor coupled to 5.0 hp TEFC motor 415 v, 3ph, 50 hz with base, foundation bolts.	No.	3.00	87589.83	2,62,769.48
2	Supply and installation of Direcet online starter for the 5.0 hp motor make L&T bhartia cutler.	No.	3.00	1459.83	4,379.48
3	6 Sqmm x 3 core aluminium armoured cable with glands, lugs, clamps, etc.,	RM	120.00	121.65	14,598.36
4	Supply and installation of cast iron butterfly valves with operating handle marked open / shut 100mm dia	Nos.	6.00	6812.54	40,875.25
5	Supply and installation of non- return valve, swing check type slim seal 100mmdia.	Nos.	3.00	6812.54	20,437.62
6	Supply and installation of MS pipe B class with fittings like bend, reducer, tee, etc., fixed to the wall with "U" clamps and angle supports pipe painted to post office red colour, welded type				
a)	100mm dia MS pipe	RM	158.80	1946.44	3,09,094.51
b)	80mm dia MS pipe	RM	3.20	1362.51	4,360.03
7	Supply and installation of 63mm dia GM hydrant valve, oblique type with instaneous inlet, cast iron wheel marked open/ shut	Nos.	13.00	7299.15	94,888.99

BOQ ITEM NO	DESCRIPTION	UNIT	Qty	Rate (excluding GST) (Rs.)	Amount (excluding GST) (Rs)
8	Supply and installation of 63mm dia Gm Pipe with nozzle	Nos.	14.00	3260.29	45,644.00
9	Supply and installation of hose reel drum swing 180 deg type with 19mm rubber hose,25mm length,stop nozzle and gate valve 19mm	Nos.	13.00	9245.59	1,20,192.70
10	Supply and installation of MS hose box wall mounting type with glass doors and painted to pored colour	Nos.	13.00	9245.59	1,20,192.70
11	supply and installation of 63mm dia canvass hose for fire fighting with GM coupling bound on either end				
a)	7.50m length	Nos.	36.00	4671.46	1,68,172.52
b)	15.00m length	Nos.	5.00	6812.54	34,062.71
12	Supply and installation of two way fire brigade inlet connection	Sets	3.00	2919.66	8,758.99
13	Supply and installation of 0-100 Psi Pressure Gauge	No.	3.00	1946.44	5,839.32
14	Supply and installation of Air release valve	No.	3.00	2919.66	8,758.99
	Total D =				12,63,025.65
9	Extra work				
i	Rebar anchoring / dowelling for following diameter of bars including scaffolding , drilling holes to required depth in existing RCC member with due care of PT Tendons, cleaning the holes embedding and fixing reinforcement rods with Fischer Chemical FISV360s / 'lockset' or equivalent compound as per manufacturer's specifications, making good surafce to the satisfaction of Engineer, etc complete, as directed by the engineer In Charge. (Reinforcing bars shall be paid in relevant Item)				
ii	16mm (210mm min. embedment depth) or as per the design requirement.	each	780	468.00	3,65,040.00
iii	20mm (260 mm min. embedment depth) or as per the design requirement.	each	780	527.40	4,11,372.00
iv	25mm (325 mm min. embedment depth) or as per the design requirement.	each	780	585.90	4,57,002.00
v	CPWD-DAR-item No:15.7 Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge	Cum	90	1571.34	1,41,420.51
	Total E =				13,74,834.51
	Total (A+B+C+D+E)=				3,94,13,527.31

Say **3,94,13,527.00**