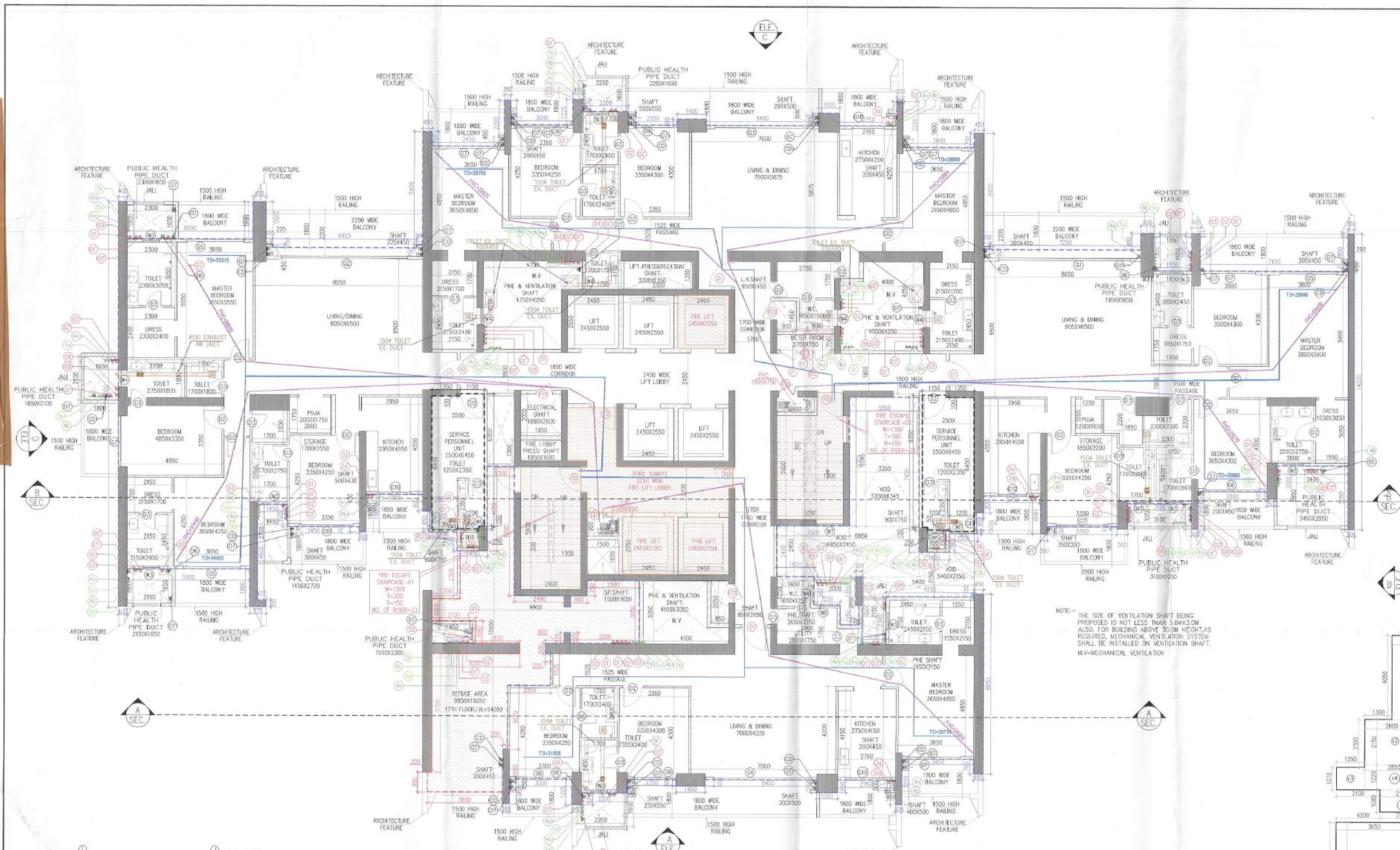
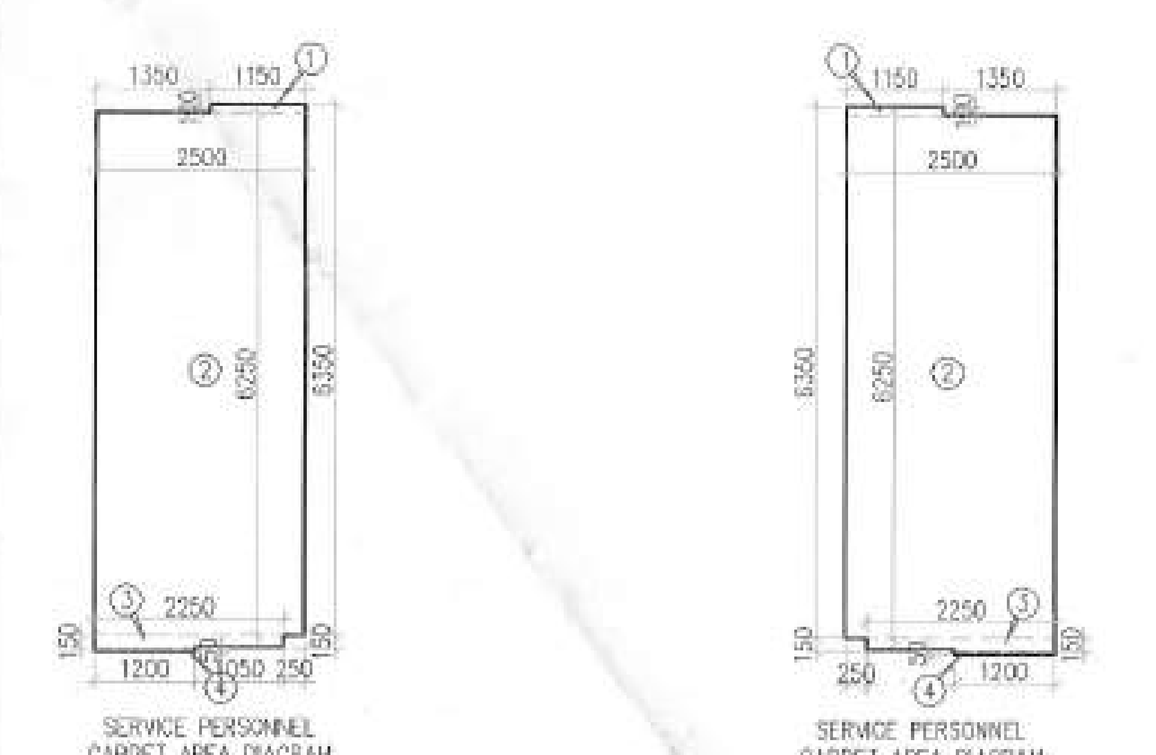


17TH REFUGE FLOOR PLAN
UNIT = 04
SERVICE PERSONAL UNIT = 02
LVL.+64050
TOWER-3

NOTE:- THE SIZE OF VENTILATION SHAFT BEING PROPOSED IS NOT LESS THAN 3.0MX3.0M ALSO, FOR BUILDING ABOVE 30.0M HEIGHT, AS REQUIRED, MECHANICAL VENTILATION SYSTEM SHALL BE INSTALLED ON VENTILATION SHAFT. M.V=MECHANICAL VENTILATION



SERVICE PERSONNEL CARPET AREA DIAGRAM

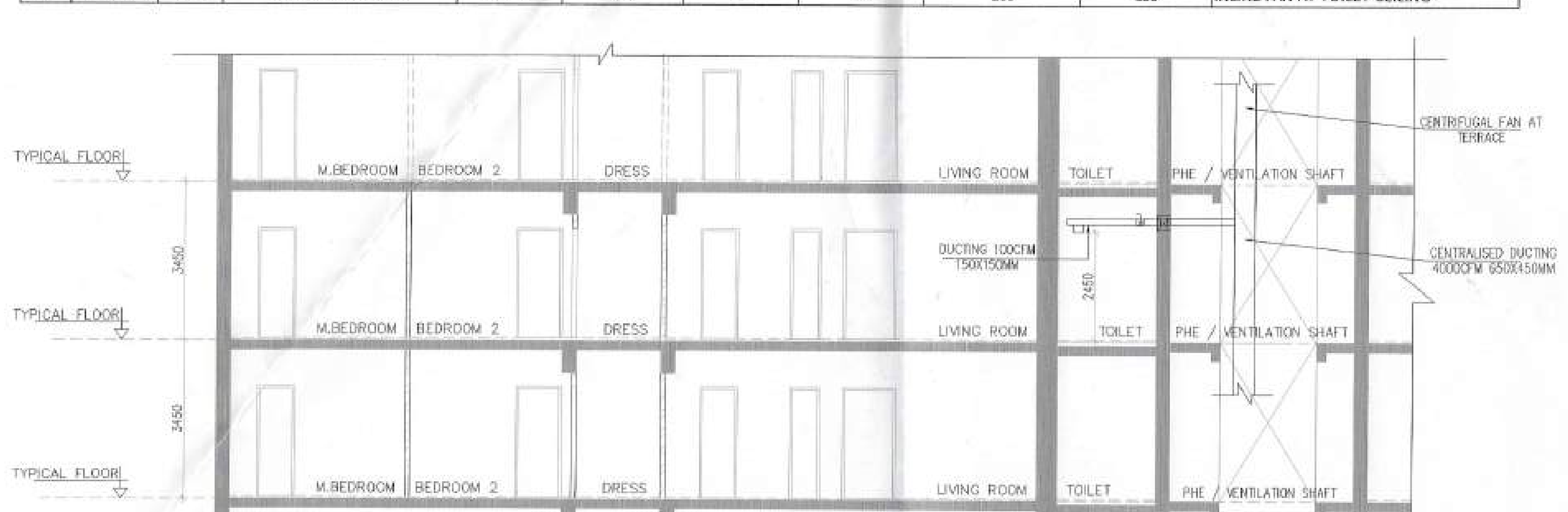
SERVICE PERSONNEL CARPET AREA DIAGRAM

SERVICE PERSONNEL CARPET AREA CALCULATION

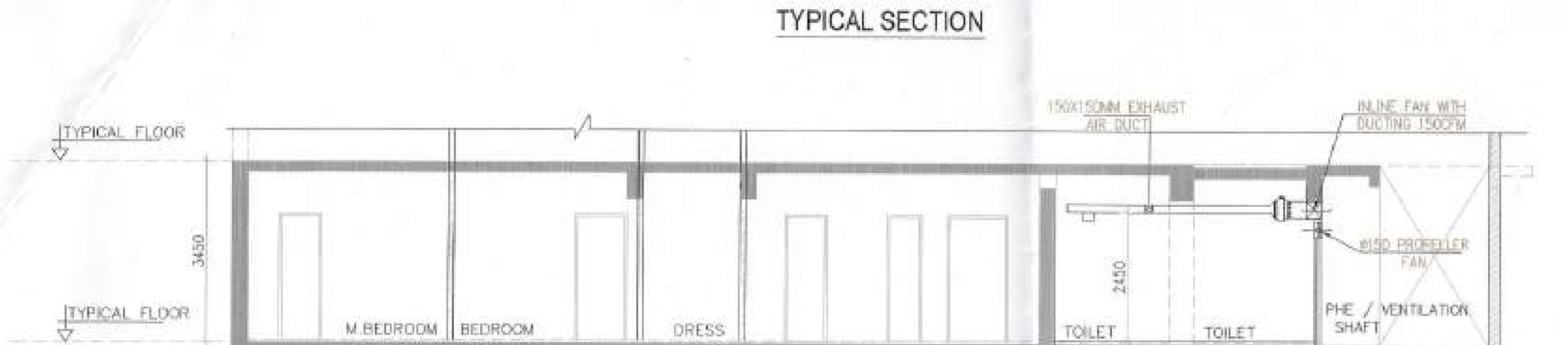
GROSS – A									
1	=	1	X	1.150	X	0.100	=	0.115	SQM
2	=	1	X	2.500	X	6.250	=	15.625	SQM
3	=	1	X	2.250	X	0.150	=	0.338	SQM
4	=	1	X	1.200	X	0.050	=	0.060	SQM
						TOTAL	=	16.138	SQM

VENTILATION - TOWER 3 - TOILET/PLUMBING SHAFT

Sl. No.	TOWER	FLOOR	BUILDING NO. & PLUMBING SHAFT	FLAT NO	AIFLOW (CFM) PER FLOOR	NO. OF FLOORS	AIFLOW (CFM) MAXIMUM	AIRFLOW (CFM) DESIGN	AIR FLOW (CFM) SELECTED	Type of Ventilation System
1	TOWER 5	TYP.	DRESSING ROOM TOILET	UNIT 1	100	37	3,700	3,700	4,000	DUCTED EXHAUST, FAN AT THE TERRACE
2	TOWER 5	TYP.	BEDROOM 03 TOILET	UNIT 1	100	1	100	100	150	INLINE FAN AT TOILET CEILING
3	TOWER 5	TYP.	POWDER TOILET	UNIT 1	100	37	3,700	3,700	4,000	DUCTED EXHAUST, FAN AT THE TERRACE
4	TOWER 5	TYP.	UTILITY ROOM TOILET	UNIT 1	100	37	3,700	3,700	4,000	DUCTED EXHAUST, FAN AT THE TERRACE
5	TOWER 5	TYP.	MASTER BEDROOM 02 TOILET	UNIT 1	100	37	3,700	3,700	4,000	DUCTED EXHAUST, FAN AT THE TERRACE
6	TOWER 5	TYP.	POWDER TOILET	UNIT 2	100	1	100	100	150	INLINE FAN AT TOILET CEILING
7	TOWER 5	TYP.	SERVANT TOILET	UNIT 2	100	1	100	100	150	INLINE FAN AT TOILET CEILING
8	TOWER 5	TYP.	POWDER TOILET	UNIT 3	100	1	100	100	150	INLINE FAN AT TOILET CEILING
9	TOWER 5	TYP.	SERVANT TOILET	UNIT 3	100	1	100	100	150	INLINE FAN AT TOILET CEILING
10	TOWER 5	TYP.	POWDER TOILET	UNIT 4	100	37	3,700	3,700	4,000	DUCTED EXHAUST, FAN AT THE TERRACE
11	TOWER 5	TYP.	BEDROOM 03 TOILET	UNIT 4	100	1	100	100	150	INLINE FAN AT TOILET CEILING



TYPICAL SECTION



TYPICAL SECTION

DOOR SCHEDULE

TYPE	OPENING SIZE	CILL	LINTEL (F.F.L)	LINTEL (T.O.S)	REMARKS	FIRE FIGHTING
D1	1250X2400	±0 0	+2400	+2450	ENTRANCE HALL	1 HOURS
D2	1000X2400	±0 0	+2400	+2450	BED ROOM	
D3	800X2400	±0 0	+2400	+2450	TOILET/UTILITY DOOR	
FD	1250X2400	±0 0	+2400	+2450	STAIRCASE	2 HOURS
FD1	800X2150	±0 0	+2150	+2200	FHC SHAFT	2 HOURS
FD2	2400X2150	±0 0	+2150	+2200	METER ROOM	2 HOURS
FD3	800X2150	±0 0	+2150	+2200	ELECTRICAL SHAFT SPACE	2 HOURS

GLAZING/WINDOW SCHEDULE

TYPE	OPENING SIZE	CILL	LINTEL (F.F.L)	LINTEL (T.O.S)
G1	5350X2400	±0 0	+2400	+2450
G2	6875X2400	±0 0	+2400	+2450
G3	4700X2400	±0 0	+2400	+2450
G4	4600X2400	±0 0	+2400	+2450
G5	2750X2400	±0 0	+2400	+2450
G6	2800X2400	±0 0	+2400	+2450
G7	2450X2400	±0 0	+2400	+2450
G8	2425X2400	±0 0	+2400	+2450
G9	2000X2400	±0 0	+2400	+2450
G10	1550X2400	±0 0	+2400	+2450
G11	1500X2400	±0 0	+2400	+2450
G12	3600X2400	±0 0	+2400	+2450
W1	1200X1500	+900	+1500	+1550
W2	1000X2100	+300	+2100	+2450
W3	800X2100	+300	+2100	+2150
W4	800X1400	+1000	+1400	+1450
W5	650X1400	+1000	+1400	+1450
W6	800X2150	+250	+2150	+2200
W7	1300X1050	+1350	+2400	+2450
W8	1300X1050	+1350	+2400	+2450
G0	5400X5200	±0 0	+5200	+5250
GW1	4500X5200	±0 0	+5200	+5250
GW2	2700X5200	±0 0	+5200	+5250
GW3	2350X5200	±0 0	+5200	+5250

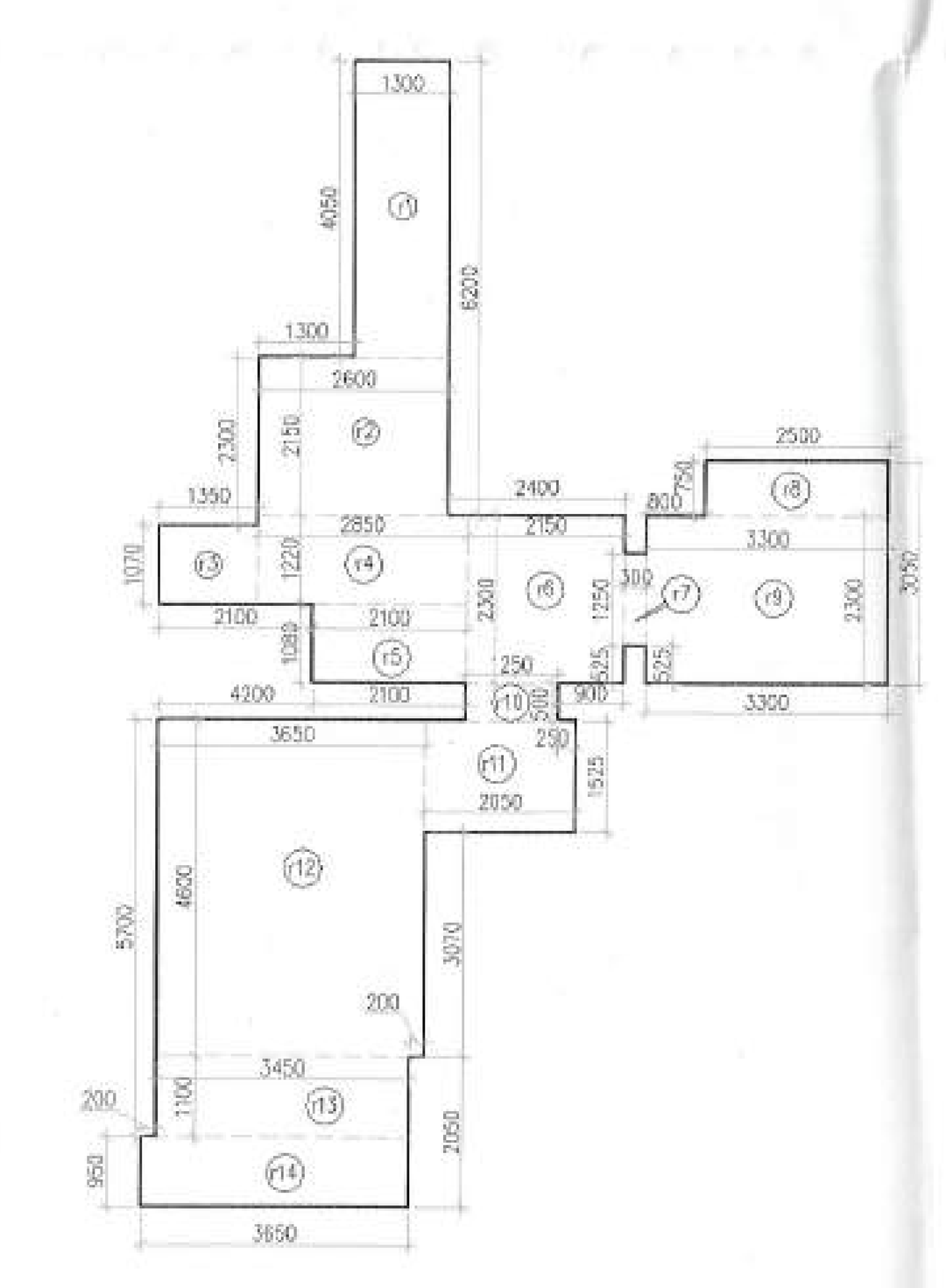
PLUMBING LEGEND:-

- (01) 100Ø Soil Pipe (SP)
- (02) 100Ø Waste Pipe (WP)
- (03) 75Ø Vent Pipe (VP)
- (4a) Domestic Water Supply Drop From Tank To Toilet / Kitchen For Top Five Floor (33th To 37th)
- (4b) Domestic Water Supply Drop From Tank To Toilet / Kitchen For First To 32nd Floor.
- (5a) Recycled Water Supply Drop From Tank To Toilet For Top Five Floor (33th To 37th)
- (5b) Recycled Water Supply Drop From Tank To Toilet For First To 32nd Floor.
- (D) Domestic Water Supply Riser Pipe Fill To O.H.T.
- (F) Recycled Water Supply Riser Pipe Fill To O.H.T.
- (2a) 100Ø Waste Pipe (For Use Kitchen Waste)
- 150Ø Terrace Rain Water Pipe
- (01) 100Ø Soil Pipe upto Third Floor (SP)
- (02) 100Ø Waste Pipe upto Third Floor (WP)
- (07) 100Ø Balcony Rain Water Pipe
- S.S Service Slab
- M.FT Multi Floor Trap
- FD Floor Drain
- COP Clean Out Plug
- Soil Pipe
- Waste Pipe
- CI Cutout Size: 200x200 mm (For Use Soil/Waste & Rain Water Drainage)
- M.FT Cutout Size: 150x150 mm (For Use WC & Floor P'Trap)
- FD Cutout Size: 100x100 mm (For Use Floor Drain)

17TH REFUGE FLOOR AREA CALCULATION

GROSS – A									
r1	=	1	X	1.300	X	4.050	=	5.265	SQM
r2	=	1	X	2.600	X	2.150	=	5.590	SQM
r3	=	1	X	1.350	X	1.070	=	1.445	SQM
r4	=	1	X	2.850	X	1.220	=	3.477	SQM
r5	=	1	X	2.100	X	1.080	=	2.268	SQM
r6	=	1	X	2.150	X	2.300	=	4.945	SQM
r7	=	1	X	0.300	X	1.250	=	0.375	SQM
r8	=	1	X	2.500	X	0.750	=	1.875	SQM
r9	=	1	X	3.300	X	2.300	=	7.590	SQM
r10	=	1	X	1.250	X	0.500	=	0.625	SQM
r11	=	1	X	2.050	X	1.525	=	3.126	SQM
r12	=	1	X	3.650	X	4.600	=	16.790	SQM
r13	=	1	X	3.450	X	1.100	=	3.795	SQM
r14	=	1	X	3.650	X	0.950	=	3.468	SQM
						TOTAL	=	60.633	SQM

TOTAL REFUGE AREA	=	GROSS – A				
	=	60.633				
	=	60.633				
GROSS AREA OF TYPICAL FLOOR (REFUGE)	=	1145.959	SQM			
GROSS AREA OF TYPICAL FLOOR	=	1199.987	SQM			
TOTAL	=	2345.946	SQM			
TOTAL NO. OF OCCUPANTS	=	GROSS AREA	/	OCCUPANT FACTOR		
	=	2345.946	/	12.5	=	187 PERSONS
REFUGE AREA REQUIRED	=	0.3 SQM. PER PERSON	+	0.9 SQM. ADDITIONAL SPAE TO ACCOMMODATE WHEEL CHAIR SPACE FOR EVERY 200 PERSON POPULATION OR PART THEREOF		
	=	0.3	X	187	+	0.9
	=	56.100			+	0.9
	=	57.000	SQM.			
PROPOSED REFUGE AREA	=	60.633	SQM.			



17TH FLOOR REFUGE AREA CALCULATION
TOWER-3

AREA CALCULATION OF TYPICAL REFUGE FLOOR (TOWER-03)

GROSS – A								
1	2	X	0.400	X	1.800	=	1.440	SQM
1a	1	X	0.300	X	1.800	=	0.540	SQM
1y	1	X	0.425	X	0.300	=	0.128	SQM
1z	1	X	0.350	X	1.800	=	0.630	SQM
2	1	X	0.625	X	1.800	=	1.125	SQM
3	1	X	7.075	X	12.750	=	90.206	SQM
4	1	X	6.650	X	3.100	=	20.615	SQM
5	1	X	3.750	X	1.050	=	3.938	SQM
6	1	X	0.300	X	0.250	=	0.075	SQM
7	1	X	4.775	X	12.350	=	58.971	SQM
8	1	X	2.750	X	0.850	=	2.338	SQM
8a	1	X	3.100	X	0.800	=	2.480	SQM
9	1	X	1.350	X	0.150	=	0.203	SQM
10	1	X	1.450	X	1.050	=	1.523	SQM
11	1	X	14.400	X	0.200	=	2.880	SQM
11a	1	X	3.505	X	0.750	=	2.629	SQM
11b	2	X	0.300	X	0.525	=	0.315	SQM
12	1	X	0.250	X	0.500	=	0.125	SQM
13	1	X	0.200	X	1.425	=	0.285	SQM
14	1	X	2.050	X	3.475	=	7.124	SQM
15	1	X	0.300	X	1.175	=	0.353	SQM
16	1	X	0.450	X	0.575	=	0.259	SQM
17	1	X	2.650	X	0.650	=	1.723	SQM
18	1	X	18.950	X	1.025	=	19.424	SQM
19	1	X	1.400	X	0.300	=	0.420	SQM
20	1	X	1.000	X	0.600	=	0.600	SQM
21	1	X	0.300	X	1.175	=	0.353	SQM
22	1	X	12.650	X	5.500	=	69.575	SQM
22a	1	X	8.400	X	3.050	=	25.620	SQM
23	1	X	1.250	X	7.400	=	9.250	SQM
24	1	X	1.050	X	6.450	=	6.773	SQM
25	1	X	1.950	X	5.500	=	10.725	SQM
26	1	X	3.450	X	5.500	=	18.975	SQM
27	1	X	0.450	X	8.650	=	3.893	SQM
28	1	X	4.250	X	2.300	=	9.775	SQM
30	1	X	0.150	X	0.950	=	0.143	SQM
31	1	X	0.300	X	1.350	=	0.405	SQM
32	1	X	12.600	X	2.450	=	30.870	SQM
33	1	X	16.100	X	6.200	=	99.820	SQM
33a	1	X	1.300	X	3.400	=	4.420	SQM
34	1	X	5.850	X	4.750	=	27.788	SQM
35	1	X	26.600	X	7.100	=	188.860	SQM
36	1	X	26.500	X	4.900	=	129.850	SQM
37	1	X	0.450	X	0.700	=	0.315	SQM
38	1	X	0.300	X	2.200	=	0.660	SQM
39	1	X	18.850	X	1.025	=	19.321	SQM
40	1	X	0.450	X	1.225	=	0.551	SQM
41	1	X	2.200	X	0.650	=	1.430	SQM
42	1	X	1.400	X	0.300	=	0.420	SQM
43	1	X	1.000	X	0.600	=	0.600	SQM
44	1	X	0.300	X	1.175	=	0.353	SQM
45	1	X	0.450	X	5.600	=	2.520	SQM
45a	3	X	0.300	X	0.150	=	0.135	SQM
46	1	X	5.850	X	11.850	=	69.323	SQM
47	1	X	3.100	X	0.800	=	2.480	SQM
47a	1	X	2.750	X	0.850	=	2.338	SQM
48	1	X	1.450	X	0.900	=	1.305	SQM
49	1	X	1.350	X	0.150	=	0.203	SQM
50	1	X	0.300	X	0.300	=	0.090	SQM
51	1	X	3.650	X	1.100	=	4.015	SQM
52	1	X	0.500	X	1.200	=	0.600	SQM
53	1	X	5.400	X	12.200	=	65.880	SQM
54	1	X	0.600	X	0.800	=	0.480	SQM
55	1	X	0.400	X	1.800	=	0.720	SQM
56	1	X	2.150	X	11.200	=	24.080	SQM
57	1	X	0.300	X	1.200	=	0.360	SQM
58	1	X	0.500	X	0.355	=	0.178	SQM
59	1	X	3.800	X	10.590	=	40.242	SQM
60	1	X	3.700	X	9.350	=	34.595	SQM
61	1	X	0.300	X	3.050	=	0.915	SQM
					TOTAL	=	1131.545	SQM

DEDUCTION AREA

GROSS – B								
a	1	X	3.750	X	4.250	=	15.938	SQM
b	1	X	1.000	X	1.350	=	1.350	SQM
c	1	X	3.300	X	1.350	=	4.455	SQM
d	5	X	2.450	X	2.550	=	31.238	SQM
e	1	X	0.950	X	1.450	=	1.378	SQM
f	1	X	2.900	X	0.950	=	2.755	SQM
g	1	X	4.000	X	3.300	=	13.200	SQM
h	1	X	1.250	X	1.200	=	1.500	SQM
j	1	X	3.200	X	5.000	=	18.000	SQM
k	1	X	1.800	X	0.750	=	1.350	SQM
m	1	X	1.300	X	3.250	=	4.225	SQM
p	1	X	1.950	X	2.000	=	3.900	SQM
q	1	X	1.950	X	1.000	=	1.950	SQM
r	2	X	0.900	X	0.750	=	1.350	SQM
s	1	X	10.450	X	5.600	=	58.520	SQM
s1	1	X	2.700	X	0.750	=	2.025	SQM
t	1	X	0.800	X	0.750	=	0.600	SQM
u	1	X	10.450	X	0.150	=	1.568	SQM
v	1	X	2.950	X	2.650	=	7.818	SQM
x	1	X	4.100	X	3.050	=	12.505	SQM
					TOTAL	=	183.623	SQM

TOTAL FAR AREA OF TYPICAL REFUGE FLOOR (TOWER-03)	=	GROSS-A	-	GROSS-B
	=	1131.545	-	183.623
	=	947.922	SQM	

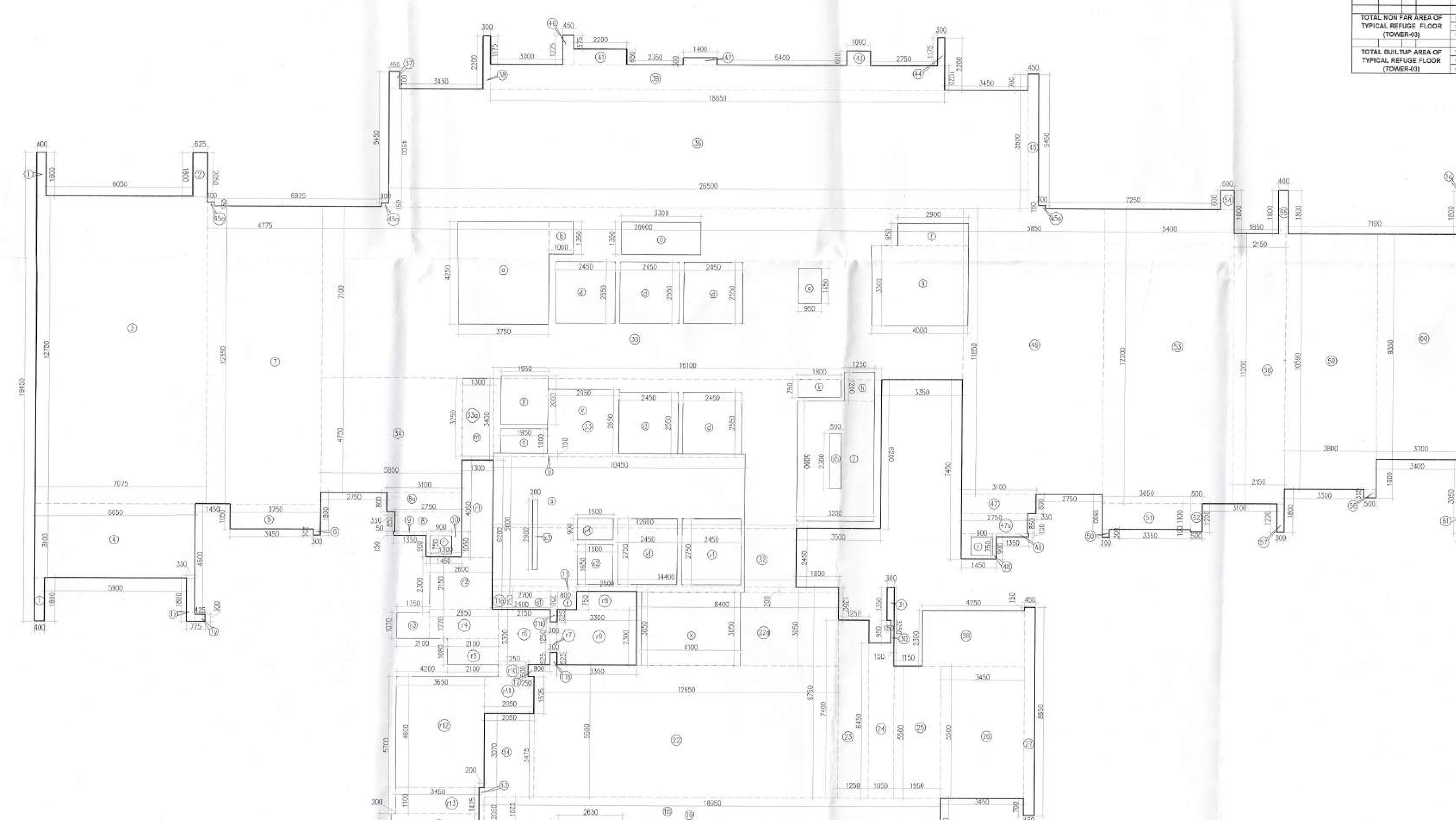
NON FAR AREA

GROSS – C								
h	1	X	1.250	X	1.200	=	1.500	SQM
j	1	X	3.200	X	5.000	=	16.000	SQM
p	1	X	1.950	X	2.000	=	3.900	SQM
s	1	X	10.450	X	5.600	=	58.520	SQM
s1	1	X	2.700	X	0.450	=	1.215	SQM
t	1	X	0.800	X	0.750	=	0.600	SQM
u	1	X	10.450	X	0.150	=	1.568	SQM
v	1	X	2.950	X	2.650	=	7.818	SQM
r1	1	X	1.300	X	4.050	=	5.265	SQM
r2	1	X	2.600	X	2.150	=	5.590	SQM
r3	1	X	1.350	X	1.070	=	1.445	SQM
r4	1	X	2.850	X	1.220	=	3.477	SQM
r5	1	X	2.100	X	1.080	=	2.268	SQM
r6	1	X	2.150	X	2.300	=	4.945	SQM
r7	1	X	0.300	X	1.250	=	0.375	SQM
r8	1	X	2.500	X	0.750	=	1.875	SQM
r9	1	X	3.300	X	2.300	=	7.590	SQM
r10	1	X	1.250	X	0.500	=	0.625	SQM
r11	1	X	2.050	X	1.525	=	3.126	SQM
r12	1	X	3.650	X	4.600	=	16.790	SQM
r13	1	X	3.450	X	1.100	=	3.795	SQM
r14	1	X	3.650	X	0.950	=	3.468	SQM
					TOTAL	=	151.753	SQM

NON FAR AREA (DEDUCTION)

GROSS – D								
x1	2	X	2.450	X	2.750	=	13.475	SQM
x2	1	X	1.500	X	1.650	=	2.475	SQM
x3	1	X	0.200	X	2.900	=	0.580	SQM
x4	1	X	1.500	X	0.900	=	1.350	SQM
x5	1	X	0.500	X	2.300	=	1.150	SQM
					TOTAL	=	19.030	SQM

TOTAL NON FAR AREA OF TYPICAL REFUGE FLOOR (TOWER-03)	=	GROSS-C	-	GROSS-D
	=	151.753	-	19.030
	=	132.723	SQM	
TOTAL BUILTUP AREA OF TYPICAL REFUGE FLOOR (TOWER-03)	=	FAR AREA	+	NON FAR
	=	947.922	+	132.723
	=	1080.645	SQM	



REFUGE FLOOR AREA
TOWER-03

SANCTIONED TO BE READ WITH THIS OFFICE

Note :-

1. BUILDING HAS AUTOMATIC SPRINKLER SYSTEM WHEREVER REQUIRED BY NBC.
2. BUILDING WILL BE DESIGNED (STRUCTURES) AS PER RELEVENT IS CODES FOR EARTH QUAKE RESISTANCE.
3. ALL TOILET & KITCHEN HAVE PERMANENT VENTILATION /EXHAUST
4. ALL BUILDINGS ARE NATURALLY VENTILATED AND WHERE EVER REQUIRED MECHANICAL VENTILATION IS PROPOSED WITH 100% POWER BACKUP.

Project

REVISED BUILDING PLAN OF GROUP HOUSING COLONY MEASURING 19.9743 ACRES (LICENSE NO-47 OF 2009 DATED 21.08.2009 GRANTED FOR 11.35 ACRES AND LICENSE NO-104 OF 2012 DATED 06.10.2012 GRANTED FOR 6.475 ACRES & LICENSE NO-24 OF 2026 DATED 09.02.2026 GRANTED FOR 2.15 ACRES) IN SECTOR-81 & 86, GURUGRAM BEING DEVELOPED BY INTERNATIONAL GREEN SCAPES LTD.

DESIGN CONSULTANT :

Architect
Hafeez
Contractor
29 bank street, Fort, Mumbai
400 023 Tel : 2266 1920

Client

M/s International Green Scapes Ltd.
Corporate Office: 1st Floor,
World Trade Tower, Barakhamba Lane,
New Delhi-110001

Associate Architects:

SBA Design N Code LLP
Architecture·Codes·Interiors
(Formerly known as RSMS)
Plot no. 10 A&B, Bhawani Kunj,
Behind D2,Vasant Kunj,
New Delhi-110070.
Mob.: 9810791652,9811077209

S.T.P.(HQ) Member Secretary B.P.A.C.
C.T.P.(HR) Chairman B.P.A.C.
DTP(HQ)
ATP(HQ)
JD.
ATP
AFO, (HQ) Member BPAC
FSO, (HQ) Member BPAC
DINESH KUMAR PA(HQ)
Superintending Engineer (HQ) for Chief Engineer-I

ARCHITECT'S SEAL & SIGNATURE | OWNER'S SEAL & SIGNATURE

AUG.-2026 | Scale : 1:100

Drawing Title:- 17TH REFUGE FLOOR PLAN & AREA CALCULATION (TOWER-3)

Drawing No:- T3-06

03-24.08.26