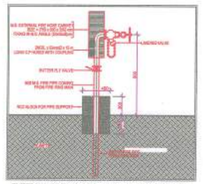
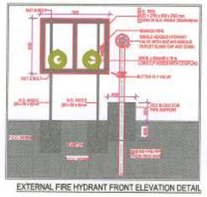
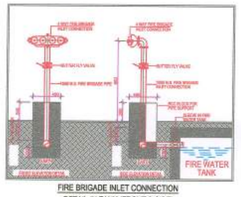


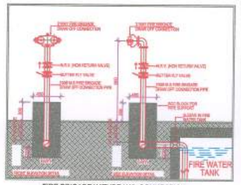
EXTERNAL FIRE HYDRANT SIDE ELEVATION DETAIL



EXTERNAL FIRE HYDRANT FRONT ELEVATION DETAIL



FIRE BRIGADE INLET CONNECTION DETAIL IN TANK (FRONT & SIDE)



FIRE BRIGADE WITHDRAWL CONNECTION DETAIL IN TANK (FRONT & SIDE)

LEGEND FOR FIRE FIGHTING	
	M.S FIRE PIPE
E.F.H	EXTERNAL FIRE HYDRANT
F.B.C	FIRE BRIGADE CONNECTION
	6.0M WIDE FIRE TENDER

LEGEND FOR ICV	
I.C.V-1	INSTALLATION CONTROL VALVE FOR LOWER FLOOR ZONE WORKING
I.C.V-2	INSTALLATION CONTROL VALVE FOR LOWER FLOOR ZONE STANDBY
I.C.V-3	INSTALLATION CONTROL VALVE FOR MIDDLE FLOOR ZONE WORKING
I.C.V-4	INSTALLATION CONTROL VALVE FOR MIDDLE FLOOR ZONE STANDBY
I.C.V-5	INSTALLATION CONTROL VALVE FOR HIGHER FLOOR ZONE WORKING
I.C.V-6	INSTALLATION CONTROL VALVE FOR HIGHER FLOOR ZONE STANDBY
I.C.V-7	INSTALLATION CONTROL VALVE FOR BASEMENTS

PLOT C1		
Site Area	**2320.00**	**SQM**
Zoned Area	**1768.00**	**76%**
Ground Coverage	**1392.00**	**60%**
General FAR @ 1.75	4060.00	
Additional FAR for TOD @1.75	4060.00	
Additional FAR for Green Building @.12	278.40	
Total Permissible FAR	**8398.40**	**362%**
Permissible Height	107.89	
Proposed Scheme		

Proposed FAR	8326.13	358.88%
Proposed Height	105.65	M
Proposed Ground Coverage	1391.50	59.98%
Proposed Built Up (SUPERSTRUCTURE)	11348.50	SQM
Proposed Built Up (BASEMENT)	4989.11	SQM
Total built up area (total)	16337.61	SQM
Proposed Carpet Area	6198.01	SQM

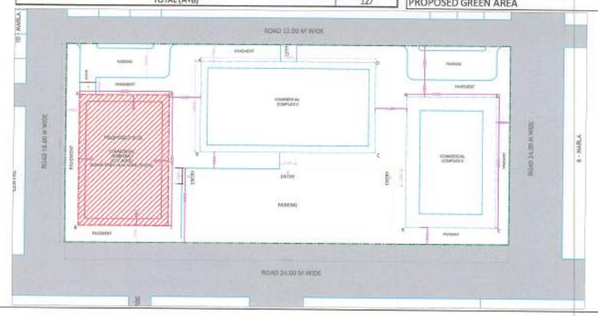
ECS Requirement		
Proposed Carpet area	6198.01	SQM
Required ECS @ 1/50 SQM of Carpet area	**124**	ECS
Total Parking Proposed in 3 basements	**125**	ECS

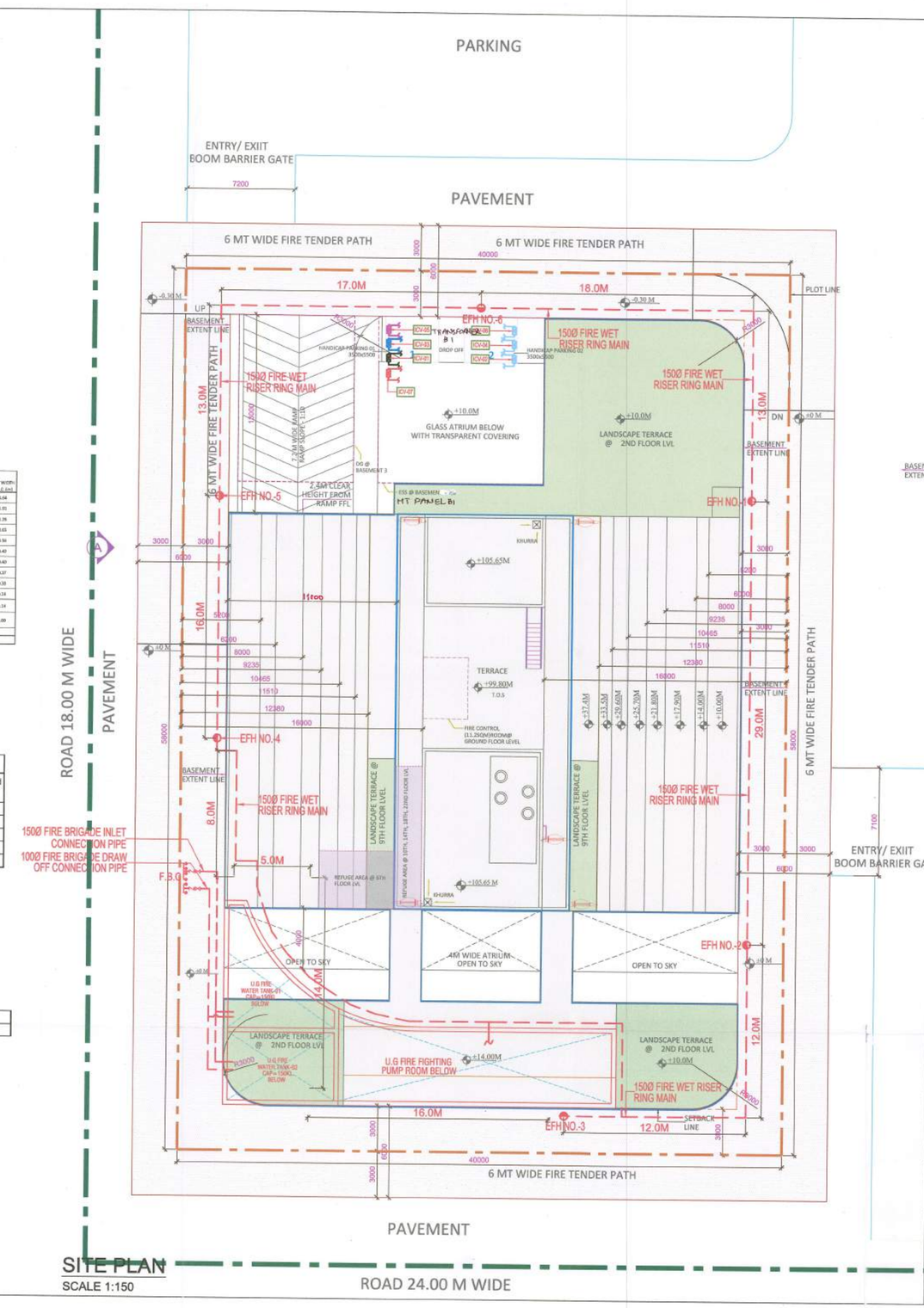
FLOOR NO.	FUNCTION	NO. OF FLOORS	AREA OF A SINGLE LEVEL				TOTAL AREA				POPULATION	HT. (m)	TOTAL HT (m)	EXIT WIDTH ONLY (m)
			FAR AREA	NON FAR AREA	BUILT UP AREA	CARPET AREA	FAR AREA	NON FAR AREA	BUILT UP AREA	CARPET AREA				
GROUND FLOOR	COMMERCIAL	1	1365.50	111.27	1503.76	1322.04	1365.50	111.27	1502.76	1301.64	484	5.40	5.40	6.04
FIRST FLOOR	COMMERCIAL	1	1148.54	39.60	1188.14	794.82	1148.54	39.60	1188.14	794.82	191	4.20	4.20	1.91
SECOND FLOOR	COMMERCIAL	1	796.42	107.60	904.02	481.76	796.42	107.60	904.02	481.76	135	4.00	4.00	1.35
THIRD FLOOR	OFFICE	1	653.53	60.40	713.93	489.67	653.53	60.40	713.93	489.67	65	3.90	3.90	0.65
FOURTH FLOOR	OFFICE	1	556.69	39.60	596.53	360.91	556.69	39.60	596.53	360.91	56	3.90	3.90	0.56
FIFTH FLOOR	OFFICE	1	498.52	56.29	544.80	355.50	498.52	56.29	544.80	355.50	49	3.90	3.90	0.49
SIXTH FLOOR	OFFICE	1	404.76	76.08	480.84	357.34	404.76	76.08	480.84	357.34	40	3.90	3.90	0.40
SEVENTH FLOOR	OFFICE	1	372.21	78.66	450.87	352.55	372.21	78.66	450.87	352.55	37	3.90	3.90	0.37
EIGHTH FLOOR	OFFICE	1	326.97	88.22	415.19	208.00	326.97	88.22	415.19	208.00	33	3.90	3.90	0.33
NINTH FLOOR	OFFICE	1	136.75	38.84	175.59	107.23	136.75	38.84	175.59	107.23	14	3.90	3.90	0.14
TENTH FLOOR - TWENTY FOURTH FLOOR (TWO DLU)	OFFICE	15	136.75	133.30	271.05	107.23	2051.23	1999.50	4079.02	1608.45	208 (14 x 15FLOOR)	3.90	58.50	8.14
MUMTY & MACHINE ROOM AT TERRACE					134.42		0.00	134.42	134.42	0.00	0	3.75	3.75	0.00
WATER TANK					134.42		0.00	134.42	134.42	0.00		3.00	3.00	
TOTAL		25					8326.13	5022.37	11348.50	6198.01	1284.32		105.65	

REFUGE AREA CALCULATION								
FLOOR	HT	Area of two consecutive floors	Total area	Occupant Load @ 10sqm/PERSON	Area equi. @ 0.3sqm/PERSON	Additional area for wheelchair requirement	Required floor area for refuge (sqm)	Area provided (sqm)
SIXTH FLOOR	25.70 m	404.76	372.21	777	78	23	0.90	24.21	25.71
TENTH FLOOR	41.30 m	138.73	138.73	277	28	8	0.90	9.22	16.90
FOURTEENTH FLOOR	56.90 m	138.73	138.73	277	28	8	0.90	9.22	16.90
EIGHTEENTH FLOOR	72.50 m	138.73	138.73	277	28	8	0.90	9.22	16.90
TWENTY SECOND FLOOR	88.10 m	138.73	138.73	277	28	8	0.90	9.22	16.90

PARKING					
A.	ON SURFACE		2 NO.S HANDICAP PARKING		
B.	IN BASEMENT		125 CARS		
BASEMENT LVL	BUILT UP	SERVICES	AREA FOR PARKING	ACTUAL NO. OF CARS	
				PARKING SLOTS	TOTAL NO.
BASEMENT 1	1703.19	588.19	1115.00	19 DOUBLE STACK	38
BASEMENT 2	1560.27	551.19	1008.94	19 DOUBLE STACK	38
BASEMENT 3	1725.65	541.31	1184.34	22 DOUBLE STACK	44
				5 SINGLE CARS	5
TOTAL	4989.11	1680.69	3308.28		125
TOTAL (A+B)					127

GREEN AREA		
PROPOSED GREEN AREA	372.20	sqm





SITE PLAN

SCALE 1:150

Authority Signatory

Environ Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No. Z0002/E0018/UE024/FBFLA/00000000122 Dt. 22/08/23

Architects :

OWNER SIGN

ARCHITECT SIGN

Ar. VINEHRA GOYAL CA/2019/114662 H.No. 739/2, Patel Nagar, Gurugram

Clients:

ESSEL INFRA LLP

Project Title :

COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :

SUBMISSION DRAWINGS

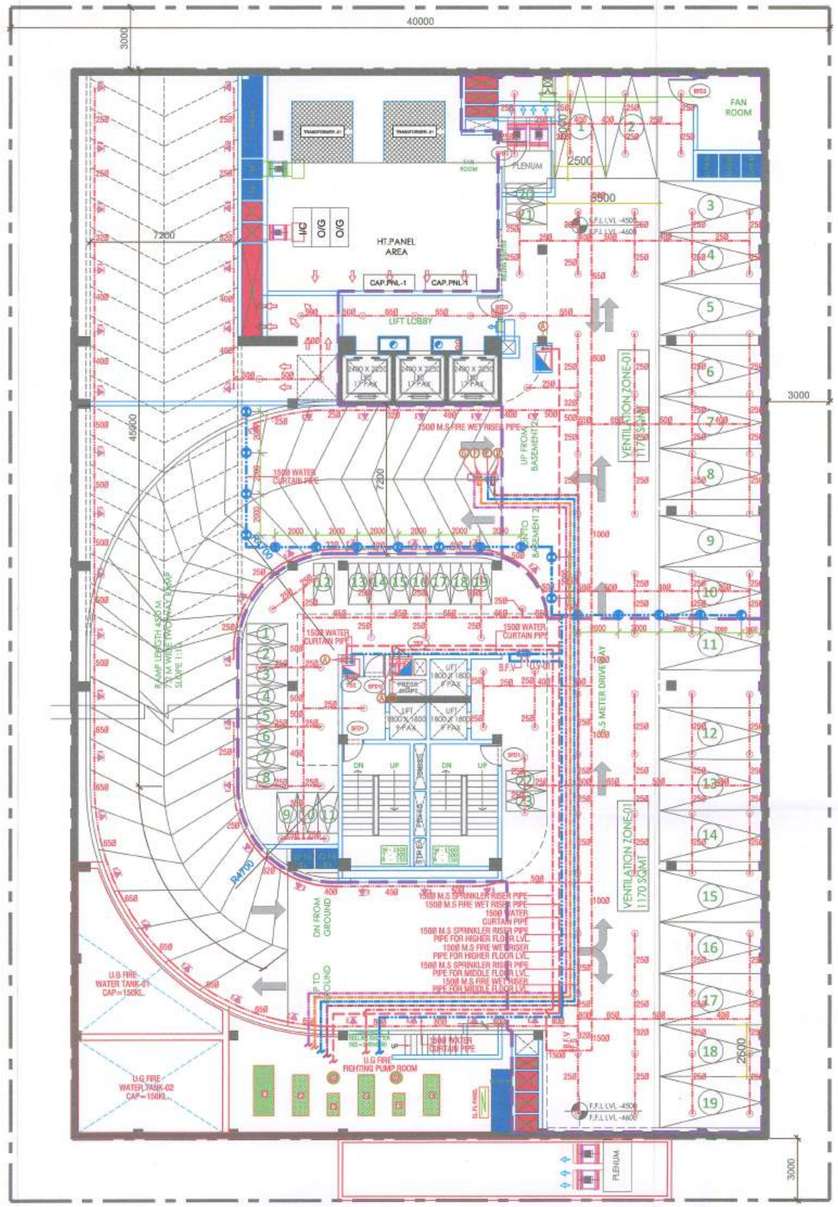
SITE PLAN (FIRE FIGHTING)

Certified that the scheme is as per N.B.C. Part IV, revised 2016

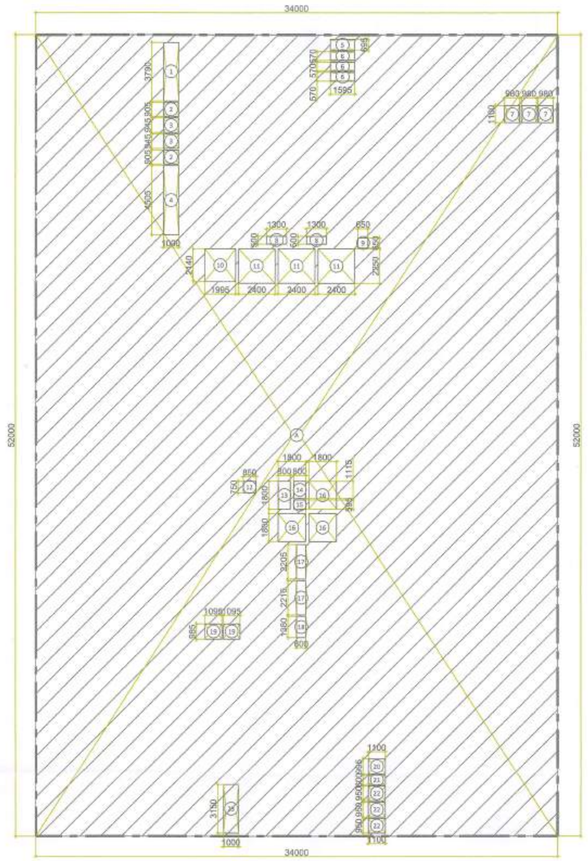
FSO Gurugram | FSO Gurugram | DG(T) Gurugram

Scale :	1:150	Drawing No :
Date :	SEP-2023	
Drawn By :	S.G	
Checked By :	A.S	
Sheet Size :	A1	

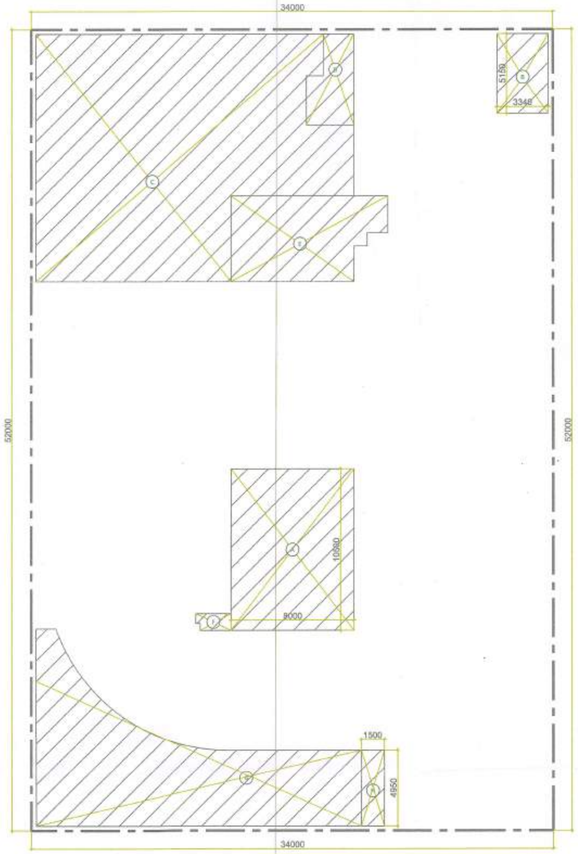
Fire Fighting Scheme Approved Vide Memo No. ... Dated 14/10/2023 CP-23-H-681 Deputy Director (Tech.)



BASEMENT 1
SCALE 1: 150



BUILTUP AREA DIAGRAM
SCALE 1:200



SERVICE AREA DIAGRAM
SCALE 1:200

BASEMENT 1 BUILT UP AREA CALCULATION				
ADDITION				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
A	34000	52000	1	1768.00
TOTAL AREA (A)				1768.00
SUBTRACTIONS				
AREA (RECTANGLE)				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
1	1000	3790	1	3.79
2	1000	905	2	1.81
3	1000	945	2	1.89
4	1000	4505	1	4.51
5	1595	695	1	1.11
6	1595	570	3	2.73
7	980	1100	3	3.23
8	1300	500	2	1.30
9	650	650	1	0.42
10	1995	2140	1	4.27
11	2400	2250	3	16.20
12	850	750	1	0.64
13	800	1800	1	1.44
14	800	1115	1	0.89
15	800	595	3	1.43
16	1800	1800	2	6.48
17	600	2205	2	2.65
18	600	1380	1	0.83
19	1095	985	2	2.16
20	1100	995	1	1.09
21	1100	600	1	0.66
22	1100	650	3	2.15
23	1000	3150	1	3.15
TOTAL AREA (B)				64.81
BUILT UP AREA BASEMENT 1 (A - B = C)				1703.19

BASEMENT 1				
SL.NO.	TAG.	Rough Opening		REMARKS
		Width	Height	
FIRE DOOR SCHEDULE				
1	BFD1	1300	2450	Staircase
2	BFD2	1200	2450	Lift lobby
3	BFD3	1350	2450	Fan room
SERVICE DOOR SCHEDULE				
1	TD1	1150	2450	SERVICE
2	TD2	800	2450	FHC, SERVICE
3	TD3	650	2450	FHC, SERVICE

PARKING					
A.	ON SURFACE		2 NO.S HANDICAP PARKING		
B.	IN BASEMENT		125 CARS		
BASEMENT LVL	BUILT UP	SERVICES	AREA FOR PARKING	ACTUAL NO. OF CARS	
				PARKING SLOTS	TOTAL NO.
BASEMENT 1	1703.19	588.19	1115.00	19 DOUBLE STACK	38
BASEMENT 2	1560.27	551.19	1008.94	19 DOUBLE STACK	38
BASEMENT 3	1725.65	541.31	1184.34	22 DOUBLE STACK	44
				SSINGLE CARS	5
TOTAL	4989.11	1680.69	3308.28		125
TOTAL (A+B)					127

LEGEND FOR EQUIPMENT'S	
F1	DIESEL ENGINE MAIN PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F2	MAIN ELECTRIC FIRE HYDRANT PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F3	FIRE HYDRANT JOCKEY PUMP CAP.=180 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F4	MAIN ELECTRIC SPRINKLER PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F5	SPRINKLER JOCKEY PUMP CAP.=180 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F6	FIRE CURTAIN SYSTEM PUMP CAP.=1620 LPM@50M.HEAD
AV	AIR VESSEL

LEGEND FOR FIRE FIGHTING	
A	150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
C	80Ø M.S SPRINKLER DRAIN PIPE
D	150Ø M.S FIRE WET RISER PIPE FOR 11th TO 22th FLOOR
E	150Ø M.S SPRINKLER PIPE FOR 11th TO 22th FLOOR
F	150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
G	150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
	UP-RIGHT TYPE SPRINKLER
	SEMI CONCEALED TYPE SPRINKLER
	EXTENDED SIDE WALL SPRINKLER
	WATER CURTAIN NOZZLE
D.V.	DELUGE VALVE
F.S	FLOW SWITCH
BFV	BUTTER FLY VALVE
M.S	MILD STEEL
	M.S SPRINKLER BRANCH PIPE
	M.S SPRINKLER HEADER PIPE
	150Ø M.S WETRSER FIRE PIPE

SCHEDULE FOR SPRINKLER PIPE DIA

S. No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 5	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	150Ø

LEGEND FOR FIRE HOSE CABINET
FHC= FIRE HOSE CABINET COMPRISING OF
(1) ONE NO.FIRE HOSE CABINET
(2) ONE NO. 63mmØ SINGLE LANDING VALVE
(3) ONE NO. FIRE HOSE REEL WITH DRUM 20mmØ x36.9M. LONG
(4) TWO NOS. 63mmØ x15M. LONG RRL HOSE PIPES
(5) ONE NO. BRANCH PIPE
(6) ONE NO. FIRE MEN'S AXE
● ONE NO. 4.5 Kg. CO2 TYPE FIRE EXTINGUISHERS
▲ ONE NO. 6.0 Kg. ABC POWDER TYPE FIRE EXTINGUISHERS

LEGEND

- FRESH AIR CUTOUT
- EXHAUST CUTOUT
- VENTILATION ZONE

Authority Signatory

Envirotech Design Pvt. Ltd. New Delhi-25

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No 20002/EBOUK/UE029/FBPLA/0000000122 Dtd. 22/08/23

Architect Sign. Owner Sign.

ARK CONSULTANTS (Fire Fighting Consultants)

OWNER SIGN

ARCHITECT SIGN

Ar. VIREMRA GOYAL
CA/2019/114652
H.No. 739/2, Palat Nagar, Gurugram

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

BASEMENT 1 FLOOR PLAN (FIRE FIGHTING)

as per N.B.C. Part IV revised 2016

Scale :	1:150
Date :	SEP-2023
Drawn By :	
Checked By :	
Sheet Size :	A1

Gurugram Gurugram No : Gurugram

CP_BA_FF-01

Fire Fighting Scheme Approved Vide Memo No. 14/10/2023 1165

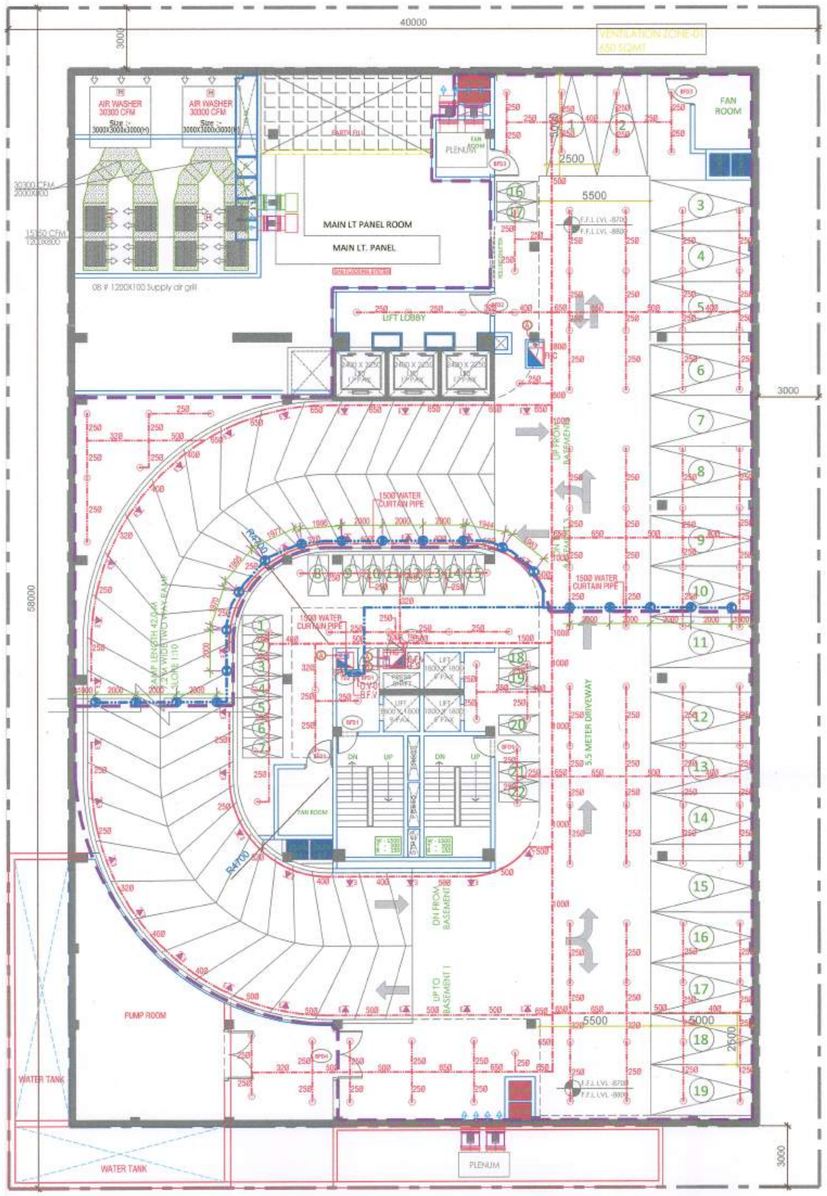
Deputy Director (Fire)

4

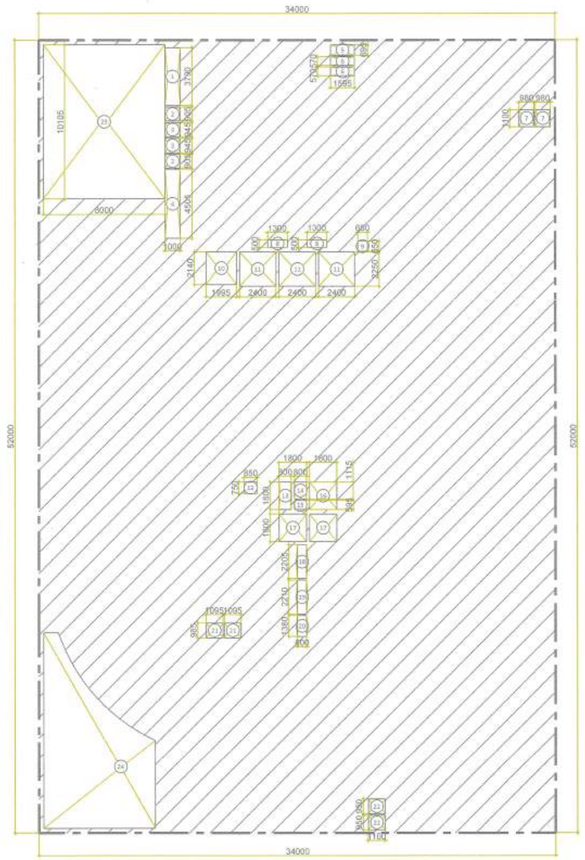
3

2

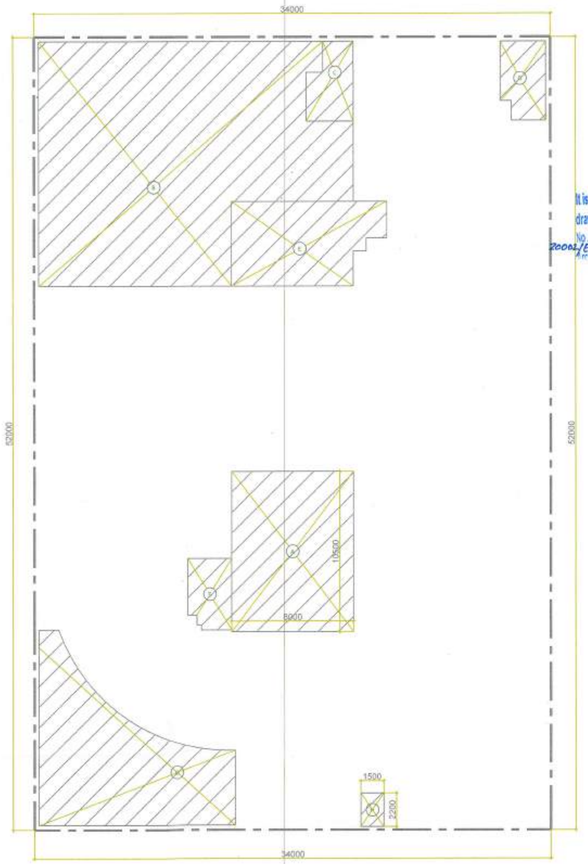
1



BASEMENT 2
SCALE 1: 150



BUILTUP AREA DIAGRAM
SCALE 1:200



SERVICE AREA DIAGRAM
SCALE 1:200

BASEMENT 2 BUILT UP AREA CALCULATION				
ADDITION				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
A	34000	52000	1	1768.00
TOTAL AREA (A)				1768.00
SUBTRACTIONS				
AREA (RECTANGLE)				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
1	1000	3790	1	3.79
2	1000	905	2	1.81
3	1000	945	2	1.89
4	1000	4505	1	4.51
5	1595	695	1	1.11
6	1595	570	2	1.82
7	1100	980	2	2.16
8	1300	500	2	1.30
9	650	650	1	0.42
10	1995	2140	1	4.27
11	2400	2250	3	16.20
12	850	750	1	0.64
13	800	1800	1	1.44
14	800	1115	1	0.89
15	800	595	3	1.43
16	1800	1800	1	3.24
17	1800	1800	2	6.48
18	600	2205	1	1.32
19	600	2210	1	1.33
20	600	1380	1	0.83
21	1095	985	2	2.16
22	1100	950	2	2.09
23	8000	10105	1	80.84
24	AS SHAPE		1	65.78
TOTAL AREA (B)				207.73
BUILT UP AREA BASEMENT 2 (A - B = C)				1560.27

BASEMENT 2 SERVICE AREA CALCULATION				
ADDITION				
LEGEND	WIDTH (MM)	LENGTH (MM)	NO.S	AREAS (MTS.SQ)
A	8000	10500	1	84.00
B	AS SHAPE		1	273.82
C	AS SHAPE		1	13.96
D	AS SHAPE		1	14.64
E	AS SHAPE		1	90.52
F	AS SHAPE		1	12.89
G	AS SHAPE		1	98.20
H	1500	2200	1	3.30
TOTAL SERVICE AREA (D)				551.33

PARKING					
A.	ON SURFACE		2 NO.S HANDICAP PARKING		
B.	IN BASEMENT		125 CARS		
BASEMENT LVL	BUILT UP	SERVICES	AREA FOR PARKING	ACTUAL NO. OF CARS	
				PARKING SLOTS	TOTAL NO.
BASEMENT 1	1703.19	588.19	1115.00	19 DOUBLE STACK	38
BASEMENT 2	1560.27	551.19	1008.94	19 DOUBLE STACK	38
BASEMENT 3	1725.65	541.31	1184.34	22 DOUBLE STACK	44
				5SINGLE CARS	5
TOTAL	4989.11	1680.69	3308.28		125
TOTAL (A+B)					127

LEGEND FOR EQUIPMENT'S	
F1	DIESEL ENGINE MAIN PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F2	MAIN ELECTRIC FIRE HYDRANT PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F3	FIRE HYDRANT JOCKEY PUMP CAP.=150 LPM@90M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F4	MAIN ELECTRIC SPRINKLER PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F5	SPRINKLER JOCKEY PUMP CAP.=180 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F6	FIRE CURTAIN SYSTEM PUMP CAP.=1620 LPM@50M.HEAD
AV	AIR VESSEL

LEGEND FOR FIRE FIGHTING	
A	150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
C	80Ø M.S SPRINKLER DRAIN PIPE
D	150Ø M.S FIRE WET RISER PIPE FOR 11th TO 22th FLOOR
E	150Ø M.S SPRINKLER PIPE FOR 11th TO 22th FLOOR
F	150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
G	150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
	UP-RIGHT TYPE SPRINKLER
	SEMI CONCEALED TYPE SPRINKLER
	EXTENDED SIDE WALL SPRINKLER
	WATER CURTAIN NOZZLE
D.V	DELUGE VALVE
F.S	FLOW SWITCH
BFV	BUTTER FLY VALVE
M.S	MILD STEEL
	M.S SPRINKLER BRANCH PIPE
	M.S SPRINKLER HEADER PIPE
	150Ø M.S WETRISER FIRE PIPE

SCHEDULE FOR SPRINKLER PIPE DIA

S. No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 5	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	150Ø

LEGEND FOR FIRE HOSE CABINET	
FHC= FIRE HOSE CABINET COMPRISING OF	
1	ONE NO.FIRE HOSE CABINET
2	ONE NO. 63mm Ø SINGLE LANDING VALVE
3	ONE NO. FIRE HOSE REEL WITH DRUM 30mm Ø x 36.5M. LONG
4	TWO NOS. 63mm Ø x 15M. LONG RRL HOSE PIPES
5	ONE NO. BRANCH PIPE
6	ONE NO. FIRE MEN'S AXE.
	ONE NO. 4.5 Kg. CO2 TYPE FIRE EXTINGUISHERS
	ONE NO. 6.0 Kg. ABC POWDER TYPE FIRE EXTINGUISHERS

LEGEND

- FRESH AIR CUTOUT
- EXHAUST CUTOUT
- VENTILATION ZONE

Authority Signatory

ARK CONSULTANTS
(Fire Fighting Consultants)

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No. 20001/E&NR/LCE&TP/FB/PLA/00000001122 Dtd 22/08/23
Architect Sign
Owner Sign

Envirotech Design New Delhi-25

4

3

2

OWNER SIGN

ARCHITECT SIGN
SMT. HEMRA GOYAL
CA/2019/114082
H.No. 739/2, Patel Nagar, ...

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

1

BASEMENT 2 FLOOR PLAN (FIRE FIGHTING)

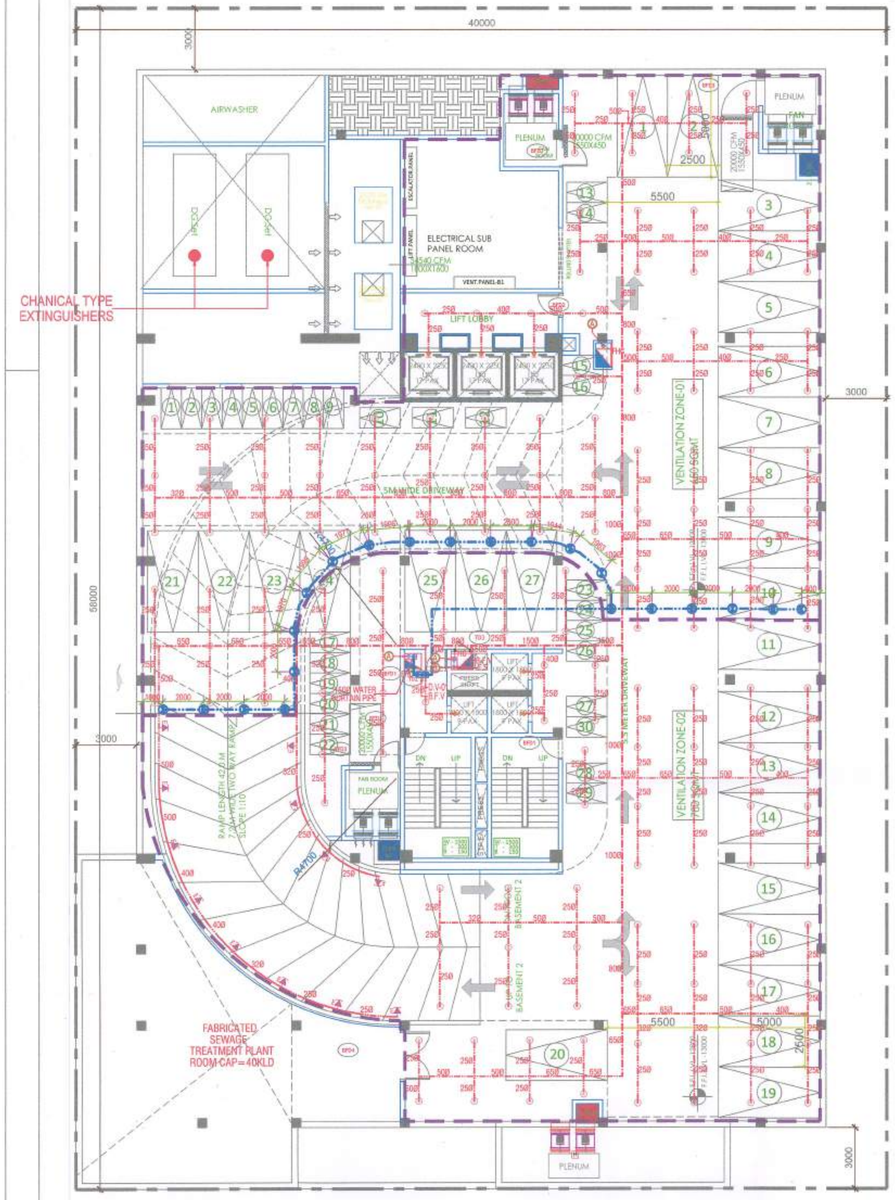
Certified that the drawing are as per N.B.C. Part IV, revised 2005

FSO Gurugram | FSO Gurugram | DDFS Gurugram

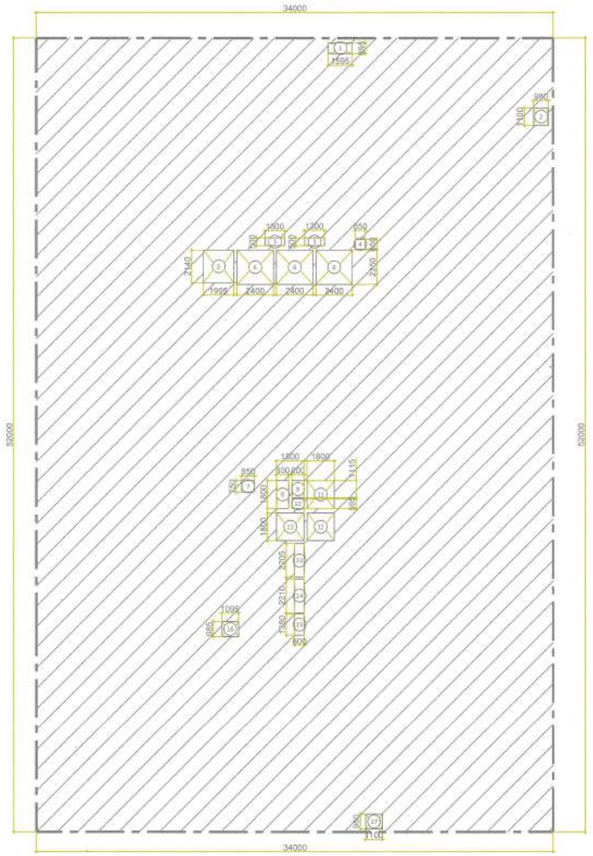
Scale :
Date : SEP-2023
Drawn By :
Checked By :
Sheet Size : A1
Drawing No. : CP_BA_FF-02

Fire Fighting Scheme Approved Vide letter No. 2023 1165 Dated 14/11/2023

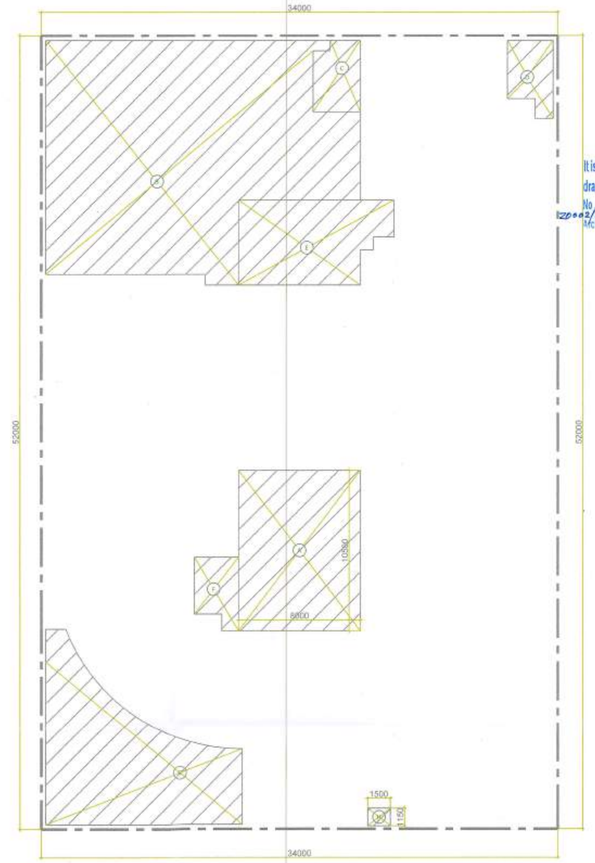
Deputy Director (Fire)



BASEMENT 3
SCALE 1: 150



BUILTUP AREA DIAGRAM
SCALE 1:200



SERVICE AREA DIAGRAM
SCALE 1:200

PARKING					
A.	ON SURFACE		2 NO.S HANDICAP PARKING		
B.	IN BASEMENT		125 CARS		
BASEMENT LVL	BUILT UP	SERVICES	AREA FOR PARKING	ACTUAL NO. OF CARS	
				PARKING SLOTS	TOTAL NO.
BASEMENT 1	1703.19	588.19	1115.00	19 DOUBLE STACK	38
BASEMENT 2	1560.27	551.19	1008.94	19 DOUBLE STACK	38
BASEMENT 3	1725.65	541.31	1184.34	22 DOUBLE STACK	44
				5SINGLE CARS	5
TOTAL	4989.11	1680.69	3308.28		125
TOTAL (A+B)					127

BASEMENT 3 BUILT UP AREA CALCULATION				
ADDITION				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
A	34000	52000	1	1768.00
TOTAL AREA (A)				1768.00
SUBTRACTIONS				
AREA (RECTANGLE)				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
1	1995	695	1	1.11
2	980	1100	1	1.08
3	1300	500	2	1.30
4	650	650	1	0.42
5	1995	2140	1	4.27
6	2400	2140	3	15.41
7	850	750	1	0.64
8	800	1800	1	1.44
9	800	1115	1	0.89
10	800	595	1	0.48
11	1800	1800	1	3.24
12	1800	1800	2	6.48
13	600	2205	1	1.32
14	600	2210	1	1.33
15	600	1380	1	0.83
16	1095	985	1	1.08
17	1100	950	1	1.05
TOTAL AREA (B)				42.35
BUILT UP AREA BASEMENT 2 (A - B = C)				1725.65

BASEMENT 3 SERVICE AREA CALCULATION				
ADDITION				
LEGEND	WIDTH (MM)	LENGTH (MM)	NO.S	AREAS (MTS.SQ)
A	8000	10500	1	84.00
B	AS SHAPE		1	266.66
C	AS SHAPE		1	13.79
D	AS SHAPE		1	13.07
E	AS SHAPE		1	50.52
F	AS SHAPE		1	11.94
G	AS SHAPE		1	99.61
H	1500	1150	1	1.73
TOTAL SERVICE AREA (D)				541.31

LEGEND

- FRESH AIR CUTOUT
- EXHAUST CUTOUT
- VENTILATION ZONE

LEGEND FOR EQUIPMENT'S	
F1	DIESEL ENGINE MAIN PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F2	MAIN ELECTRIC FIRE HYDRANT PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F3	FIRE HYDRANT JOCKEY PUMP CAP.=180 LPM@85M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F4	MAIN ELECTRIC SPRINKLER PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F5	SPRINKLER JOCKEY PUMP CAP.=180 LPM@85M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F6	FIRE CURTAIN SYSTEM PUMP CAP.=1620 LPM@50M.HEAD
AV	AIR VESSEL

LEGEND FOR FIRE FIGHTING
(A) 150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
(B) 150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
(C) 80Ø M.S SPRINKLER DRAIN PIPE
(D) 150Ø M.S FIRE WET RISER PIPE FOR 11th TO 22th FLOOR
(E) 150Ø M.S SPRINKLER PIPE FOR 11th TO 22th FLOOR
(F) 150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
(G) 150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
UR UP-RIGHT TYPE SPRINKLER
SC SEMI CONCEALED TYPE SPRINKLER
EW EXTENDED SIDE WALL SPRINKLER
WC WATER CURTAIN NOZZLE
D.V. DELUGE VALVE
F.S. FLOW SWITCH
BFV BUTTER FLY VALVE
M.S MILD STEEL
M.S SPRINKLER BRANCH PIPE
M.S SPRINKLER HEADER PIPE
150Ø M.S WETRISER FIRE PIPE

SCHEDULE FOR SPRINKLER PIPE DIA

S. No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 5	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	150Ø

LEGEND FOR FIRE HOSE CABINET
FHC= FIRE HOSE CABINET COMPRISING OF
(1) ONE NO.FIRE HOSE CABINET
(2) ONE NO. 63mmØ SINGLE LANDING VALVE
(3) ONE NO. FIRE HOSE REEL WITH DRUM 20mmØ x36.5M LONG
(4) TWO NOS. 63mmØ x15M. LONG RRL HOSE PIPES
(5) ONE NO. BRANCH PIPE
(6) ONE NO. FIRE MEN'S AXE
● ONE NO. 4.5 Kg. CO2 TYPE FIRE EXTINGUISHERS
▲ ONE NO. 6.0 Kg. ABC POWDER TYPE FIRE EXTINGUISHER

Authority Signatory

APK CONSULTANTS (Fire Fighting Consultants)

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No. ..... Dtd. 22/08/23
Architect Sign. ..... Owner Sign. .....

Envirotech Design Pvt. Ltd. New Delhi-25

4

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2

OWNER SIGN

ARCHITECT SIGN

Ar. VINEMRA GOYAL
CA/2019/114067
H.No. 739/2, Pa...

Clients:

ESSEL INFRA LLP

Project Title :

COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :

SUBMISSION DRAWINGS

BASEMENT 3 FLOOR PLAN (FIRE FIGHTING)

1

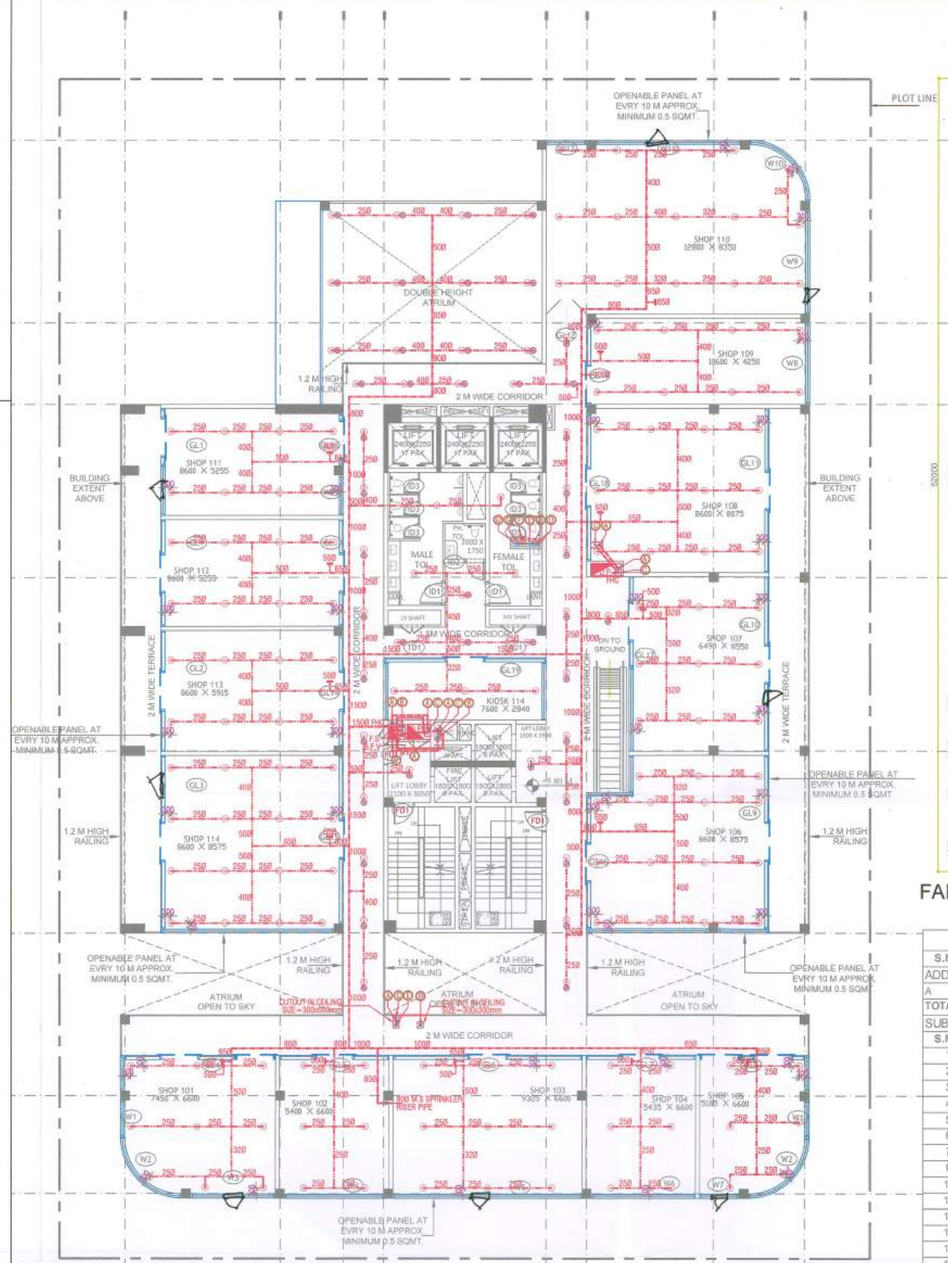
Certified that fire Fighting Scheme is as per NBC Part-IV, revised 2016

FSO Gurugram | FZO Gurugram | DTP Gurugram

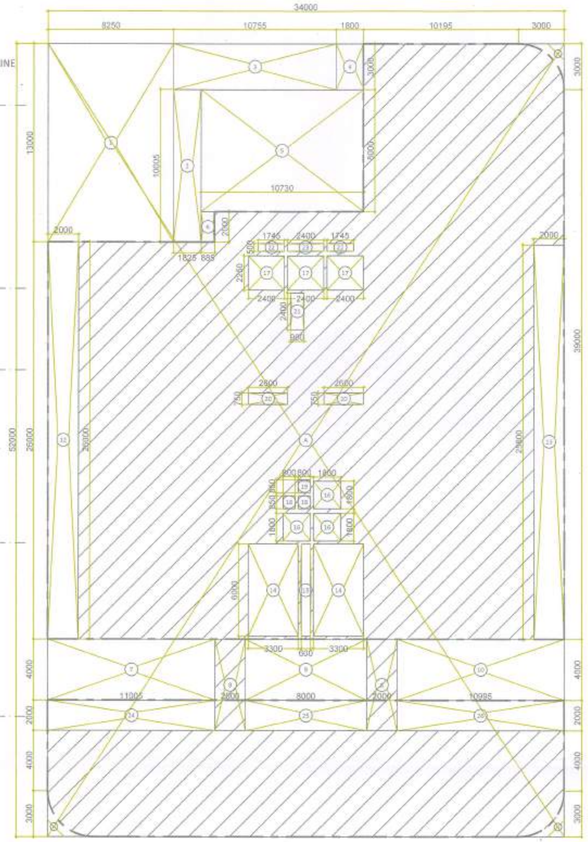
Scale :	1:150
Date :	SEP-2023
Drawn By :	
Checked By :	
Sheet Size :	A1
Drawing No.	CP_BA_FF-03

Fire Fighting Scheme Approved Vide letter No. 2023/1165 Dated 14/10/2023

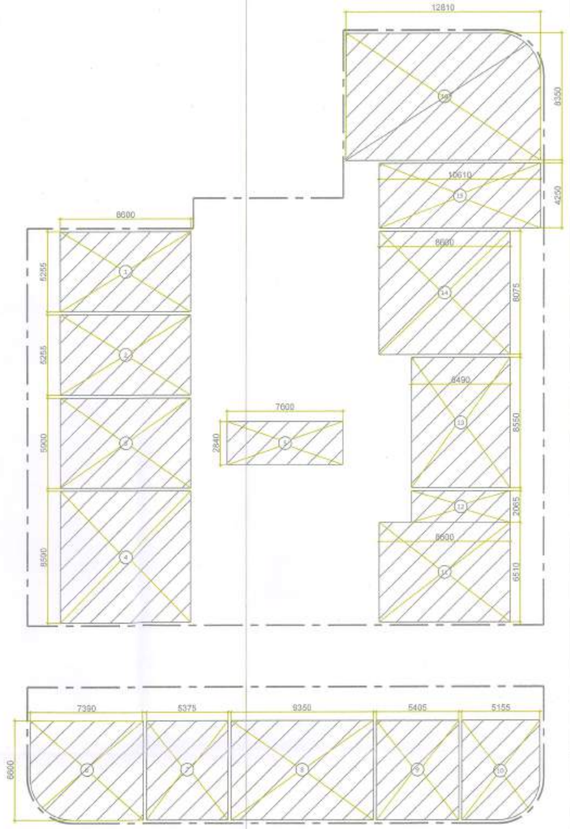
Deputy Director (Fire)



FIRST FLOOR PLAN (1:150)



FAR DIAGRAM (1:200)



CARPET AREA (1:200)

FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION				
A	1	52000	34000	1768.00
TOTAL AREA(A)				1768.00
SUBTRACTION				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	13000	8250	107.25
2	1	10005	1825	18.26
3	1	3000	10755	32.27
4	1	3000	1800	5.40
5	1	8000	10730	85.84
6	1	2000	885	1.77
7	1	4000	11005	44.02
9	1	4000	7995	31.98
10	1	4000	10995	43.98
11	3	1931416		5.79
12	1	26000	2000	52.00
13	1	25800	2000	51.60
14	2	6000	3300	39.60
15	1	6000	600	3.60
16	3	1800	1800	9.72
17	3	2250	2400	16.20
18	2	850	800	1.36
19	1	880	800	0.70
20	2	750	2600	3.90
21	1	2400	900	2.16
22	1	1745	500	0.87
23	1	2400	500	1.20
24	1	2000	11005	22.01
25	1	2000	7995	15.99
26	1	2000	10995	21.99
TOTA SUBTRACTION (B)				619.46
C. FAR (A-B)				1148.54

AREA FREE FROM FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
14	2	6000	3300	39.60
TOTAL D				39.60

TOTAL BUILT UP (C +D)		1188.14

CARPET AREA_FIRST FLOOR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	5255	8600	45.19
2	1	5255	8600	45.19
3	1	5900	8600	50.74
4	1	8590	8600	73.87
5	1	7600	2840	21.58
6	1	47557533		47.56
7	1	6600	5375	35.48
8	1	6600	9350	61.71
9	1	6600	5405	35.67
10	1	32411102		32.41
11	1	6510	8600	55.99
12	1	2065	6490	13.40
13	1	8550	6490	55.49
14	1	8075	8600	69.45
15	1	4250	10610	45.09
16	1	105192687		105.19
CARPET AREA				794.02

FIRST FLOOR				
SL.NO.	TAG.	Rough Opening		REMARKS
		Width	Height	
INTERNAL DOOR SCHEDULE				
1	ID1	1200	2450	Toilet
2	ID2	1050	2450	H.Toi.
3	ID3	750	2450	Toilet
FIRE DOOR SCHEDULE				
1	FD1	1300	2450	Staircase,lift lobby
SERVICE DOOR SCHEDULE				
1	TD1	1150	2450	SERVICE
2	TD2	800	2450	FHC, SERVICE
3	TD3	650	2450	FHC, SERVICE
GLAZING DOOR SCHEDULE				
1	GL1	5255	3550/B.O.B	SHOP 110, SHOP 111
2	GL2	5915	3550/B.O.B	SHOP 112
3	GL3	17135	3550/B.O.B	SHOP 113
4	GL4	9260	3550/B.O.B	SHOP 101
5	GL5	5400	3550/B.O.B	SHOP 102
6	GL6	9325	3550/B.O.B	SHOP 103
7	GL7	5435	3550/B.O.B	SHOP 104
8	GL8	8920	3550/B.O.B	SHOP 105
9	GL9	11060	3550/B.O.B	SHOP 106
10	GL10	8550	3550/B.O.B	SHOP 107
11	GL11	12275	3550/B.O.B	SHOP 108
12	GL12	2000	3550/B.O.B	SHOP 109
13	GL13	2575	3550/B.O.B	SHOP 110
14	GL14	5415	3550/B.O.B	SHOP 112
15	GL15	8325	3550/B.O.B	SHOP 113
17	GL16	16745	3550/B.O.B	SHOP 106
18	GL17	8550	3550/B.O.B	SHOP 107
19	GL18	7825	3550/B.O.B	SHOP 108
20	GL19	13680	3550/B.O.B	KIOSK
WINDOW SCHEDULE				
1	W1	1800	3550/B.O.B	SHOP 101, SHOP 105
2	W2	5235	3550/B.O.B	SHOP 101, SHOP 105
3	W3	4200	3550/B.O.B	SHOP 101
4	W4	4900	3550/B.O.B	SHOP 102
5	W5	8325	3550/B.O.B	SHOP 103
6	W6	5185	3550/B.O.B	SHOP 104
7	W7	3935	3550/B.O.B	SHOP 105
8	W8	3800	3550/B.O.B	SHOP 109
9	W9	5100	3550/B.O.B	SHOP 109
10	W10	4510	3550/B.O.B	SHOP 109
11	W11	3000	3550/B.O.B	SHOP 108, SHOP 109
12	W12	1080	3550/B.O.B	SHOP 110

FIRST FLOOR SANITARY FIXTURE CALCULATION		
TOTAL COVERED AREA	:	1148.54 SQ.M.
TOTAL POPULATION @ 6 SQ.MT/PERSON	:	191
(REFER Clause 4.3 & 4.4.2.1, Table 3 OCCUPANT LOAD (AS PER NBC 2016-PART-08 BUILDING SERVICES)		
VISITOR'S POPULATION @90% OF TOTAL POPULATION	:	172
MALE @1/2 OF VISITOR'S POPULATON	:	86
FEMALE @1/2 OF VISITOR'S POPULATON	:	86
STAFF POPULATION @10% OF TOTAL POPULATION	:	19
MALE @1/2 OF STAFF POPULATON	:	10
FEMALE @1/2 OF STAFF POPULATON	:	10

SANITARY FIXTURE CALCULATION								
	VISITOR				STAFF			
FIXTURE	REQUIRED		PROVIDED		REQUIRED		PROVIDED	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
WATER CLOSET	2	2	2	2	1	1	1	1
WASH BASIN	2	2	2	2	1	1	1	1
URINAL	2	-	2		1	-	1	

(REFER Clause 4.2.5.1, Table 15 SHOPPING MALLS & RETAIL BUILDINGS (AS PER NBC 2016-PART-08 BUILDING SERVICES)

BUILDING EXTENT BELOW

Authority Signatory

It is Certified that these drawings are as per original drawings approved by HSVP Haryana Vide memo No. 20002/EO018/UE029/FBPLA/0000000122 Dtd. 22/08/23

Architect Sign. Owner Sign

LEGEND FOR FIRE FIGHTING	
A	150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR GROUND TO 10th FLOOR
C	80Ø M.S SPRINKLER DRAIN PIPE
D	150Ø M.S FIRE WET RISER PIPE FOR 11th TO 22th FLOOR
E	150Ø M.S SPRINKLER PIPE FOR 11th TO 22th FLOOR
E	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 11th TO 22th FLOOR
F	150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
G	150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
G	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 23th & 24th FLOOR
	UP-RIGHT TYPE SPRINKLER
	SEMI CONCEALED TYPE SPRINKLER
	SIDE WALL SPRINKLER
	FUTURE CONNECTION
F.S	FLOW SWITCH
BFV	BUTTER FLY VALVE
M.S	MILD STEEL
	M.S SPRINKLER BRANCH PIPE
	M.S SPRINKLER HEADER PIPE
	150ØM.S WETRISER FIRE PIPE

LEGEND FOR FIRE HOSE CABINET
FHC= FIRE HOSE CABINET COMPRISING OF
ONE NO.FIRE HOSE CABINET
ONE NO. 63mmØ SINGLE LANDING VALVE
ONE NO. FIRE HOSE REEL, WITH DRUM 20mmØ x35.5M. LONG
TWO NOS. 63mmØ x15M. LONG RRL HOSE PIPES
ONE NO. BRANCH PIPE
ONE NO. FIRE MEN'S AXE.
ONE NO. 4.5 Kg. CO2 TYPE FIRE EXTINGUISHERS
ONE NO. 6.0 Kg. ABC POWDER TYPE FIRE EXTINGUISHERS

SCHEDULE FOR SPRINKLER PIPE DIA		
S.No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 3	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	150Ø

Architects :

OWNER SIGN

ARCHITECT SIGN

Ar. VINEETA GOYAL
CA/2019/114662
H.No. 709/2, Patel Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

Certified that Fire Fighting Scheme is as per N.B.C. Part IV, revised 2016

FIRST FLOOR CEILING PLAN(FIRE FIGHTING)

1

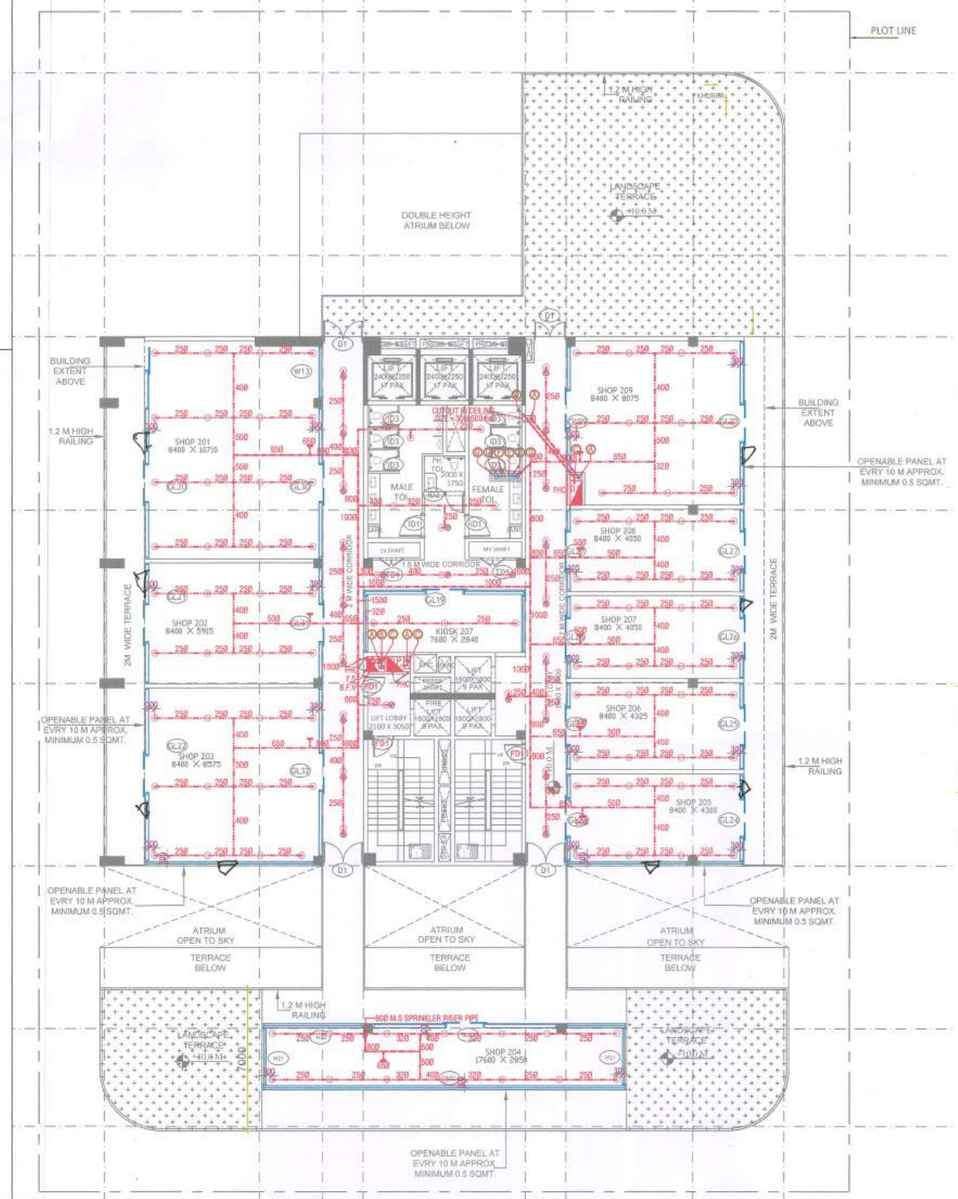
FSO Gurugram | CFO Gurugram | DFO (HQ) Gurugram

Scale :	1:150	Drawing No :
Date :	AUG-2023	
Drawn By :		
Checked By :	Fire Fighting Scheme Vide letter No.	CP-SP-FF-1065
Sheet Size :	A Dated 14/10/2022	

Deputy Director (Fire)

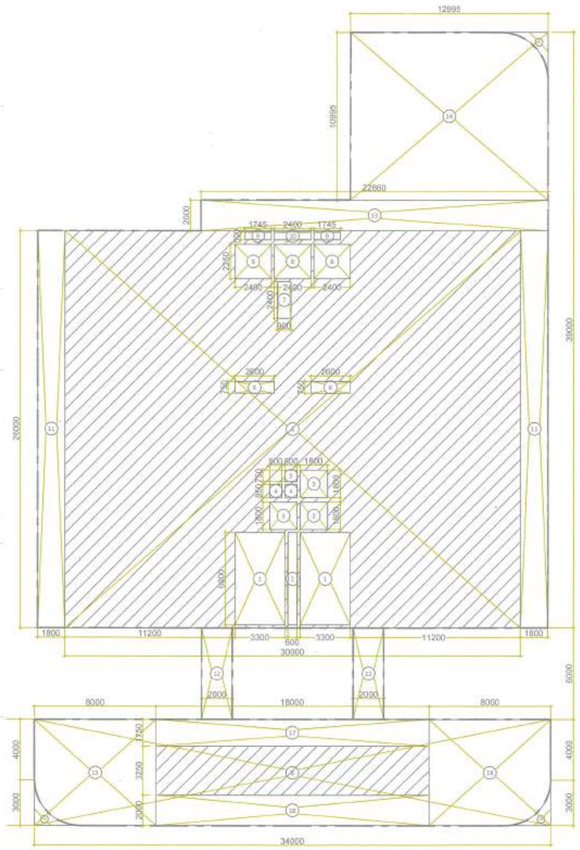
Enviro Tech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

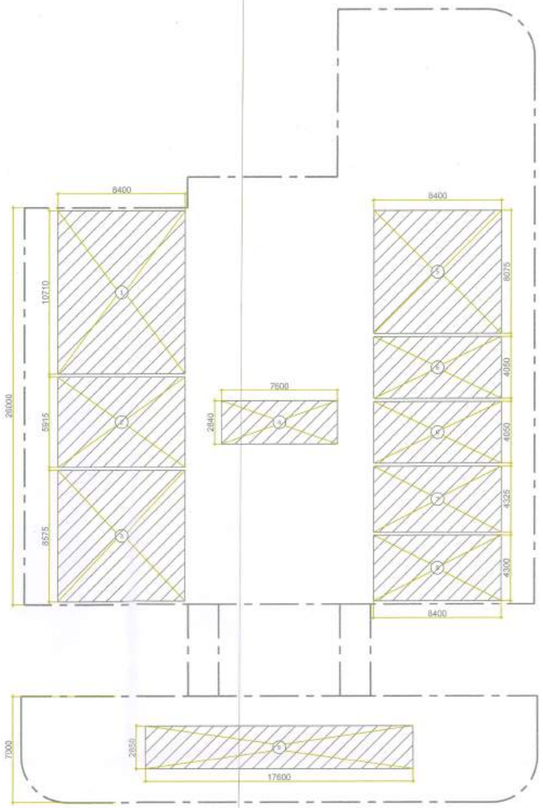


SECOND FLOOR PLAN (1:150)

BUILDING EXTENT BELOW



FAR DIAGRAM (1:200)



CARPET AREA (1:200)

SECOND FLOOR SANITARY FIXTURE CALCULATION		
TOTAL COVERED AREA	:	728.52 SQ.M.
TOTAL POPULATION @ 6 SQ.MT/PERSON	:	121
(REFER Clause 4.3 & 4.4.2.1, Table 3 OCCUPANT LOAD (AS PER NBC 2016-PART-08 BUILDING SERVICES)		
VISITOR'S POPULATION @90% OF TOTAL POPULATION	:	109
MALE @1/2 OF VISITOR'S POPULATON	:	55
FEMALE @1/2 OF VISITOR'S POPULATON	:	55
STAFF POPULATION @10% OF TOTAL POPULATION	:	12
MALE @1/2 OF STAFF POPULATON	:	6
FEMALE @1/2 OF STAFF POPULATON	:	6

SANITARY FIXTURE CALCULATION

FIXTURE	VISITOR				STAFF			
	REQUIRED		PROVIDED		REQUIRED		PROVIDED	
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
WATER C	2	2	2	2	1	1	1	1
WASH BA	2	2	2	2	1	1	1	1
URINAL	2	-	2		0	-	1	

(REFER Clause 4.2.5.1, Table 15 SHOPPING MALLS & RETAIL BUILDINGS (AS PER NBC 2016-PART-08 BUILDING SERVICES)

FAR

S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION				
A	1	26000	30000	780.00
B	1	7000	34000	238.00
TOTAL AREA(A)				1018.00
SUBTRACTION				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	2	6000	3300	39.60
2	1	6000	600	3.60
3	3	1800	1800	9.72
4	2	850	800	1.36
5	1	750	800	0.60
6	2	750	2600	3.90
7	1	2400	900	2.16
8	3	2250	2400	16.20
9	2	500	1745	1.75
10	1	500	2400	1.20
15	1	7000	8000	56.00
16	1	7000	8000	56.00
17	1	1750	18000	31.50
18	1	2000	18000	36.00
TOTA SUBTRACTION (B)				259.59
C. FAR (A-B)				758.42

AREA FREE FROM FAR

S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION (X)				
1	2	6000	3300	39.60
11	2	26000	2000	104.00
12	2	6000	2000	24.00
TOTAL ADDITION				167.60
D. TOTAL NON FAR AREA (X-Y)				167.60
TOTAL BUILT UP (C +D)				926.02

CARPET AREA

S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	10710	8400	89.96
2	1	5915	8400	49.69
3	1	8575	8400	72.03
4	1	2840	7600	21.58
5	1	8075	8400	67.83
6	2	4050	8400	68.04
7	1	4325	8400	36.33
8	1	4300	8400	36.12
9	1	2850	17600	50.16
CARPET AREA				491.74

SECOND FLOOR

SL.NO.	TAG.	Rough Opening Width	Rough Opening Height	REMARKS
INTERNAL DOOR SCHEDULE				
1	ID1	1200	2450	Toilet
3	ID3	750	2450	Toilet
FIRE DOOR SCHEDULE				
1	FD1	1300	2450	Staircase/Lift lobby
SERVICE DOOR SCHEDULE				
1	TD1	1350	2450	SERVICE
2	TD2	800	2450	FHC, SERVICE
3	TD3	650	2450	FHC, SERVICE
GLAZING DOOR SCHEDULE				
1	GL20	10725	3350/B.O.B	RESTAURANT 201
2	GL21	5910	3350/B.O.B	RESTAURANT 202
3	GL22	16925	3350/B.O.B	RESTAURANT 203
4	GL23	11950	3350/B.O.B	RESTAURANT 205
5	GL24	6590	3350/B.O.B	RESTAURANT 205
6	GL25	4325	3350/B.O.B	RESTAURANT 206
7	GL26	4050	3350/B.O.B	RESTAURANT 207
8	GL27	4025	3350/B.O.B	RESTAURANT 208
9	GL28	8075	3350/B.O.B	RESTAURANT 209
10	GL29	7825	3350/B.O.B	RESTAURANT 209
13	GL30	7495	3350/B.O.B	RESTAURANT 201
12	GL31	5415	3350/B.O.B	RESTAURANT 202
13	GL32	8325	3350/B.O.B	RESTAURANT 203
14	GL52	9100	3350/B.O.B	RESTAURANT 204
15	GL53	9101	3350/B.O.B	RESTAURANT 205
WINDOW SCHEDULE				
1	W13	2575	3350/B.O.B	SHOP 101, SHOP 105
2	W20	5080	3350/B.O.B	RESTAURANT 204
3	W21	2850	3350/B.O.B	RESTAURANT 204
4	W22	17600	3350/B.O.B	RESTAURANT 204
EXTERNAL DOOR SCHEDULE				
1	D1	2000	2450	CORRIDOR

ARK CONSULTANTS (Fire Fighting Consultants)

Envirotech Design Pvt. Ltd. New Delhi-25

Authority Signatory

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No ..... Dtd 22/08/23
20002/CODLR/JE029/FBPLA/000000122
Architect Sign. Owner Sign.

LEGEND FOR FIRE FIGHTING

A	150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
B1	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR GROUND TO 10th FLOOR
C	80Ø M.S SPRINKLER DRAIN PIPE
D	150Ø M.S FIRE WET RISER PIPE FOR 11th TO 23th FLOOR
E	150Ø M.S SPRINKLER PIPE FOR 11th TO 23th FLOOR
E1	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 11th TO 23th FLOOR
F	150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
G	150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
G1	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 23th & 24th FLOOR
	UP-RIGHT TYPE SPRINKLER
	SEMI CONCEALED TYPE SPRINKLER
	SIDE WALL SPRINKLER
	FUTURE CONNECTION
F.S	FLOW SWITCH
BFV	BUTTER FLY VALVE
M.S	MILD STEEL
	M.S SPRINKLER BRANCH PIPE
	M.S SPRINKLER HEADER PIPE
	150Ø M.S WETRISER FIRE PIPE

LEGEND FOR FIRE HOSE CABINET

FHC - FIRE HOSE CABINET COMPRISING OF
- ONE NO FIRE HOSE CABINET
- ONE NO. 63mmØ SINGLE LANDING VALVE
- ONE NO. FIRE HOSE REEL WITH DRUM 25mmØ x36.5M LONG
- TWO NOS. 63mmØ x15M LONG RRL HOSE PIPES
- ONE NO. BRANCH PIPE
- ONE NO. FIRE MEN'S AXE.
- ONE NO. 4.5 kg. CO2 TYPE FIRE EXTINGUISHERS
- ONE NO. 6.0 kg. ABC POWDER TYPE FIRE EXTINGUISHERS

SCHEDULE FOR SPRINKLER PIPE DIA

S. No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 5	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	100Ø

N

Architects :

OWNER SIGN

ARCHITECT SIGN

Ar. VINI MRA GOYAL
CA/2019/114662
H.No. 739/2, Patel Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

SECOND FLOOR CEILING PLAN(FIRE FIGHTING) as per N.B.C. Part-IV, revised 2016

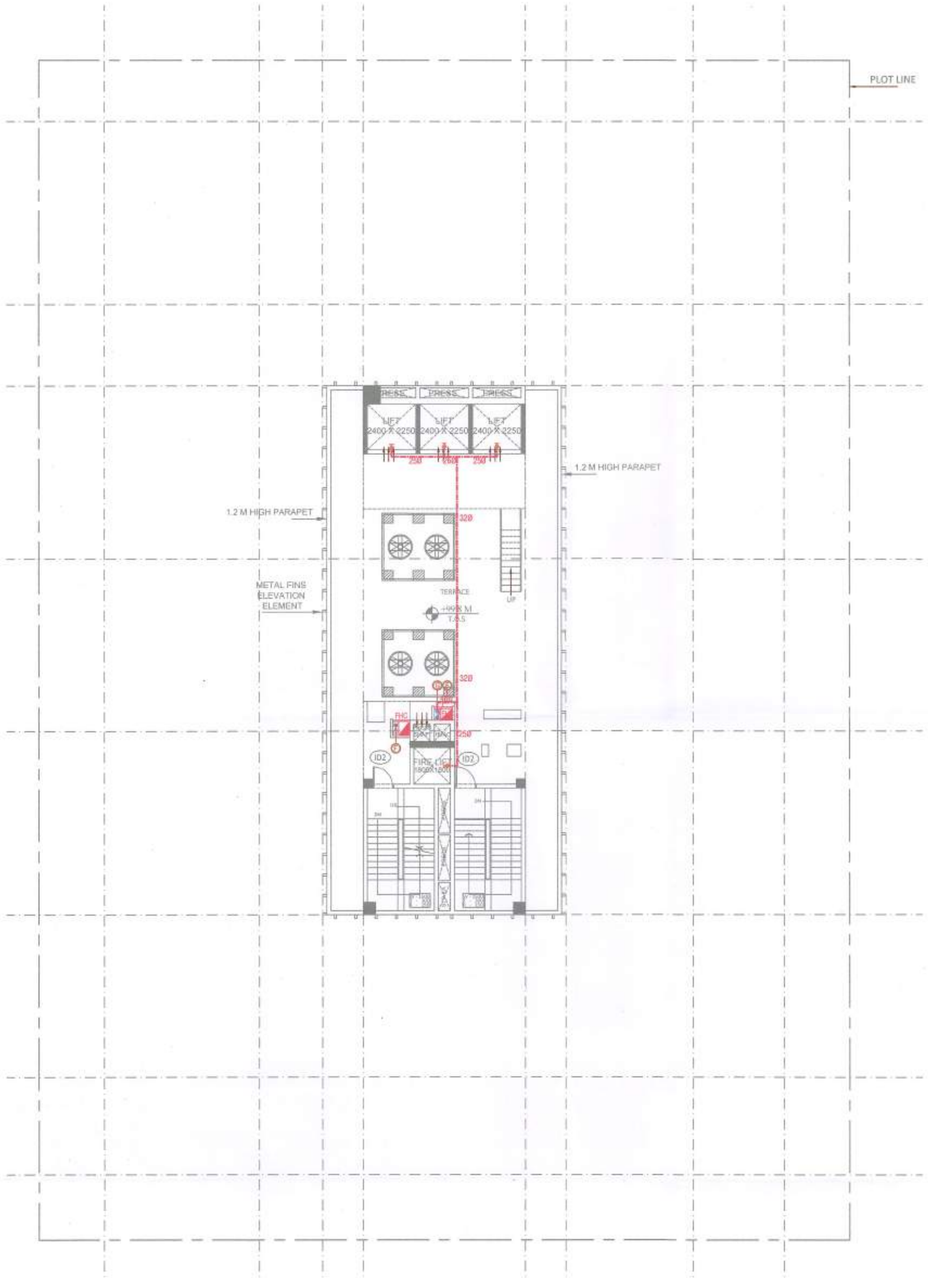
1

	FSO	SSO	DD(T)
Scale :	1:150	Gurugram	Gurugram
Date :	AUG-2023		
Drawn By :			
Checked By :			
Sheet Size :	A1		

CP_SP-FF-04

Fire Fighting Scheme Approved Vide letter No. 2023/1165 Dated 14/09/2023

Deputy Director (Tech.)



MUMTY & MACHINE ROOM
AT TERRACE PLAN
SCALE 1:150

LEGEND FOR FIRE FIGHTING	
A	150Ø M.S FIRE WET RISER PIPE FOR GROUND TO 10th FLOOR
B	150Ø M.S SPRINKLER PIPE FOR FOR GROUND TO 10th FLOOR
C	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR GROUND TO 10th FLOOR
D	80Ø M.S SPRINKLER DRAIN PIPE
E	150Ø M.S FIRE WET RISER PIPE FOR 11th TO 22th FLOOR
F	150Ø M.S SPRINKLER PIPE FOR 11th TO 22th FLOOR
G	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 11th TO 22th FLOOR
H	150Ø M.S FIRE WET RISER PIPE FOR 23th & 24th FLOOR
I	150Ø M.S SPRINKLER PIPE FOR 23th & 24th FLOOR
J	150Ø M.S SPRINKLER STAND BY RISER PIPE FOR 23th & 24th FLOOR
	UP-RIGHT TYPE SPRINKLER
	SEMI CONCEALED TYPE SPRINKLER
	SIDE WALL SPRINKLER
	FUTURE CONNECTION
F.S	FLOW SWITCH
BFV	BUTTER FLY VALVE
M.S	MILD STEEL
	M.S SPRINKLER BRANCH PIPE
	M.S SPRINKLER HEADER PIPE
	150Ø M.S WETRISER FIRE PIPE

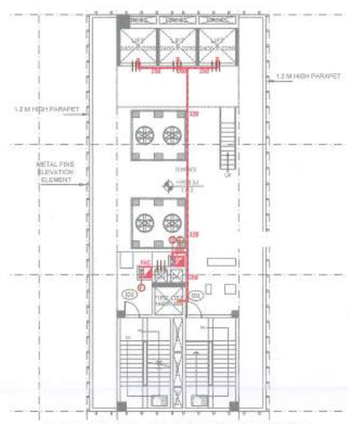
LEGEND FOR FIRE HOSE CABINET
FHC= FIRE HOSE CABINET COMPRISING OF
1 ONE NO.FIRE HOSE CABINET
2 ONE NO. 63mmØ SINGLE LANDING VALVE
3 ONE NO. FIRE HOSE REEL WITH DRUM 20mmØ x36.5M. LONG
4 TWO NOS. 63mmØ x16M. LONG RRL HOSE PIPES
5 ONE NO. BRANCH PIPE
6 ONE NO. FIRE MEN'S AXE
● ONE NO. 4.5 Kg. CO2 TYPE FIRE EXTINGUISHERS
▲ ONE NO. 6.0 Kg. ABC POWDER TYPE FIRE EXTINGUISHERS

SCHEDULE FOR SPRINKLER PIPE DIA

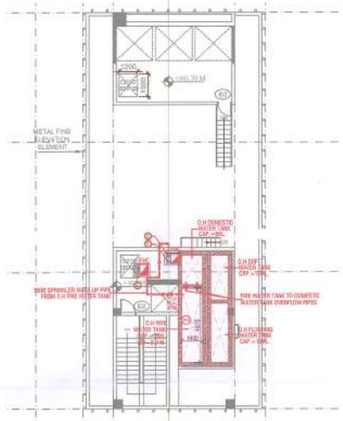
S. No.	No. OF SPRINKLER	DIA OF SPRINKLER PIPE
1	0 TO 1	25Ø
2	1 TO 2	25Ø
3	3	32Ø
4	4 TO 5	40Ø
5	6 TO 10	50Ø
6	11 TO 18	65Ø
7	19 TO 40	80Ø
8	41 TO 100	100Ø
9	101 TO ABOVE	150Ø

BUILT UP AREA DIAGRAM_MUMTY & MACHINE ROOM				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION (X)				
1	1	10715	8000	85.72
2	1	6050	8050	48.70
TOTAL NON FAR				134.42

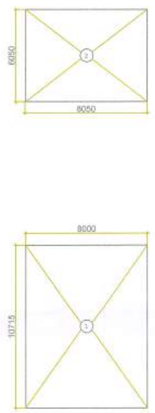
BUILT UP AREA DIAGRAM_WATER TANK				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION (X)				
1	1	10715	8000	85.72
2	1	6050	8050	48.70
TOTAL NON FAR				134.42



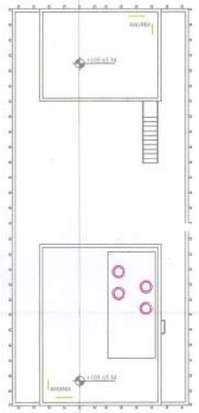
MUMTY & MACHINE ROOM
AT TERRACE PLAN
SCALE 1:200



WATER TANK
SCALE 1:200



BUILT UP AREA DIAGRAM
SCALE 1:200



ROOF PLAN
SCALE 1:200

Authority Signatory

Envirotech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)
It is Certified that these drawing are as per original drawings approved by HSVP Haryana vide memo No. 20042/EDCIR/UE029/FBPLA/0000000122 Dt. 22/08/23
Architect Sign.

N

Architects :

OWNER SIGN

ARCHITECT SIGN
Ar. VINEMRA GOYAL
CA/2019/114692
H.No. 739/2, Patel Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

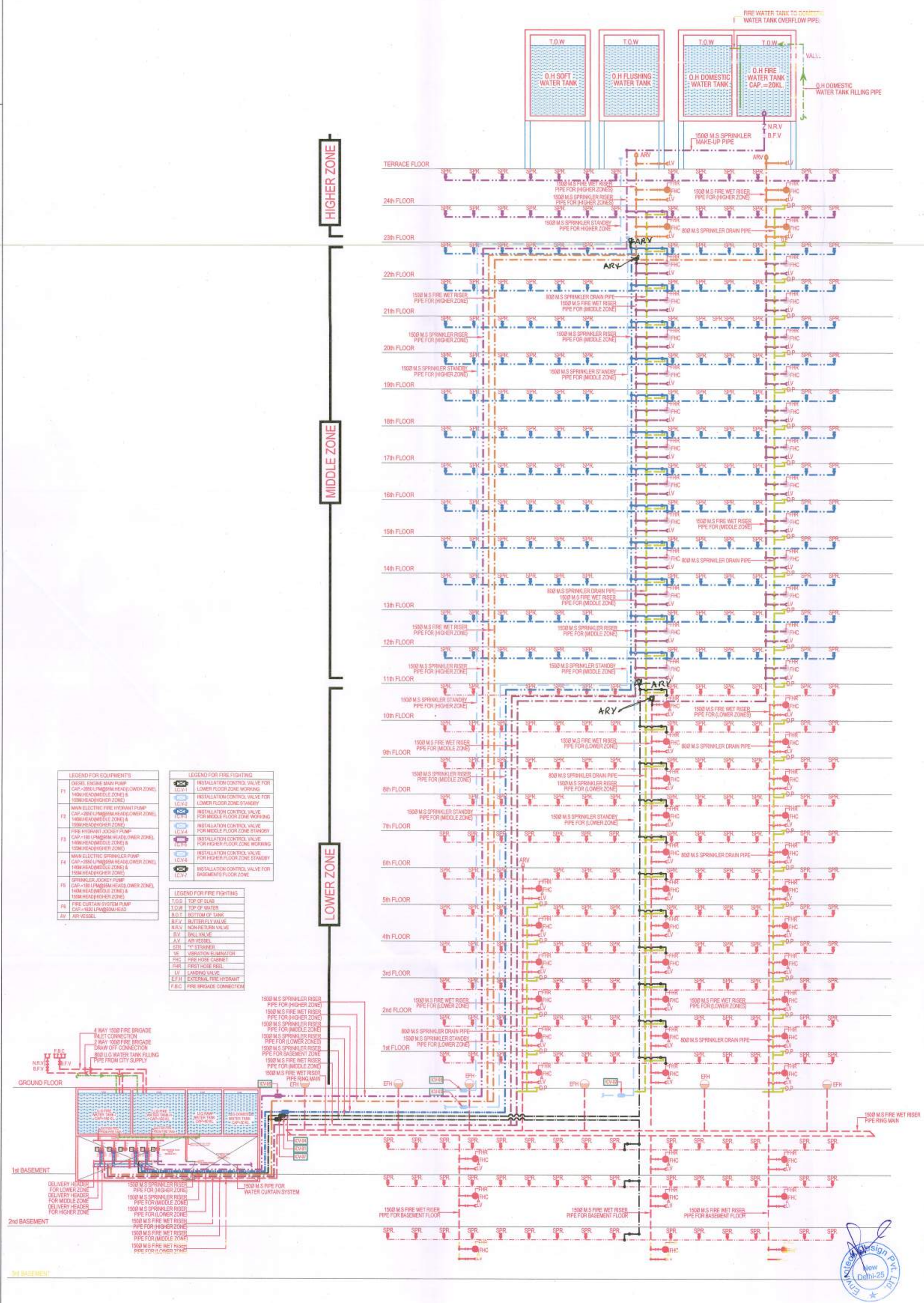
Drawing Title :
SUBMISSION DRAWINGS
TERRACE FLOOR (FIRE FIGHTING)

1

Certified that fire Fighting Scheme is prepared as per NBC Part IV Fire Protection and Fire Fighting Services 2016
FSO Gurugram | FSO Gurugram | DS(T) Gurugram

Scale :	1:150	Drawing No :
Date :	AUG-2023	
Drawn By :		
Checked By :		CP_SP-FF-14
Sheet Size :	A	

Fire Fighting Scheme vide memo No. 2023/1165 Dated 14/10/2023
Deputy Director (T.)



LEGEND FOR EQUIPMENT'S	
F1	DIESEL ENGINE MAIN PUMP CAP.=2850 LPM@85M HEAD(LOWER ZONE), 140M HEAD(MIDDLE ZONE) & 155M HEAD(HIGHER ZONE)
F2	MAIN ELECTRIC FIRE HYDRANT PUMP CAP.=2850 LPM@85M HEAD(LOWER ZONE), 140M HEAD(MIDDLE ZONE) & 155M HEAD(HIGHER ZONE)
F3	FIRE HYDRANT JOCKEY PUMP CAP.=180 LPM@85M HEAD(LOWER ZONE), 140M HEAD(MIDDLE ZONE) & 155M HEAD(HIGHER ZONE)
F4	MAIN ELECTRIC SPRINKLER PUMP CAP.=2850 LPM@85M HEAD(LOWER ZONE), 140M HEAD(MIDDLE ZONE) & 155M HEAD(HIGHER ZONE)
F5	SPRINKLER JOCKEY PUMP CAP.=180 LPM@85M HEAD(LOWER ZONE), 140M HEAD(MIDDLE ZONE) & 155M HEAD(HIGHER ZONE)
F6	FIRE CURTAIN SYSTEM PUMP CAP.=1600 LPM@35M HEAD
AV	AIR VESSEL

LEGEND FOR FIRE FIGHTING	
I.C.V-1	INSTALLATION CONTROL VALVE FOR LOWER FLOOR ZONE WORKING
I.C.V-2	INSTALLATION CONTROL VALVE FOR LOWER FLOOR ZONE STANDBY
I.C.V-3	INSTALLATION CONTROL VALVE FOR MIDDLE FLOOR ZONE WORKING
I.C.V-4	INSTALLATION CONTROL VALVE FOR MIDDLE FLOOR ZONE STANDBY
I.C.V-5	INSTALLATION CONTROL VALVE FOR HIGHER FLOOR ZONE WORKING
I.C.V-6	INSTALLATION CONTROL VALVE FOR HIGHER FLOOR ZONE STANDBY
I.C.V-7	INSTALLATION CONTROL VALVE FOR BASEMENTS FLOOR ZONE

LEGEND FOR FIRE FIGHTING	
T.O.S	TOP OF SLAB
T.O.W	TOP OF WATER
B.O.T	BOTTOM OF TANK
B.F.V	BUTTERFLY VALVE
N.R.V	NON-RETURN VALVE
B.V	BALL VALVE
A.V	AIR VESSEL
STR	"Y" STRAINER
VE	VIBRATION ELIMINATOR
FHC	FIRE HOSE CABINET
FHR	FIRST HOSE REEL
LV	LANDING VALVE
E.F.H	EXTERNAL FIRE HYDRANT
F.B.C	FIRE BRIGADE CONNECTION

Authority Signatory

Architects :

OWNER SIGN

ARCHITECT SIGN

Ar. VINEMRA GOYAL
CA/2019/11162
H.No. 738/2, Patel Nagar, Gurugram

Cliente:

ESSEL INFRA LLP

Project Title:

COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title:

SUBMISSION DRAWING

SCHEMATIC DIAGRAM(FIRE FIGHTING)

Certified that fire Fighting Scheme is as per N.B.C. Part-IV revised 2016

TCP Gurugram | TCP Gurugram | DTP(N) Gurugram

Scale	NTS	Drawing No.
Date	JUNE-2023	
Drawn by		
Checked by	Fire Fighting Scheme Vide Letter No. 2021 1165	CP_SP-SLD-01
Sheet Size	Dated 14/10/2023	

Deputy Director (Tech.)

Envirotech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS Fire Fighting Consultants

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No. Z0002/E0018/UE029/FBPLA/0000000122 Dtd. 22/08/23

Architect Sign. | Owner Sign.

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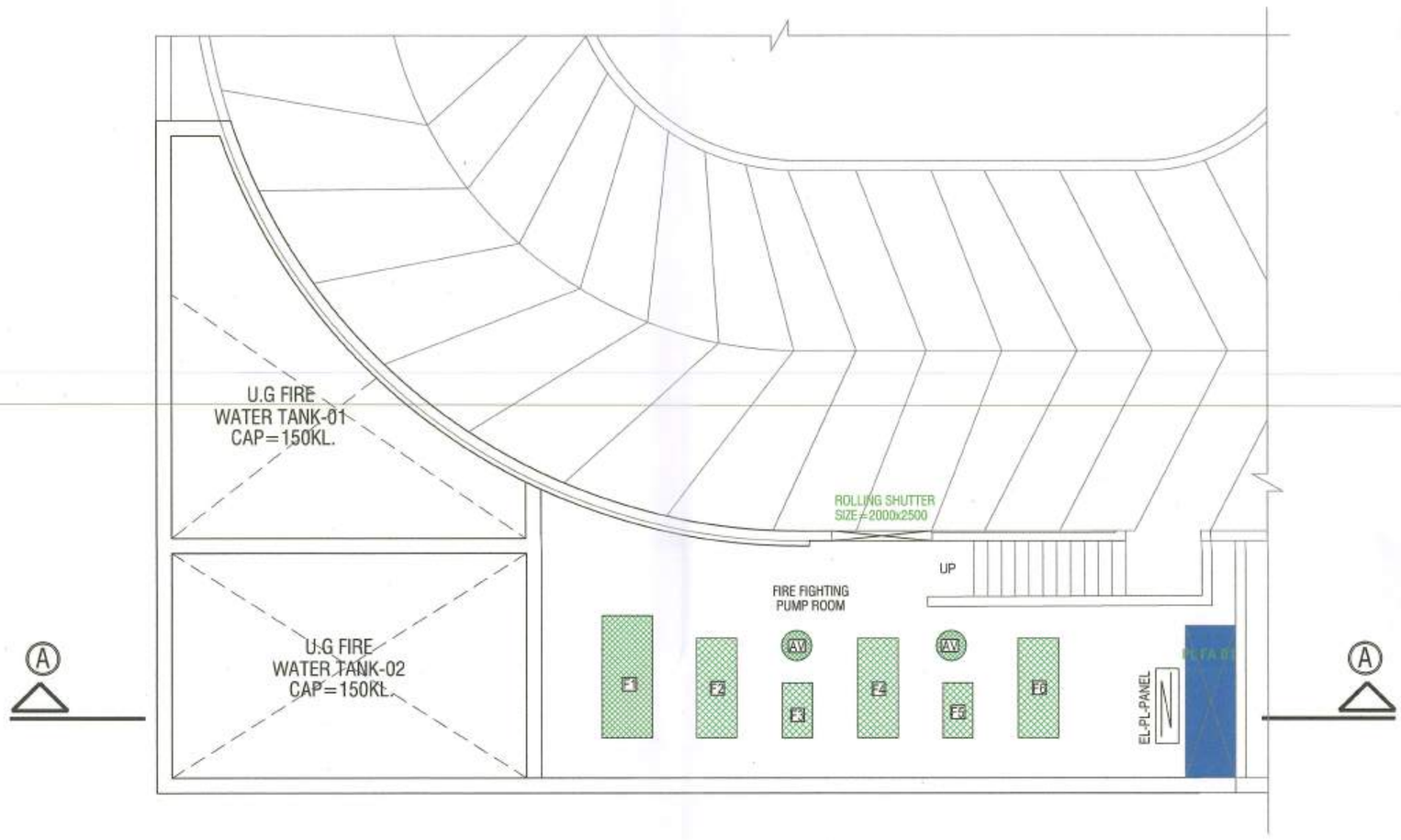
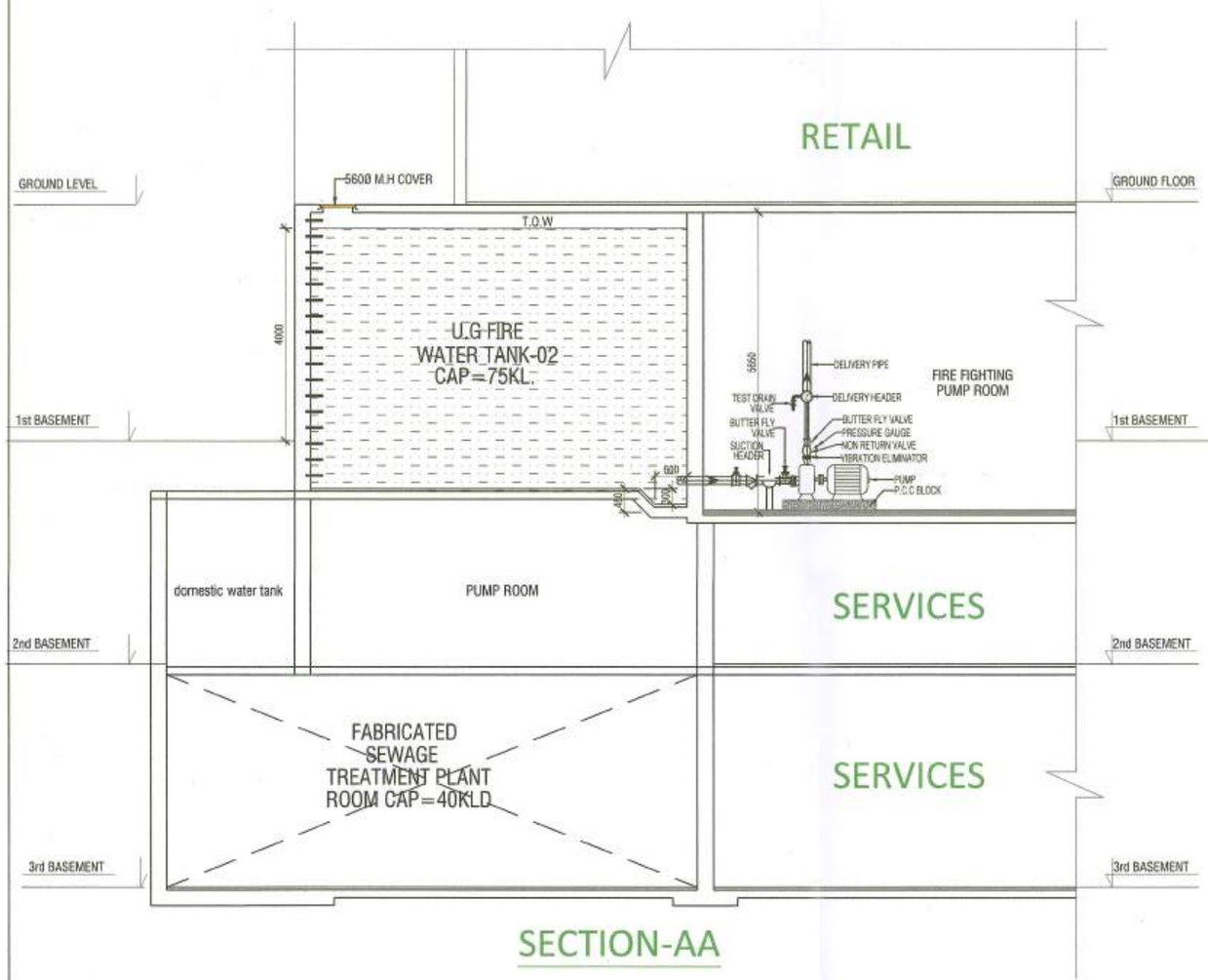


LEGEND FOR FIRE FIGHTING	
T.O.S	TOP OF SLAB
T.O.W	TOP OF WATER
B.O.T	BOTTOM OF TANK
B.F.V	BUTTER FLY VALVE
N.R.V	NON-RETURN VALVE
B.V	BALL VALVE
A.V	AIR VESSEL
STR	"Y" STRAINER
VE	VIBRATION ELIMINATOR
AV	AIR VESSEL



SECTION-AA

LEGEND FOR EQUIPMENT'S	
F1	DIESEL ENGINE MAIN PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F2	MAIN ELECTRIC FIRE HYDRANT PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F3	FIRE HYDRANT JOCKEY PUMP CAP.=180 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F4	MAIN ELECTRIC SPRINKLER PUMP CAP.=2850 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F5	SPRINKLER JOCKEY PUMP CAP.=180 LPM@95M.HEAD(LOWER ZONE), 140M.HEAD(MIDDLE ZONE) & 155M.HEAD(HIGHER ZONE)
F6	FIRE CURTAIN SYSTEM PUMP CAP.=1620 LPM@50M.HEAD
AV	AIR VESSEL

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo 20002/E0018/UE029/FBPLA/0000000122 Dtd. 22/08/23

Architect Sign. Owner Sign.

Authority Signatory

ARK CONSULTANTS
(Fire Fighting Consultants)

Architects :

OWNER SIGN

ARCHITECT SIGN

Ar. VINEMRA GOYAL
CA/2019/114662
H.No. 739/2, Patel Nagar, Gurugram

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Fire Fighting Scheme Approved
Vide letter No. CFO/2022/1165
Dated 14/10/2023
Deputy Director (Tech.)

Drawing Title :
SUBMISSION DRAWINGS

U.G WATER TANK & PUMP ROOM DETAIL (FIRE FIGHTING)

Certified that fire Fighting Scheme is as per N.B.C. Part IV revised 2016

Scale :	1:100@A1	Drawing No :
Date :	SEP-2023	
Drawn By :	FSO	FSO
Checked By :	Gurugram	Gurugram
Sheet Size :	A 1	

DD(T) Gurugram

CP-SP-UGT-01

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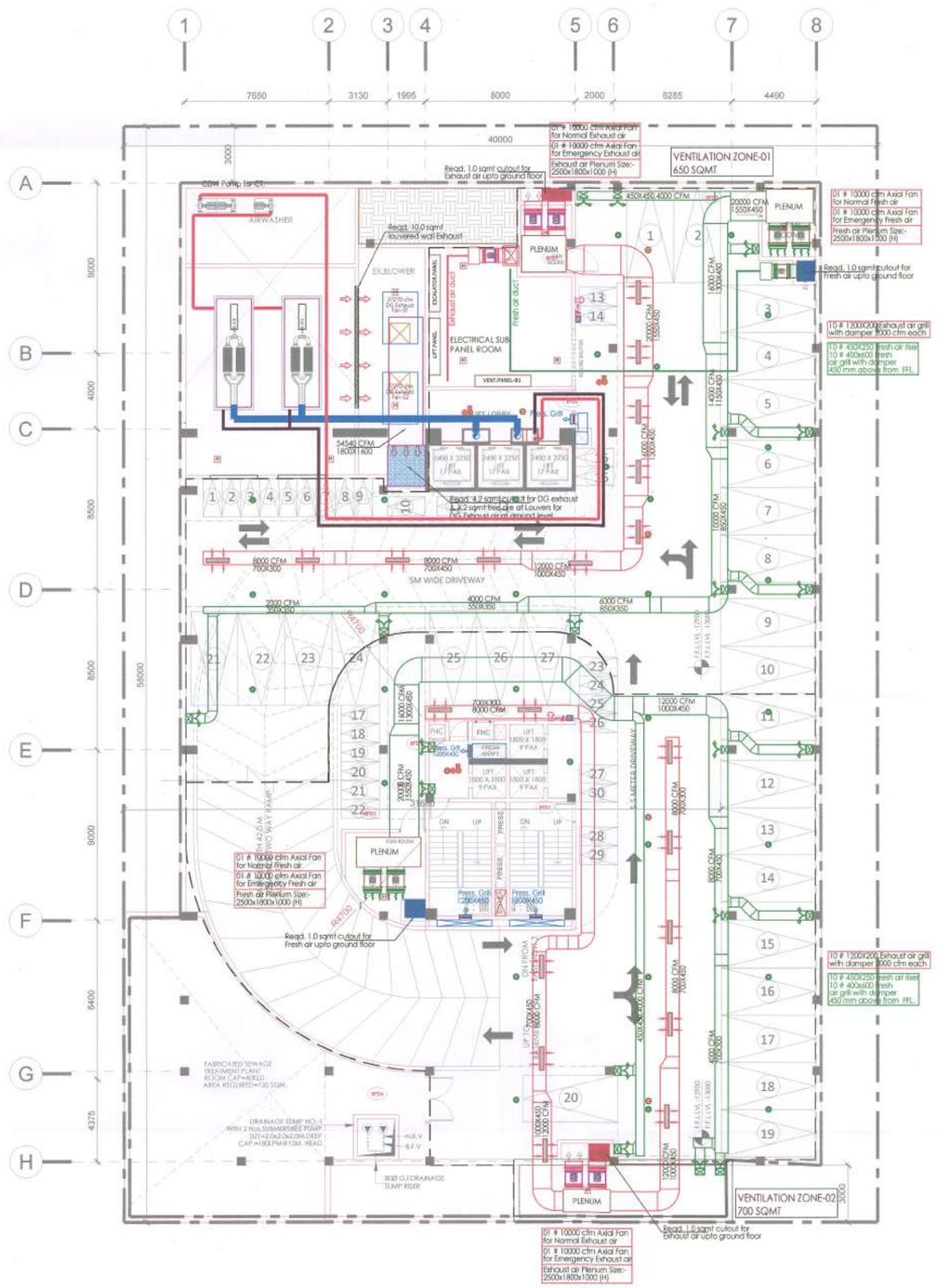

BASEMENT 3 SCALE 1: 150

BASEMENT 3 BUILT UP AREA CALCULATION				
ADDITION				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
A	34000	52000	1	1768.00
TOTAL AREA (A)				1768.00
SUBTRACTIONS				
AREA (RECTANGLE)				
LEGEND	WIDTH(MM)	LENGTH(MM)	NO.S	AREAS (MTS.SQ)
1	1595	695	1	1.11
2	980	1100	1	1.08
3	1300	500	2	1.30
4	650	650	1	0.42
5	1995	2140	1	4.27
6	2400	2140	3	15.41
7	850	750	1	0.64
8	800	1800	1	1.44
9	800	1115	1	0.89
10	800	595	1	0.48
11	1800	1800	1	3.24
12	1800	1800	2	6.48
13	600	2205	1	1.32
14	600	2210	1	1.33
15	600	1380	1	0.83
16	1095	985	1	1.08
17	1100	950	1	1.05
TOTAL AREA (B)				42.35
BUILT UP AREA BASEMENT 2 (A - B = C)				1725.65

BASEMENT 3 SERVICE AREA CALCULATION				
ADDITION				
LEGEND	WIDTH (MM)	LENGTH (MM)	NO.S	AREAS (MTS.SQ)
A	8000	10508	1	84.00
B	AS SHAPE		1	266.66
C	AS SHAPE		1	13.79
D	AS SHAPE		1	13.07
E	AS SHAPE		1	50.53
F	AS SHAPE		1	11.94
G	AS SHAPE		1	99.61
H	1500	1150	1	1.73
TOTAL SERVICE AREA (D)				541.31

PARKING					
A.	ON SURFACE		2 NO.S HANDICAP PARKING		
B.	IN BASEMENT		125 CARS		
BASEMENT LVL	BUILT UP	SERVICES	AREA FOR PARKING	ACTUAL NO. OF CARS	
				PARKING SLOTS	TOTAL NO.
BASEMENT 1	1703.19	588.19	1115.00	19 DOUBLE STACK	38
BASEMENT 2	1560.27	551.19	1008.94	19 DOUBLE STACK	38
BASEMENT 3	1725.65	541.31	1184.34	22 DOUBLE STACK	44
				5SINGLE CARS	5
TOTAL	4989.11	1680.69	3308.28		125
TOTAL (A+B)					127

HVAC LEGENDS

- SMOKE FRESH AIR DUCT
- PRESSURIZATION DUCT
- SMOKE EXHAUST AIR DUCT
- SMOKE EXHAUST AIR GRILL
- SMOKE FRESH AIR RIZER
- PRESSURIZATION FAN
- AXIAL FAN FOR SMOKE FRESH AIR
- AXIAL FAN FOR SMOKE EXHAUST AIR
- MULTI DETECTOR

S.NO	LEGEND-:	DESCRIPTION
1	MCP	MANUAL CALL POINT
2		HOOTER
3	CM	CONTROL MODULE
4		FIRE TELEPHONE JACK
5	R	RESPONSE INDICATOR
6		SMOKE DETECTOR (BELOW)
7	S	SMOKE DETECTOR (ABOVE)
8	H	HEAT DETECTOR
9		MULTI CRITERIA DETECTOR
10	BT	BAEM TRANSMETER
11	BR	BAEM REFLECTOR
12		PA SPEAKAR
13		FAS CONDUIT
14		PA CONDUIT
15		FIRE ALARM PANEL
16		PUBLIC ADDRESS PANEL

VENTILATION CALCULATION FOR SEC-43 COMMERCIAL BUILDING C-1													
S. No	Area Description	Type of Exhaust	Area (Sqmt)	Dead / -ve Area (Sqmt)	Net Area (Sqmt)	Area (Sqft)	Height (Ft)	ACPH	Air Qty (CFM)	Total (CFM)	Selected Fan (AXIAL) (CFM)	Qty	CUTOUT AREA (SQMT)
T)	BASEMENT-3												
	Zone - 1												
a)	Parking Area	Normal Exhaust	693	43	650	6994	12.96	6	9061	10000	10000	1	1.0
b)	Parking Area	Emergency Exhaust	693	43	650	6994	12.96	6	9061	10000	10000	1	
c)	Parking Area	Normal Fresh Air	693	43	650	6994	12.96	6	9061	10000	10000	1	1.0
d)	Parking Area	Emergency Fresh Air	693	43	650	6994	12.96	6	9061	10000	10000	1	
	Zone - 2												
a)	Parking Area	Normal Exhaust	800	100	700	7532	12.96	6	9758	10000	10000	1	1.0
b)	Parking Area	Emergency Exhaust	800	100	700	7532	12.96	6	9758	10000	10000	1	
c)	Parking Area	Normal Fresh Air	800	100	700	7532	12.96	6	9758	10000	10000	1	1.0
d)	Parking Area	Emergency Fresh Air	800	100	700	7532	12.96	6	9758	10000	10000	1	

Authority Signatory

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No. 20001/EC04/DTP/FB&LA/0000002 Dtd. 27/05/2022

Architect Sign. Owner Sign.

Envirotech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

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3

N

FIRE SUBMISSION

OWNER SIGN	ARCHITECT SIGN
	Ar. VINEETA GOYAL CA/2019/114662 H.No. 738/2, Patel Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

BASEMENT 3 FLOOR PLAN

1

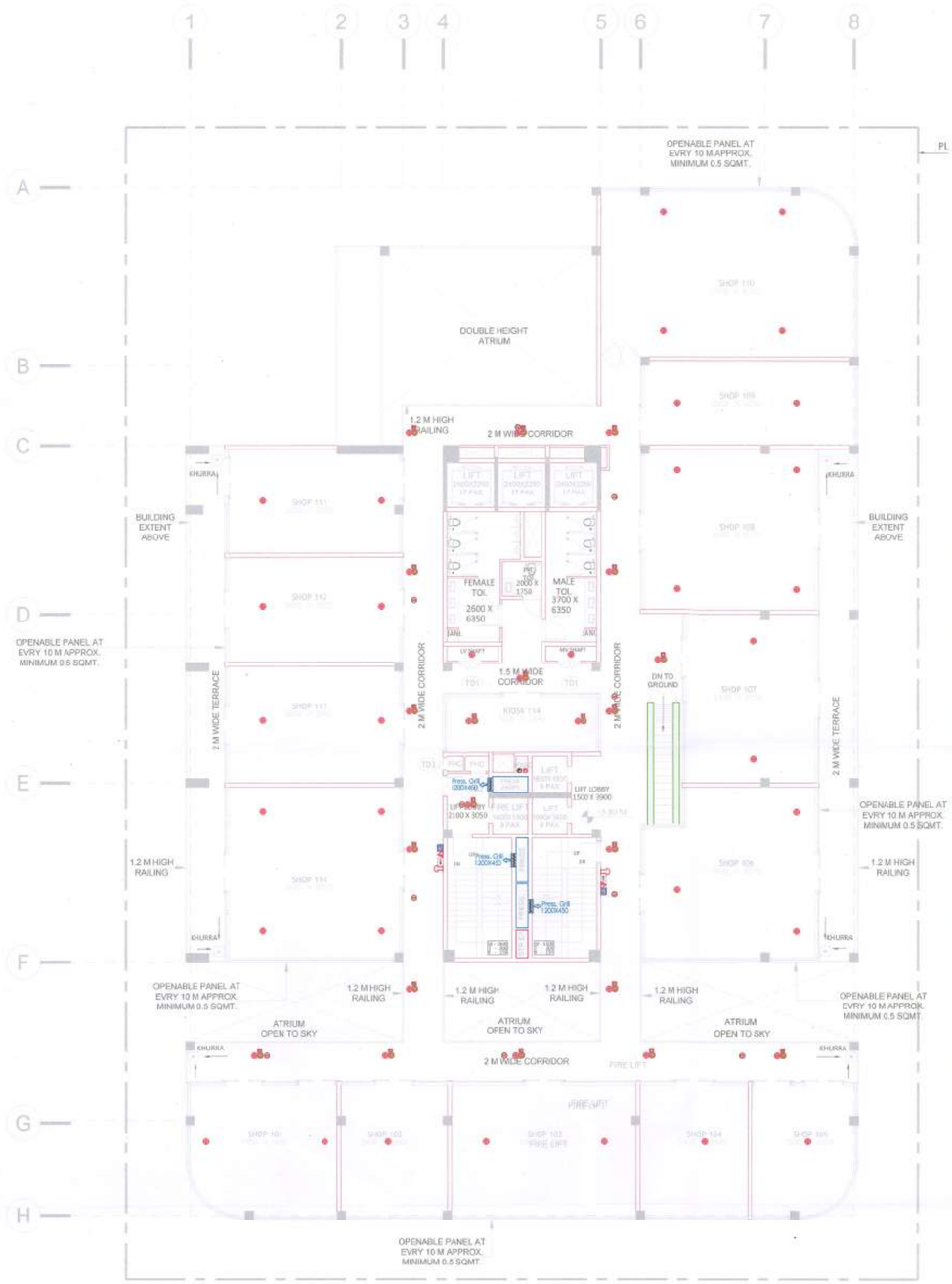
SMOKE VENTILATION & ELECTRICAL DRAWINGS

Certified that fire Fighting Scheme as per NBC, Part-IV, revised 2

Scale :		Drawing No :	
Date :	SEP 2022	Gurugram	Gurugram
Drawn By :			
Checked By :		C1-HVAC-003	
Sheet Size :	A1		

Fire Fighting Scheme Approved Vide Memo No. 2023/1165 Dated 14/10/2023

Deputy Director (Tech.)



FIRST FLOOR PLAN (1:150)

FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION				
A	1	52000	34000	1768.00
TOTAL AREA(A)				1768.00
SUBTRACTION				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	13000	8250	107.25
2	1	10005	1825	18.26
3	1	3000	10755	32.27
4	1	3000	1800	5.40
5	1	8000	10730	85.84
6	1	2000	885	1.77
7	1	4000	11005	44.02
9	1	4000	7995	31.98
10	1	4000	10995	43.98
11	3	1931416		5.79
12	1	26000	2000	52.00
13	1	25800	2000	51.60
14	2	6000	3300	39.60
15	1	6000	600	3.60
16	3	1800	1800	9.72
17	3	2250	2400	16.20
18	2	850	800	1.36
19	1	880	800	0.70
20	2	750	2600	3.90
21	1	2400	900	2.16
22	1	1745	500	0.87
23	1	2400	500	1.20
24	1	2000	11005	22.01
25	1	2000	7995	15.99
26	1	2000	10995	21.99
TOTA SUBTRACTION (B)				619.46
C. FAR (A-B)				1148.54

AREA FREE FROM FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
14	2	6000	3300	39.60
TOTAL D				39.60

TOTAL BUILT UP (C +D)		1188.14

CARPET AREA_FIRST FLOOR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	5255	8600	45.19
1	1	5255	8600	45.19
2	1	5900	8600	50.74
3	1	8590	8600	73.87
4	1	7600	2840	21.58
5	1	47557533		47.56
6	1	6600	5375	35.48
7	1	6600	9350	61.71
8	1	6600	5405	35.67
9	1	32411102		32.41
10	1	6510	8600	55.99
11	1	2065	6490	13.40
12	1	8550	6490	55.49
13	1	8075	8600	69.45
14	1	4250	10610	45.09
15	1	105192687		105.19
16	1			
CARPET AREA				794.02

FIRST FLOOR				
SL.NO.	TAG.	Rough Opening		REMARKS
		Width	Height	
INTERNAL DOOR SCHEDULE				
1	ID1	1200	2450	Toilet
2	ID2	1050	2450	H.Toi.
3	ID3	750	2450	Toilet
FIRE DOOR SCHEDULE				
1	FD1	1300	2450	Staircase,lift lobby
SERVICE DOOR SCHEDULE				
1	TD1	1150	2450	SERVICE
2	TD2	800	2450	FHC, SERVICE
3	TD3	650	2450	FHC, SERVICE
GLAZING DOOR SCHEDULE				
1	GL1	5255	3550/B.O.B	SHOP 110, SHOP 111
2	GL2	5915	3550/B.O.B	SHOP 112
3	GL3	17135	3550/B.O.B	SHOP 113
4	GL4	9260	3550/B.O.B	SHOP 101
5	GL5	5400	3550/B.O.B	SHOP 102
6	GL6	9325	3550/B.O.B	SHOP 103
7	GL7	5435	3550/B.O.B	SHOP 104
8	GL8	6920	3550/B.O.B	SHOP 105
9	GL9	11060	3550/B.O.B	SHOP 106
10	GL10	8550	3550/B.O.B	SHOP 107
11	GL11	16275	3550/B.O.B	SHOP 108
12	GL12	2000	3550/B.O.B	SHOP 109
13	GL13	2575	3550/B.O.B	SHOP 110
14	GL14	5415	3550/B.O.B	SHOP 112
15	GL15	8325	3550/B.O.B	SHOP 113
17	GL16	16745	3550/B.O.B	SHOP 106
18	GL17	8550	3550/B.O.B	SHOP 107
19	GL18	7825	3550/B.O.B	SHOP 108
20	GL19	13680	3550/B.O.B	KIOSK
WINDOW SCHEDULE				
1	W1	1800	3550/B.O.B	SHOP 101, SHOP 105
2	W2	5235	3550/B.O.B	SHOP 101, SHOP 105
3	W3	4200	3550/B.O.B	SHOP 101
4	W4	4900	3550/B.O.B	SHOP 102
5	W5	9325	3550/B.O.B	SHOP 103
6	W6	5185	3550/B.O.B	SHOP 104
7	W7	1935	3550/B.O.B	SHOP 105
8	W8	1800	3550/B.O.B	SHOP 109
9	W9	5100	3550/B.O.B	SHOP 109
10	W10	4510	3550/B.O.B	SHOP 109
11	W11	2000	3550/B.O.B	SHOP 108, SHOP 109
12	W12	1980	3550/B.O.B	SHOP 110

HVAC LEGENDS

- SMOKE FRESH AIR DUCT
- PRESSURIZATION DUCT
- SMOKE EXHAUST AIR DUCT
- SMOKE EXHAUST AIR GRILL
- SMOKE FRESH AIR RIZER
- PRESSURIZATION FAN
- AXIAL FAN FOR SMOKE FRESH AIR
- AXIAL FAN FOR SMOKE EXHAUST AIR
- MULTI DETECTOR

S.NO	LEGEND-:	DESCRIPTION
1	MCP	MANUAL CALL POINT
2		HOOTER
3	CM	CONTROL MODULE
4		FIRE TELEPHONE JACK
5	RI	RESPONSE INDICATOR
6		SMOKE DETECTOR (BELOW)
7	S	SMOKE DETECTOR (ABOVE)
8	H	HEAT DETECTOR
9		MULTI CRITERIA DETECTOR
10	BT	BAEM TRANSMETER
11	BR	BAEM REFLECTOR
12		PA SPEAKAR
13		FAS CONDUIT
14		PA CONDUIT
15		FIRE ALARM PANEL
16		PUBLIC ADDRESS PANEL

Authority Signatory

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No 20002/EDC(B)/UR-II/FDBLA/2022-0022 Dtd. 22/8/23

Architect Sign. Owner Sign

Envirotech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

4

NOTE:
1. THE BUILDING WILL BE MECHANICALLY VENTILATED.
2. SPRINKLERS ARE INCORPORATED AS/NBC.

3

FIRE SUBMISSION

Architects :

OWNER SIGN | ARCHITECT SIGN

Ar. VINEETA GOYAL CA/2019/114662 H.No. 739/2, Patel Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS
FIRST FLOOR

1

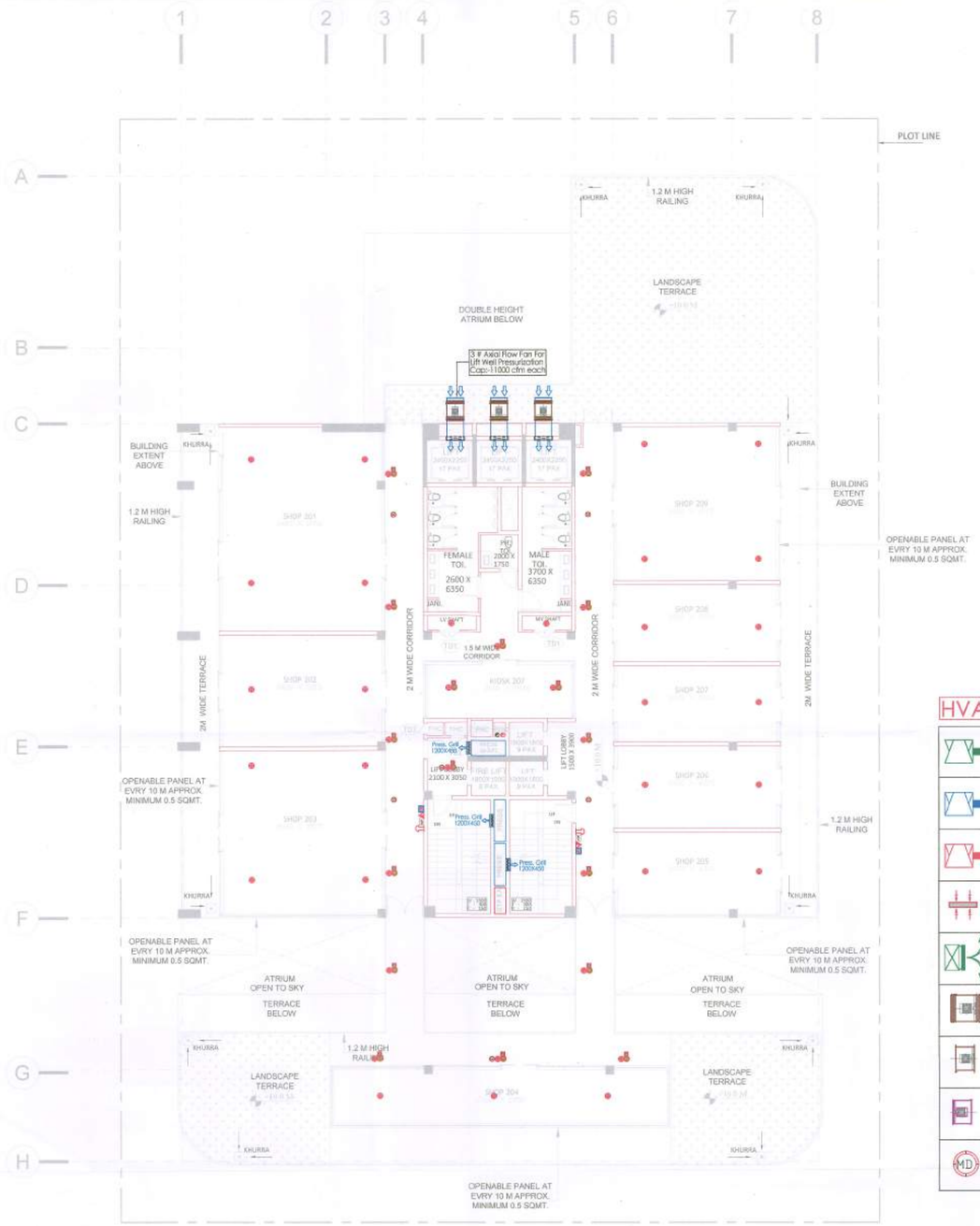
SMOKE VENTILATION & ELECTRICAL DRAWINGS

Certified that fire Fighting Scheme as per N.B.C. Part-IV revised 201.

14/10/2023

Scale :	Drawing No.
Date : SEP.2023	
Drawn By :	
Checked By :	
Sheet Size : Gurugram	Gurugram

C1-HVAC-102
Gurugram



SECOND FLOOR PLAN (1:150)

FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION				
A	1	26000	30000	780.00
B	1	7000	34000	238.00
TOTAL AREA(A)				1018.00
SUBTRACTION				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	2	6000	3300	39.60
2	1	6000	600	3.60
3	3	1800	1800	9.72
4	2	850	800	1.36
5	1	750	800	0.60
6	2	750	2600	3.90
7	1	2400	900	2.16
8	3	2250	2400	16.20
9	2	500	1745	1.75
10	1	500	2400	1.20
15	1	7000	8000	56.00
16	1	7000	8000	56.00
17	1	1750	18000	31.50
18	1	2000	18000	36.00
TOTA SUBTRACTION (B)				259.59
C. FAR (A-B)				758.42

AREA FREE FROM FAR				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
ADDITION (X)				
1	2	6000	3300	39.60
11	2	26000	2000	104.00
12	2	6000	2000	24.00
TOTAL ADDITION				167.60
D. TOTAL NON FAR AREA (X-Y)				167.60
TOTAL BUILT UP (C +D)				926.02

CARPET AREA				
S.NO.	NO.s	Length(in mm)	Breadth(in mm)	Area(in sqm)
1	1	10710	8400	89.96
2	1	5915	8400	49.69
3	1	8575	8400	72.03
4	1	2840	7600	21.58
5	1	8075	8400	67.83
6	2	4050	8400	68.04
7	1	4325	8400	36.33
8	1	4300	8400	36.12
9	1	2850	17600	50.16
CARPET AREA				491.74

SECOND FLOOR				
SL.NO.	TAG.	Rough Opening		REMARKS
		Width	Height	
INTERNAL DOOR SCHEDULE				
1	ID1	1200	2450	Toilet
3	ID3	750	2450	Toilet
FIRE DOOR SCHEDULE				
1	FD1	1300	2450	Staircase,lift lobby
SERVICE DOOR SCHEDULE				
1	TD1	1150	2450	SERVICE
2	TD2	800	2450	FHC, SERVICE
3	TD3	650	2450	FHC, SERVICE
GLAZING DOOR SCHEDULE				
1	GL20	10725	3350/B.O.B	RESTAURANT 201
2	GL21	5910	3350/B.O.B	RESTAURANT 202
3	GL22	16925	3350/B.O.B	RESTAURANT 203
4	GL23	11950	3350/B.O.B	RESTRAURANT 205
5	GL24	6590	3350/B.O.B	RESTRAURANT 205
6	GL25	4325	3350/B.O.B	RESTRAURANT 206
7	GL26	4050	3350/B.O.B	RESTRAURANT 207
8	GL27	4025	3350/B.O.B	RESTRAURANT 208
9	GL28	8075	3350/B.O.B	RESTRAURANT 209
10	GL29	7825	3350/B.O.B	RESTRAURANT 209
11	GL30	7435	3350/B.O.B	RESTAURANT 201
12	GL31	5415	3350/B.O.B	RESTAURANT 202
13	GL32	8325	3350/B.O.B	RESTAURANT 203
14	GL52	9100	3350/B.O.B	RESTAURANT 204
15	GL53	9101	3350/B.O.B	RESTAURANT 205
WINDOW SCHEDULE				
1	W13	2575	3350/B.O.B	SHOP 101, SHOP 105
2	W20	5000	3350/B.O.B	RESTAURANT 204
3	W21	2850	3350/B.O.B	RESTAURANT 204
4	W22	17600	3350/B.O.B	RESTAURANT 204
EXTERNAL DOOR SCHEDULE				
1	D1	2000	2450	CORRIDOR

HVAC LEGENDS

- SMOKE FRESH AIR DUCT
- PRESSURIZATION DUCT
- SMOKE EXHAUST AIR DUCT
- SMOKE EXHAUST AIR GRILL
- SMOKE FRESH AIR RIZER
- PRESSURIZATION FAN
- AXIAL FAN FOR SMOKE FRESH AIR
- AXIAL FAN FOR SMOKE EXHAUST AIR
- MULTI DETECTOR

S.NO	LEGEND-:	DESCRIPTION
1	MCP	MANUAL CALL POINT
2		HOOTER
3	CM	CONTROL MODULE
4		FIRE TELEPHONE JACK
5	RI	RESPONSE INDICATOR
6		SMOKE DETECTOR (BELOW)
7	S	SMOKE DETECTOR (ABOVE)
8	H	HEAT DETECTOR
9		MULTI CRITERIA DETECTOR
10	BT	BAEM TRANSMETER
11	BR	BAEM REFLECTOR
12		PA SPEAKAR
13		FAS CONDUIT
14		PA CONDUIT
15		FIRE ALARM PANEL
16		PUBLIC ADDRESS PANEL

Authority Signatory

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No 20001/2001/UD(M)/FB2A/000000112 Dt. 22/08/2023

Architect Sign. Owner Sign

Envirotech Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

NOTE:
1. THE BUILDING WILL BE MECHANICALLY VENTILATED.
2. SPRINKLERS ARE INCORPORATED AS/NBC.

FIRE SUBMISSION

Architects :

OWNER SIGN | ARCHITECT SIGN

Ar. VINEETRA GOYAL
CA/2019/114662
H.No. 739/2, Patel Nagar, Gurugram

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

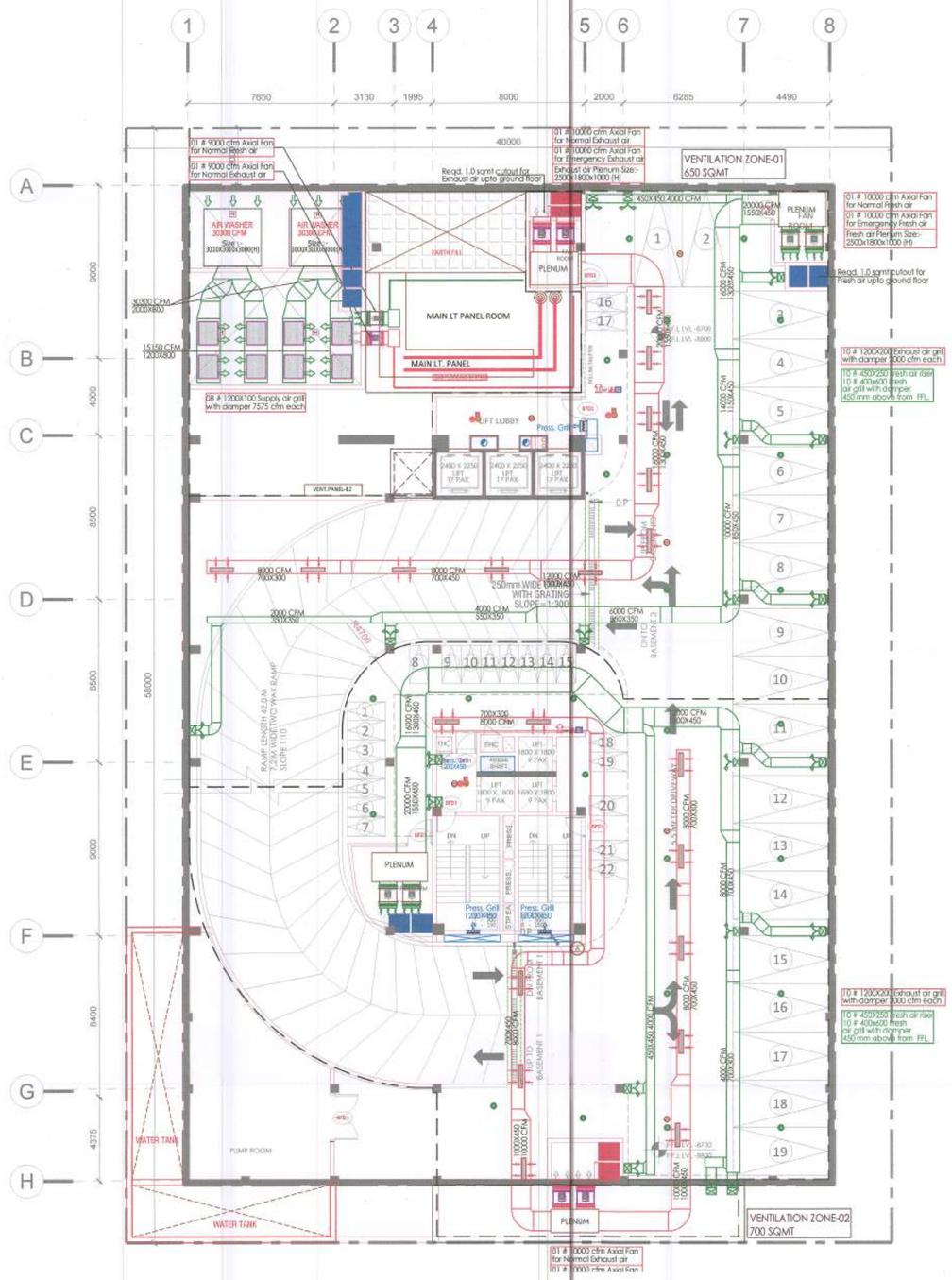
Drawing Title :
SUBMISSION DRAWINGS
SECOND FLOOR
SMOKE VENTILATION & ELECTRICAL DRAWINGS

Certified that the Fighting Scheme is as per N.B.C. Part-4, Revised 2016

Gurugram Gurugram Gurugram

Scale :	1:	Drawing No :
Date :	SEP-2023	C1-HVAC-103
Drawn By :		
Checked By :		
Sheet Size :	A1	

4
3
2
1



BASEMENT 2 SCALE 1: 150

HVAC LEGENDS

	SMOKE FRESH AIR DUCT
	PRESSURIZATION DUCT
	SMOKE EXHAUST AIR DUCT
	SMOKE EXHAUST AIR GRILL
	SMOKE FRESH AIR RIZER
	PRESSURIZATION FAN
	AXIAL FAN FOR SMOKE FRESH AIR
	AXIAL FAN FOR SMOKE EXHAUST AIR
HD	MULTI DETECTOR

S.NO	LEGEND-:	DESCRIPTION
1	MCP	MANUAL CALL POINT
2		HOOTER
3	CM	CONTROL MODULE
4		FIRE TELEPHONE JACK
5	R	RESPONSE INDICATOR
6		SMOKE DETECTOR (BELOW)
7		SMOKE DETECTOR (ABOVE)
8	H	HEAT DETECTOR
9		MULTI CRITERIA DETECTOR
10	BT	BAEM TRANSMETER
11	BR	BAEM REFLECTOR
12		PA SPEAKAR
13		FAS CONDUIT
14		PA CONDUIT
15		FIRE ALARM PANEL
16		PUBLIC ADDRESS PANEL

VENTILATION CALCULATION FOR SEC-43 COMMERCIAL BUILDING C-1

S. No	Area Description	Type of Exhaust	Area (Sqmt)	Dead / -ve Area (Sqmt)	Net Area (Sqmt)	Area (Sqft)	Height (Ft)	ACPH	Air Qty (CFM)	Total (CFM)	Selected Fan (AXIAL) (CFM)	Qty	CUT OUT AREA (SQMT)
A)	BASEMENT-2												
	Zone – 1												
a)	Parking Area	Normal Exhaust	695	45	650	6994	12.96	6	9061	10000	10000	1	1.0
b)	Parking Area	Emergency Exhaust	695	45	650	6994	12.96	6	9061	10000	10000	1	
c)	Parking Area	Normal Fresh Air	695	45	650	6994	12.96	6	9061	10000	10000	1	1.0
d)	Parking Area	Emergency Fresh Air	695	45	650	6994	12.96	6	9061	10000	10000	1	
	Zone – 2												
a)	Parking Area	Normal Exhaust	800	100	700	7532	12.96	6	9758	10000	10000	1	1.0
b)	Parking Area	Emergency Exhaust	800	100	700	7532	12.96	6	9758	10000	10000	1	
c)	Parking Area	Normal Fresh Air	800	100	700	7532	12.96	6	9758	10000	10000	1	1.0
d)	Parking Area	Emergency Fresh Air	800	100	700	7532	12.96	6	9758	10000	10000	1	

Authority Signatory

It is Certified that these drawing are as per original drawings approved by HSVP Haryana Vide memo No 20021/BP/HT/2021/PB/HP/000122 dt 22/6/2022

Architect Sign.

Owner Sign

Environ Design Pvt. Ltd. New Delhi-25

ARK CONSULTANTS (Fire Fighting Consultants)

4

3

N

FIRE SUBMISSION

OWNER SIGN	ARCHITECT SIGN
	Ar. VINEMRA GOYAL CA/2019/114062 H.No. 730/2, Palam Nagar, Gurugram

2

Clients:
ESSEL INFRA LLP

Project Title :
COMMERCIAL COMPLEX SITE C1 IN SHOPPING CENTRE SECTOR -43, GURUGRAM .

Drawing Title :
SUBMISSION DRAWINGS

BASEMENT 2 FLOOR PLAN

1

SMOKE VENTILATION
& ELECTRICAL DRAWINGS

Scale :		Drawing No :
Date :	Scheme :	C1-HVAC-002
Drawn By :		
Checked By :		
Sheet Size :	A1	

Certified that Fire Fighting Scheme is as per N.B.C. 2016 revised 2016

FSO Gurugram

FSO Gurugram

Gurugram

Fire Fighting Scheme Vide Inward No. FS 2022/1165 Dated 14/10/2022

Deputy Director (Fire)