# SHINE BUILDCON PVT. LTD.

Regd. Office: H-334, Ground Floor, New Rajinder Nagar, New Delhi-110060
CIN: U45201DL2004PTC131675, Telephone No.: 011-28744111/12
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SHINE/NOCF/2017/01

Date: 31st March, 2017

**The Sr. Fire Station Officer,**
**Fire Station , Sector -29**
**Municipal Corporation Gurgaon**

**Subject: Objection Regarding Approval of fire fighting Scheme from Fire Safety point of view of Commercial Colony meas. 2.893 acres in Sector -70 ,Gurgaon of M/s Shine Buildcon Pvt. Ltd.**

**Reference: Your letter No. MCG/FS/SFSO/2016/3239 dated 21.12.16**

Dear Sir,

This is in reference to the captioned subject. Please be informed that we have submitted clarification towards objection raised in your letter No. MCG/FS/SFSO/2016/3239 dated 21.12.16

You are therefore requested to issue Fire NOC at the earliest.

Yours truly ,
For **Shine Buildcon Pvt. Ltd.**

Vikas Bajaj
**( Authorized Signatory)**

वरिष्ठ दमकल केन्द्र अधिकारी,
दमकल केन्द्र सैक्टर-29
गुरुग्राम (हरियाणा)

M/s Shine Buildcon Pvt. Ltd.,
Vill- Badshahpur, Sector- 70,
Gurgaon.

Dated- 21/12/16

No.-MCG/FS/SFSO/2016/ 3289

Subject- **Objection Regarding Approval of fire fighting Scheme from Fire safety point of view of the Commercial Colony meas. 2.893 acres in Sector-70, Gurgaon of M/s Shine Buildcon Pvt. Ltd.**

उपरोक्त विषय पर सी.एम.सी., एम.सी.डी. से प्राप्त फाईल नं0- 20161005498 दिनांक 05.10.2016 के सन्दर्भ में।

विचाराधीन कार्य हेतु प्राप्त फाईल का दमकल केन्द्र अधिकारियों की टीम द्वारा अवलोकन किया गया। अवलोकन उपरान्त इस फाईल में बनी फायर स्कीम में निम्नलिखित कमियाँ पाई गई है:-

1- Questionnaire sr. nos. 8,11,13,15,16,18,19,22,24,26,31,33,35,39,43,44, 48,53 are not filled as per NBC norms. In questionnaire, many columns of as per NBC are stand blank/not filled.
2- Sign. of Fire, Ventilation, Electrical Consultants and Architect not affixed in questionnaire and drawing.
3- The applicant has applied for issue of Fire NOC but file relates to issuance fo fire scheme, Fresh request letter to be submitted for issuance of fire scheme.
4- Authority letter fo submission of file and Authorision letter of signing authority not attached in file.
5- DBR of Fire, Ventilation and Fire alarm and Detection System not attached.
6- Fire Ventilation and Electrical Consultant Certificate not attached.
7- Classification of building not shown in fire scheme on which fire system has been designed.
8- As per BR-III, Approval is given for revise building plan nut in questionnaire & scheme, it is not mentioned anywhere about earlier approval of fire scheme.
9- UG fire tank capacity not as per norms, it shall be increased.
10- Why fire control room shown in B-1, Which is not allowed.
11- Diesel pump capacity not as per norms, it shall be increased.
12- Automatic fire system for Transformer, HT & LT panel not shown.
13- In site plan- Fire tender movement road, Width of Main Entry/Exit, Distance between yard hydrant not shown.
14- Detail of Refuge area with calculation not shown in scheme, The area shall also be marked on relevant drawing with direct access of staircase.
15- Seprate drawing required for Ventilation and Pressurization system for basement area.

16-Distance between sprinklers, detectors and curtain nozzles not shown.
17-Fire door in Stairs, Lift lobby and Electrical shaft/room not marked.
18-Why deluge valve not shown in curtain line.
19-Mechanical Ventilation, Pressurization, Pump Head, Hydraulic head loss calculation of sprinklers, Hydrants and Curtain not attached.
20-In drawing Cinema hall Audi 1,2,3 shown but in questionnaire not matched about cinema area, occupancy. Why.
21-Seprate drawing required for Cinema Audi's, clearly showing Travel distance, Spacing between sitting area, Width of Entry/Exit etc.
22-Provision of hose reel/FHC in all Audi's etc not shown and provision of fire system are also not sufficient as per NBC norms.
23-Why smoke Detectors shown in service apartment room with pantry area, clarify.
24-Wny mechanical parking area shown in basement area, clarification required about no. of cars and fire system etc also required.
25-Fire alarm & Detection system in Audi area not shown.
26-Elevation Section Drawing not attached.

27-Upper floor mechanical ventilation system also not shown.
28-Width of staircase of Assembly building in cinema area not less than 2000 mm.
29-Detail regarding non slippery staircase not given.
30-Detail of false ceiling gap & fire system above ceiling not clear shown.
31-A Certificate shall be given on every drawing that these drawing are as per original drawing passed by Town and Country Planning vide memo no and date.

अतः आपको लिखा जाता है कि आप फायर स्कीम को एन.बी.सी. 2005 के अनुसार ठीक करवो एवं कमसंख्या अनुसार जवाब पुनः सी.एफ.सी., एम.सी.जी. कार्यालय के माध्यम से प्रस्तुत करें तथा उपरोक्त Objection मूल फाईल दमकल केन्द्र सैक्टर–29, गुड़गांव से किसी भी कार्य दिवस में आकर प्राप्त करें।

16/12/16

वरिष्ठ दमकल केन्द्र अधिकारी,
दमकल केन्द्र, सैक्टर–29,
नगर निगम गुड़गांव।

**Revised Building Plan of Commercial Colony Measuring 2.893 Acres ( License No. 34 of 2012 dated 15-4-2012) in Sector- 70, Gurgaon Manesar Urban Complex being developed by Shine Buildcon Pvt. Ltd.**

FIRE ADVISOR COMMITTEE: QUESTIONNAIRE FOR COMMERCIAL AREA

The proposed Fire Fighting Scheme

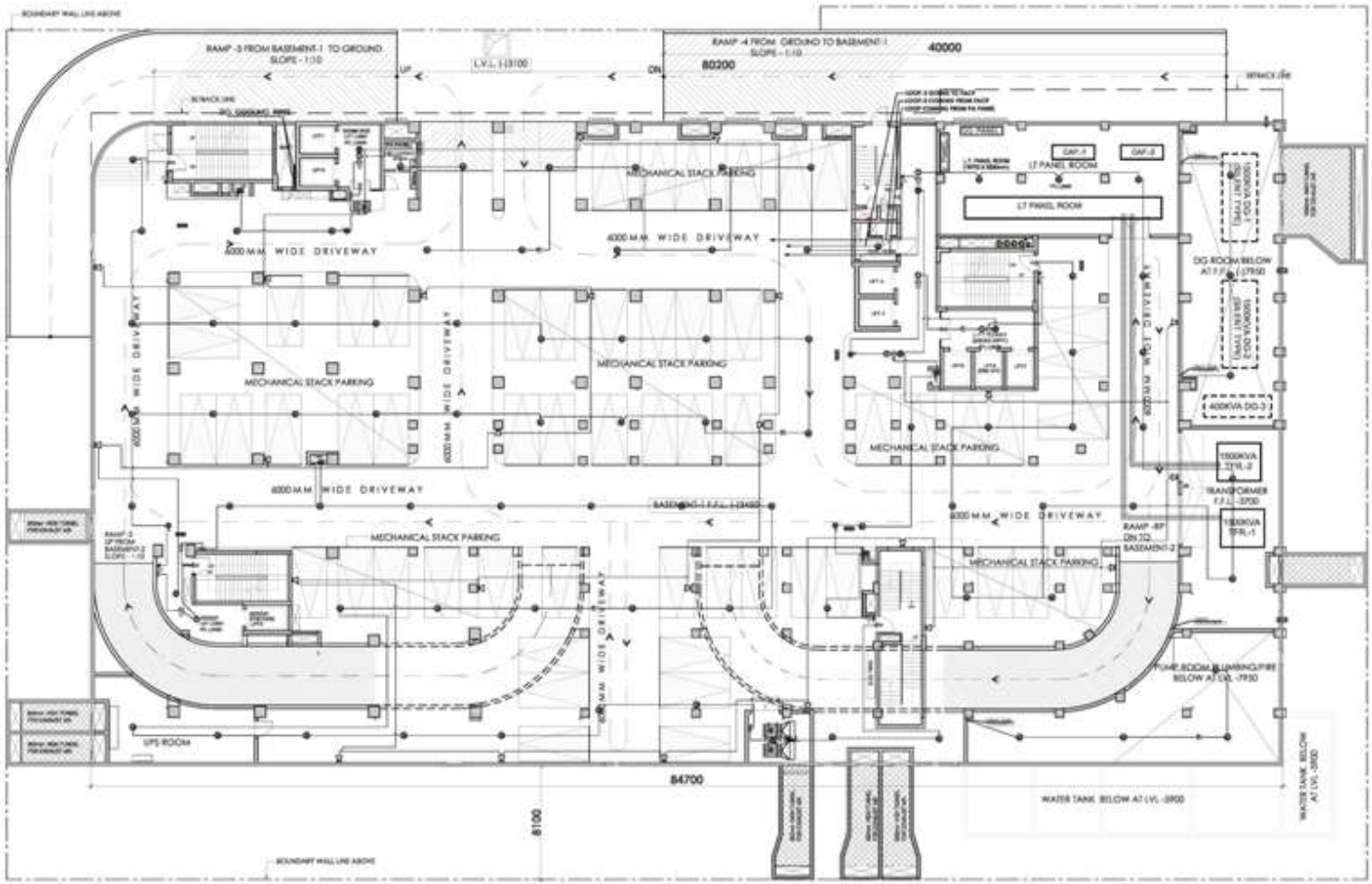
| S.No | DESCRIPTION | AS PER NBC | Proposed | | | | |
|---|---|---|---|---|---|---|---|
| 1 | Name of Building | ---- | Revised Building Plan of Commercial Colony Measuring 2.893 Acres ( License No. 34 of 2012 dated 15-4-2012) in Sector- 70, Gurgaon Manesar Urban Complex being developed by Shine Buildcon Pvt. Ltd. | | | | |
| 2 | Address of Building | ---- | SHINE BUILDCON PVT. LTD. SECTOR-70, BADSHAPUR VILLAGE, GURGAON (HARYANA) | | | | |
| 3 | Name and address of builder/promoter | ---- | SHINE BUILDCON PVT. LTD<br>REGD. OFFICE: H-334,GROUND FLOOR,NEW RAJINDER NAGAR, NEW DELHI-110060<br>CORP. OFFICE: H-281,UDYOG VIHAR, PHASE-II, GURGAON (HARYANA) | | | | |
| 4 | Name and address of Owner / occupiers of individual flats | ---- | SHINE BUILDCON PVT. LTD<br>REGD. OFFICE: H-334,GROUND FLOOR,NEW RAJINDER NAGAR, NEW DELHI-110060<br>CORP. OFFICE: 281,UDYOG VIHAR, PHASE-II, GURGAON (HARYANA) | | | | |
| 5 | Plot area (Gross) | ---- | 2.5753 Acres (10421.85 Sqm.) | | | | |
| 6 | Covered area (at ground Lvl) | ---- | 2806.24 | | | | |
| 7 | Height of building from N.H. | ---- | | | | | |
| 8. a) | Overall height (from grade level/ surrounding ground level ) | | 55.40M | | | | |
| | | | | | | | |
| b) | Height upto the highest occupied floor | | 42.4 M | | | | |
| | | | | | | | |
| 9 | Number of floors (including ground floor) | | 3 BASEMENT AND G+12 FLOOR<br>(16 FLOORS) | | | | |
| | | | | | | | |
| 10. a) | Number of basements (please indicate level below grade in each case) | | 3 Basement<br>Basement 1 = -3.5M. Lvl.<br>Basement 2 = -8.00M. Lvl.<br>Basement 3 = -12.50M. Lvl. | | | | |
| | | | | | | | |
| b) | Area of Basement and Podium | ---- | Basement 1 = 3510.00 Sqm. | | | | |
| | | | Basement 2 = 3920.03 Sqm. | | | | |
| | | | Basement 3 = 3723.13 Sqm. | | | | |
| | | | Total Basement Area (B1+B2+B3) = 11153.16 Sqm. | | | | |
| | | | | | | | |
| 11 | Occupancy (use - Please mention separately for basement and floors) | **PART-4 CLAUSE 4.3 & 4.4.2.1 TABLE-3** | **Floors** | **Covered Area (Sqm.)** | **No. of Studio Apartment** | **No. of 1BHK /STUDIO** | **Population** |
| | RETAIL | 3 Sqm. Per Person | Ground Floor | 2772.96 | | | 924.32 |
| | | 6 Sqm. Per Person | First Floor | 2406.13 | | | 401.02 |
| | | 6 Sqm. Per Person | Second Floor | 2383.02 | | | 397.17 |
| | | 6 Sqm. Per Person | Third Floor | 2463.12 | | | 410.52 |
| | | Cinema seating (366Nos.) | | | | | 439.20 |
| | | Food Court 6 Sqm. Per Person | | 1590 | | | 265.00 |
| | SERVICE FLOOR | | Fourth Floor (Service Floor) | | | | |
| | SERVICE APARTMENTS | 2 person per studio , 5 person per 1BHK | Fifth Floor | 1173.39 | 28 | 3 | 71.00 |
| | | | Sixth Floor | 1173.39 | 28 | 3 | 71.00 |
| | | | SeventhFloor | 1173.39 | 28 | 3 | 71.00 |
| | | | Eighth Floor | 1132.14 | 28 | 3 | 71.00 |
| | | | NInth Floor | 1132.14 | 28 | 3 | 71.00 |
| | | | Tenth Floor | 1132.14 | 28 | 3 | 71.00 |
| | | | Eleventh Floor | 1079.01 | 28 | 3 | 71.00 |
| | MULTIPURPOSE HALL | 6 Sqm. Per Person | Twelfth Floor | 389.75 | 0 | 0 | 64.96 |
| | | | | **TOTAL POPULATION** | | | **3399.19** |
| | | | | | | | |
| 12 | Covered area of typ. Floors | ---- | **Floor** | **Covered Area (Sqm.)** | | | |
| | | | Ground Floor | 2772.96 | | | |
| | | | First Floor | 2406.13 | | | |
| | | | Second Floor | 2383.02 | | | |
| | | | Third Floor | 2463.12 | | | |
| | | | Fourth Floor | 74.81 | | | |
| | | | Fifth Floor | 1173.39 | | | |
| | | | Sixth Floor | 1173.39 | | | |
| | | | SeventhFloor | 1173.39 | | | |
| | | | Eighth Floor | 1132.14 | | | |
| | | | NInth Floor | 1132.14 | | | |
| | | | Tenth Floor | 1132.14 | | | |
| | | | Eleventh Floor | 1079.01 | | | |
| | | | Twelfth Floor | 389.75 | | | |
| | | | **Total** | **18485.39** | | | |
| 13 | Parking areas<br>Basement @ 35 Sqm / ECS<br>Surface @ 25 Sqm / ECS | | **No. of Parking** | **Parking Area (Sqm.)** | | | |
| | | Basement 1 = | 112 | 2654.98 | | | |
| | | Basement 2 = | 116 | 2691.51 | | | |
| | | Basement 3 = | 120 | 2835.18 | | | |
| | | Surface Parking = | 55 | 1375 | | | |
| | If basement extends beyond the building line, please indicate the load bearing strength of the roof of basement | NBC PART 4 CLAUSE 5.1.6 45 MT (Fire tender load) | 60 Ton For Fire Tender Movement | | | | |
| | | | | | | | |

| S.No | DESCRIPTION | AS PER NBC | Proposed |
|---|---|---|---|
| 14 | Details of surrounding property / features | ---- | Land Use is Commercial |
| | Compass directions in relations to the building | ---- | OWNERS |
| | North | ---- | 24 MT WIDE ROAD |
| | South | ---- | PRIVATE PROPERTY |
| | East | ---- | 60MT WIDE SECTOR ROAD |
| | West | ---- | PRIVATE PROPERTY |
| | | | |
| 15 | Approach to proposed building, width of the road and connecting roads, if any | | 60M wide Sector Road (12M wide Service Road) |
| | | | |
| 16 | Please give details of water supply available exclusively for fire fighting. | Tank as per NBC | |
| a | Underground Fire Reserve | 3,00,000 ltrs. | Underground common fire tank of capacity 3,00,000 lit provided |
| b | Over Head Fire Reserve | 20,000 ltrs | 20,000 ltrs |
| | | | |
| 17 | Has wet risers (s) been provided? If so, please indicate the number of risers and internal dia of each. | Table No-23 Clause 2.3 & Table no 24 Clause 5.1.2 Required 1 no.Wet riser per 1000 sqm.(150 dia) | Yes |
| | | | For SERVICE APARTMENT BLOCK - 5th floor to terrace level- 3 Nos. Riser on each floor |
| | | | 4th floor ----- 3 Nos. Riser |
| | | | 3rd floor ----- 7 Nos. Riser |
| | | | 2nd floor ----- 7 Nos. Riser |
| | | | 1st floor ----- 8 Nos. Riser |
| | | | Gr. Floor ---- 6 Nos. Riser |
| | | | B1 ----- 4 Nos. Riser |
| | | | B2 ----- 4 Nos. Riser |
| | | | B3 ----- 4 Nos. Riser |
| | | | |
| 18 | Has any down comer been provided? If so, please give details. | Not required | Not provided |
| | | | |
| 19 | Please indicate the present arrangement for replenishment of water for fire fighting | NBC , Clause 5.1.6 replenishment with alternate source of supply at the rate 1000lt/min | Water shall be fed from HUDA supply for replenishment of water for fire fighting. Total water storage of 3,00,000 litres in underground tanks for Fire Fighting tanks has been proposed. |
| | | | |
| 20 | Is a public or other water storage facility available nearby? If so, please give the capacity and diastance from your building; also please indicate if it is readibly accessible. | | 1 No. Raw water tanks capacity 75 cum each, 1 No. domestic water tanks capacity 75 cum each |
| | | | |
| 21 | Please give any other information that you can regarding availability of water supply for fire fighting. | | 1 No. Raw water tanks capacity 75 cum each, 1 No. domestic water tanks capacity 75 cum each |
| 22 | Have internal hydrants been provided? if so, please indicate.<br>a) No. of hydrants on each floor including basement(s) and terrace<br>b) have these hydrants single or twin outlets | Required,NBC , Clause 6.4.8.2; 1No.Per 1000 Sq.M | Yes. For Service Apartment block 5th floor to terrace level- 3 Nos. Hydrant on each floor<br>1st floor ---- 8 Nos. Hydrant 2nd floor ----- 7 Nos. Hydrant 3rd floor ----- 7 Nos. Hydrant 4th floor ----- 3 Nos. Hydrant<br>Gr. Floor ---- 6 Nos. Hydrant<br>B1 ----- 4 Nos. Hydrant B2 ----- 4 Nos. Hydrant<br>B3 ----- 4 Nos. Hydrant<br>Twin outlet |
| | | | |
| 23 | Have first aid hose reels been provided? If so, please indicate | Required NBC (Table No 23) | Yes |
| 24 | No. of hose reels on each floor | Required NBC , Clause 6.4.8.2 1No. Hose reel with every hydrant | Yes. For Service Apartment block 5th floor to terrace level- 3 Nos. Hydrant on each floor<br>2nd Floor ---- 7 Nos. Hydrant 3rd floor ---- 7 Nos In Autodorium - 3 Nos . Hydrant 4th floor ---- 3 Nos.<br>Gr. Floor ---- 6 Nos. Hydrant 1st floor ---- 7 Nos. Hydrant |
| a | Including basement(s). | Required NBC , Clause 6.4.8.2 1No. Hose reel with every hydrant | B1 ----- 4 Nos. Hydrant B2 ----- 4 Nos. Hydrant<br>B3 ----- 4 Nos. Hydrant |
| b | | | |
| | Bore and length of hose reel tubing on each reel | Required NBC , Clause 5.1.5 , 20mm dia.& 36.5m long(Each) | Proposed 20mm dia and 36.5m long as per IS |
| c | Size(bore) and type of nozzle fitted to each hose reel | Stander 4(22)As per IS:884 ; 6 mm dia. with shut off nozzle | 6mm dia nozzle with shut off valve |
| d | If the hose reel connected directly to the riser or to the hydrant outlet? | Required NBC , Clause 5.1.5, Directly connected to the riser | Hose reel connected directly to the riser |
| e | | | |
| | Has fire hose been provided near each Hydrant: if so please indicate: | Required NBC , Clause 6.4.8.2 | Provided |

| S.No | DESCRIPTION | AS PER NBC | Proposed | | | | |
|---|---|---|---|---|---|---|---|
| 25 | The type of hoses | Required NBC , Clause 6.4.8.2 RRL delivery hose as per IS 636-1988 | Reinforced rubber lined hose as per IS 636 | | | | |
| a | The size(bore) of hoses | Required NBC , Clause 6.4.8.2 63 mm dia | 63 mm dia | | | | |
| b | The length of each hose | Required NBC , Clause 6.4.8.2 15 meters for each FHC | 15m long | | | | |
| c | Total No. of hoses provided near each hydrant | Required NBC , Clause 6.4.8.2 2 Nos With Each Hydrant | 4 Nos. with each FHC | | | | |
| d | Have branch pipes been provided? If so, please indicate. | Required NBC , Clause 6.4.8.2 | Yes | | | | |
| 26 | The type of branch pipe | Required NBC , Clause 6.4.8.2 Short branch pipe | Short type gun metal | | | | |
| a | Size of nozzle fitted to each pipes | Required NBC , Clause 6.4.8.2 63mm Dia 20 mm Nozzle | 63mm x 20mm dia | | | | |
| b | a) If the basement is used for car parking or storage, has it been sprinklered? | Table -23 Unit -8 Clause 5.1.7 Required | Yes, sprinklers are provided in entire basement | | | | |
| 27 | b) Whether segregation / compartmentation of the basement has been provided. If so please detail- | NBC PART 4 CLAUSE C9 Area of compartmentation - 2000 sqmt. | Basement compartmentation provided Maximum area of compartmentation 3000 sqmt. and maximum sprinkler coverage is 9 sqmt. and spacing is 3m x 3m in each compartmentation | | | | |
| | Is the building equipped with automatic fire detection and alarm system? if so, please indicate – | Table -23 NBC- SECTION-18,2005 | Yes, Addressable Fire detection and Alarm system shall be provided. Smoke detectors for shops, corridors and lobby area, Multidetector at electrical Room, Basement, Heat ( ROR cum fixed type) detector for Kitchen area shall be provided. | | | | |
| 28 | The type of detectors used | Required NBC , Clause 1.6.4 | Multi Criteria detector, Smoke and Heat detectors | | | | |
| a | The standard to which the detectors conforms | NBC- SECTION-18,2005 | IS: 2189 | | | | |
| b | c) the code to which the installation confirms. | NBC- SECTION-18,2005 | NFPA - 72 | | | | |
| c | Have manual call boxes been installed in the building for raising an alarm in the event of an outbreak of fire? If so, please give details. | Required | Yes Manual Call boxes are installed at each entry, exit, staircases. | | | | |
| 29 | Has a public address system been installed in the building with loud speakers on each floor. | NBC Part -4 Clause 5 | Yes Public address system is installed in the building with Ceiling speakers on floors, and Horn type speakers including basement. | | | | |
| 30 | Has an intercom system been provided between the various floors and the fire control room in the entrance lobby. | NBC Part -4 Clause 5 | Yes fire telephone jacks are provided. | | | | |
| 31 | Has a fire control room been provided in the entrance lobby of the building | NBC Part -4 Clause 5 | Provided at Ground and basement-1 | | | | |
| | | | | | | | |
| 32 | How many Staircases have been provided in the building? And their details | | No. of Staircase | 5 | | | |
| | | | Width of Stairway | 1800/1500 | | | |
| | | | Width of Treads | 300 | | | |
| | | | Height of Risers | 150 | | | |
| | | | Tread Surface | Non-Slip type | | | |
| | | | | | | | |
| 33 | What is the average occupant load per floor? | Table -20 (v) 3 Sqmt / person for ground floor, 6Sqmt / person for upper floors for Retail. | RETAIL | 710 persons per floor | | | |
| | | | SERVICE APARTMENT | 70 persons per floor | | | |
| | | | | | | | |
| 34 | How many lifts have been installed in the building? And details | **Lift Type** | **Passenger Lift (RETAIL)** | **Passenger Lift (RETAIL)** | **Passenger Lift (SERVICE APARTMENT)** | **Freight Lift** | |
| | No. of Lifts | | 2 | 2 | 3 | 1 | |
| | Shaft Size | | 2000x2500 | 2000x2500 | 2000x2500 | 1800x3000 | |
| | Floor Travel | | Basement 3 to 3rd Floor | Basement 3 to 4th floor | Basement 3 to 12th floor | Basement 3 to 12th floor | |
| | Door Type | NBC PART 4 CLAUSE C1.5C | Automatic | Automatic | Automatic | Automatic | |
| | Fire Resistance rating of Lift Car & Door | NBC PART 4 CLAUSE C1.5E | 2 Hrs. | 2 Hrs. | 2 Hrs. | 2 Hrs. | |
| | Lift Car Size | Part-4 Clause 1.5q-2 1.4 sqmt. Min. | 1200X2000X2100 | 1200X2000X2100 | 1200X2000X2100 | 1000X2400X2100 | |
| | Loading Capacity | Part-4 Clause c-1.5q-2 1.4 sqmt. Min 545 Kg (8 Person) Lift | 16PAX | 16PAX | 16PAX | 1020 KG | |
| | Communication System | NBC PART Clause C-1.5 | Yes | Yes | Yes | Yes | |
| | Fireman's Switch | PART 4 Clause 4.15.1 | Yes | Yes | Yes | Yes | |
| | | | | | | | |

| S.No | DESCRIPTION | AS PER NBC | Proposed |
|---|---|---|---|
| 35 | Have any stationery fire pumps(s) been installed for pressurizing the wet riser? If so, please indicate | Required as per NBC PART-IV TABLE-23 | Provided |
| a | Number of pumps | Required As per NBC Table 23 NOTE-12 Main fire pump (Electric operated)-1No, Jockey pump 1No, Sprinkler pump (Electric operated)1No, Diesel operated fire pump 1 No. | Provided 5 nos. pumps |
| | | | |
| b | The size of suction and delivery connections of each pump | 200 & 150 dia. | Main Fire Pump 200 mm dia suction & 150 mm discharge. Jockey pumps 80 mm dia suction & 65 mm dia discharge. |
| c | The output of each pump | Required As per NBC Table 23 NOTE-22 2850LPM (Hydrant), 180LPM (Jockey), 2850LPM (diesel), 2850 LPM (Sprinkler) | 1 No. main hydrant pump cap.2850 LPM @ 105m head |
| | | | 1 No. main sprinkler pump cap.2850 LPM @ 105m head |
| | | | 1 No. main curtain nozzle cap.2850 LPM @ 60m head |
| | | | 1 No. Diesel driven pump cap.2850 LPM @ 105m head |
| | | | 2 Nos. jockey pump cap.180 lpm @ 105m head |
| d | The maximum head against which the pump can operate at the output Pressure mentioned at ( c ) | Required As per NBC Table 23 Minimum 35 M at the top most landing valve. | Minimum 3.5kg/Sqcm at the top most landing valve |
| d | Is the pump automatic in action? | Required. | All pumps are in auto operation |
| 36 | Has a standby source of power supply been provided? If it is through a generator, please indicate – | PART 4 Clause C1.15 | Yes |
| a | The capacity (output) | | |
| b | The functions that can be maintained simultaneously by the use of generator, such as operating lift(s), fire pumps, emergency lighting etc. | PART 4 Clause C1.15 | 100% power backup to common areas, lifts and common services |
| c | Is the generator automatic in action or has to be started manually ? | PART 4 Clause C1.15 | Yes in Auto operation |
| d | Has any yard hydrant been provided from the building's fire pump? | REQUIRED AS PER NBC Part - IV (2005) Table 23 TYPE E BUILDING | Provided @ 45mm c/c all around the buildings. external hydrant 8 Nos. at ground level |
| 37 | Where more than one lifts are installed in a common enclosure, have individual lifts been separated by fire resisting walls of two hours fire rating? | NBC PART-4 Clause C1.5 | Yes, lifts are separated by 2 hours fire rated walls. |
| 38 | Has the lift shaft(s) lift lobby or stair wall been pressurized? | NBC PART-4 Clause C-1.4 & Clause C-1.5 g) | Yes,The lift shafts and Enclosed Lift Lobby shall be provided with pressurization system, consisting of axial flow fans installed on terrace. The staircases are pressurised in Basement 03level to Basement 01 level consisting of axial flow fans installed in Basement 01 and on upper floors these staircases are natural ventilated. Also one of the staircase is connected from basement 03 to fifth floor, which is also been pressurized , consisting of axial flow fans at terrace level and above the fifth floor this staircase is naturally ventilated.. |
| 39 | Have the lift lobbies and staircases been effectively enclosed to prevent fire/smoke entering them from outside at any floor? | NBC Part 4 Clause 4.2.9 | Fire doors are also provided for fire staircase and shaft for the upper floor. |
| 40 | Have all exits and directions of travel to each exit been sign posted with illuminated signs? | NBC Part 4 Clause 4.2.7 | Yes |
| 41 | Has a false ceiling been provided in any Public portion of the building? if so, please indicate location and also mention if the material used for the false ceiling is combustible on non-combustible. | Clause 5.1.7 | Yes.Provided in lift lobbies, passage of apartment & Non-Combustible material (the wide space between soffit of slab and false ceiling is less than 800mm) |
| 42 | Is the building centrally air conditioned? | Required | Yes, building is centrally air conditioned |
| 43 | The material used for construction of ducts and its fittings. | NBC PART-8 Clause 4.3.1.1 | GI Sheet |
| a | The type of Linning used for ducts if any. | NBC PART-8 Clause 4.3.3.2 | Acoustic insulation of nitrile rubber secured by an adhesive shall be installted inside the duct |
| b | Type of lining used, if any for insulating any portion of the duct, please also indicate how the lagging is secured. | NBC PART-8 Clause 4.3.3.2 | Closed cell nitrile rubber secured by an adhesive |
| c | If false ceiling is provided please give information as at 43 above. | NBC PART-4 Clause 5.1.7 | Only non combustible material |
| d | If plenum is used as return air passage has it been protected with fire detectors? Please give details | NBC PART-4 Clause 5.2.1 | Yes with fire dampers |
| e | Has a separate AHU been provided for each Floor? | NBC PART-4 Clause 3.4.11.4 | Yes |
| f | whether automatic shut down of A.H.U been coupled with detection system | Required | Yes, shall be provided. |
| g | Is the ducting for each floor effectively isolated or is it continuous on more than on floors ? | NBC PART-4 Clause 3.4.11.1 | Yes, ducting for each floor effectively isolated |

| S.No | DESCRIPTION | AS PER NBC | Proposed | | | | |
|---|---|---|---|---|---|---|---|
| h | Is the fire dampers being provided? | Required | Yes, fire dampers shall be provided on supply air and return air duct. | | | | |
| i | | | | | | | |
| | Where are the switchgear and transformer located? If inside the building, please indicate. | | In the First Basement | | | | |
| 44 | If the switch gear and transformer(s) have been housed in separate compartments, effectively separated from each other and from other portions of the buildings by a four hour resistive wall? | Required | Switch gear and transformer(s) have been housed in separate compartments, effectively separated from each other and from other portions of the buildings by a two hour resistive wall. | | | | |
| a) | What precautions have been taken to prevent a possible fire in the transformer (s) from spreading? | Required | Fire Extinguisher of Co2, type and Sand Buckets have been provided. | | | | |
| b) | | | | | | | |
| | Where electric cables, telephone cables, Dry/wet risers/ down comers pass through a floor or wall have spaces (apertures) round the cables/pipes been effectively sealed plugged with non-combustible, fire resistant material? | Required | Yes. Fire barrier are provided in wall & floor, wherever required. | | | | |
| 45 | | | | | | | |
| | Please indicate the number and type of fire extinguishers provided at various locations and arrangement for the maintenance of the extinguishers. | NBC Table-23 Clause 18.2.13.2 | Fire Extinguishers have been provided in each shaft and at strtegic locations complying to IS 15683. Fire extinguishers are marked with date of filling and expiry. | | | | |
| 46 | | | | | | | |
| | Please indicate if all fire extinguishers bear the ISI certification mark. | Required | All fire extinguishers bear IS certificate | | | | |
| 47 | Whether the refuge area has been provided ? If so, the floor on which provided and the total area provided floor-wise. | NBC PART 4 CLAUSE 4.12.3 | **Floor** | | Area (Sqm.) | | |
| 48 | | | 7TH Floor | | 24.22 | | |
| | | | | | | | |
| | Are the occupants of the building systematically trained in the fire prevention use of fire extinguishers and emergency procedures? If so, please give details. | Required | will be trained at the time of occupation | | | | |
| 49 | Does an emergency organization exits in the building? If so, please give details and append a copy of the emergency (fire) orders. | Required | will be confirmed at the time occupation | | | | |
| 50 | Has a qualified Fire Officer been appointed for the building - either individually or jointly with other building(s) | NBC PART-4 C-6 | Shall be appointed on completion of Project | | | | |
| 51 | Is the building protected against lightning? If so, does the lighting protection conform to any code? Please indicate details. | NBC PART-8 | Early streamer emission lightning protection provided as per NFC-17-102 code | | | | |
| 52 | Ventilation | | | | | | |
| 53 | a) Whether Natural ventilation is relied upon? If so, give detail of the vents for the stairwell lift lobby and lift shaft | NBC PART-4 Clause 3.4.12.2 | The staircases are pressurised in Basement 03level to Basement 01 level consisting of axial flow fans installed in Basement 01 and on upper floors these staircases are natural ventilated.<br>Also one of the staircase is connected from basement 03 to fifth floor, which is also been pressurized , consisting of axial flow fans at terrace level and above the fifth floor this staircase is naturally ventilated.. | | | | |
| | b) Whether Mechanical ventilation has been proposed? If so give detail of the proposed system indicating the no. of air changers for the basement and upper floors. | NBC PART-4 Clause C-1.6.4.2 & Clause 3.4.12.3 | Mechnanical ventilation has been proposed in Basement 1, Basement 2 and Basement 3 by using direct driven axial flow fan. Providing normal ventilation @ 6 ACPH and in case of fire @ 12 ACPH. | | | | |
| | c) Whether Mechanical ventilation is coupled with automatic alarm and detection system please give detail of the system. | NBC PART-4 Clause 3.4.12.1 | Yes | | | | |
| | Whether Fire Movement road around the building has been provided/duly marked in the drawings. | NBC PART-4 Clause 4.6 c | YES | | | | |
| 54 | | | | | | | |
| | Project Team | | | | | | |
| | | Fire & MEP Consultant | Architect | Owner | | | |
| | Name: | P K KALRA | ASHOK PANDIT | | | | |
| | Designation: | DIRECTOR | CHIEF ARCHITECT | | | | |
| | Organization: | C TO C SERVICES CONSULTANTS PVT LTD. | ACPL DESIGN LTD. | | | | |
| | Date: | 12.06.17 | 12.06.17 | | | | |
| | | | | | | | |
| | | | | | | | |




BASEMENT-1

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| MM | MONITOR MODULE |
| CM | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| EXIT | EXIT LIGHT |
| | RESPONSE INDICATOR |
| F | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FAMC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTION FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE INTERFACE FOR ELECTRO MAGNETIC DOOR LIT LOWER |
| RMP | RELAY MODULE FOR P. PANEL |
| RM | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SR | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR – 70,GURGAON HARYANA

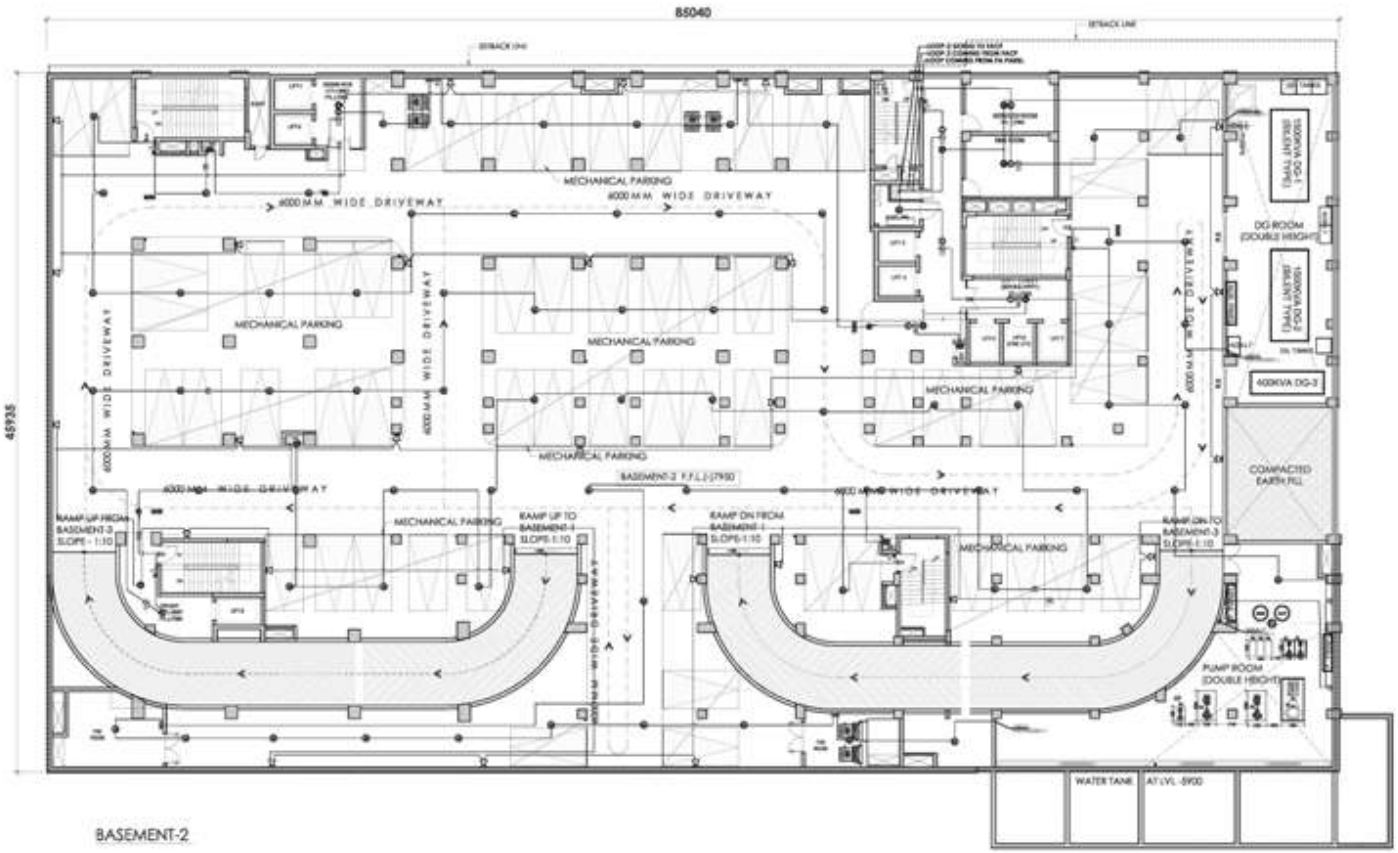
ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
BASEMENT-1
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:150(M/A) | 15.05.2017 | R0 |
| Drawing No. | | DIRECTION |
| EL-03 | | |




BASEMENT-2

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| MM | MONITOR MODULE |
| CM | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| EXIT | EXIT LIGHT |
| | RESPONSE INDICATOR |
| F | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FAMC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTION FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC CODE LIT LOADED |
| RMP | RELAY MODULE FOR P. PANEL |
| RM | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SR | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR – 70,GURGAON HARYANA

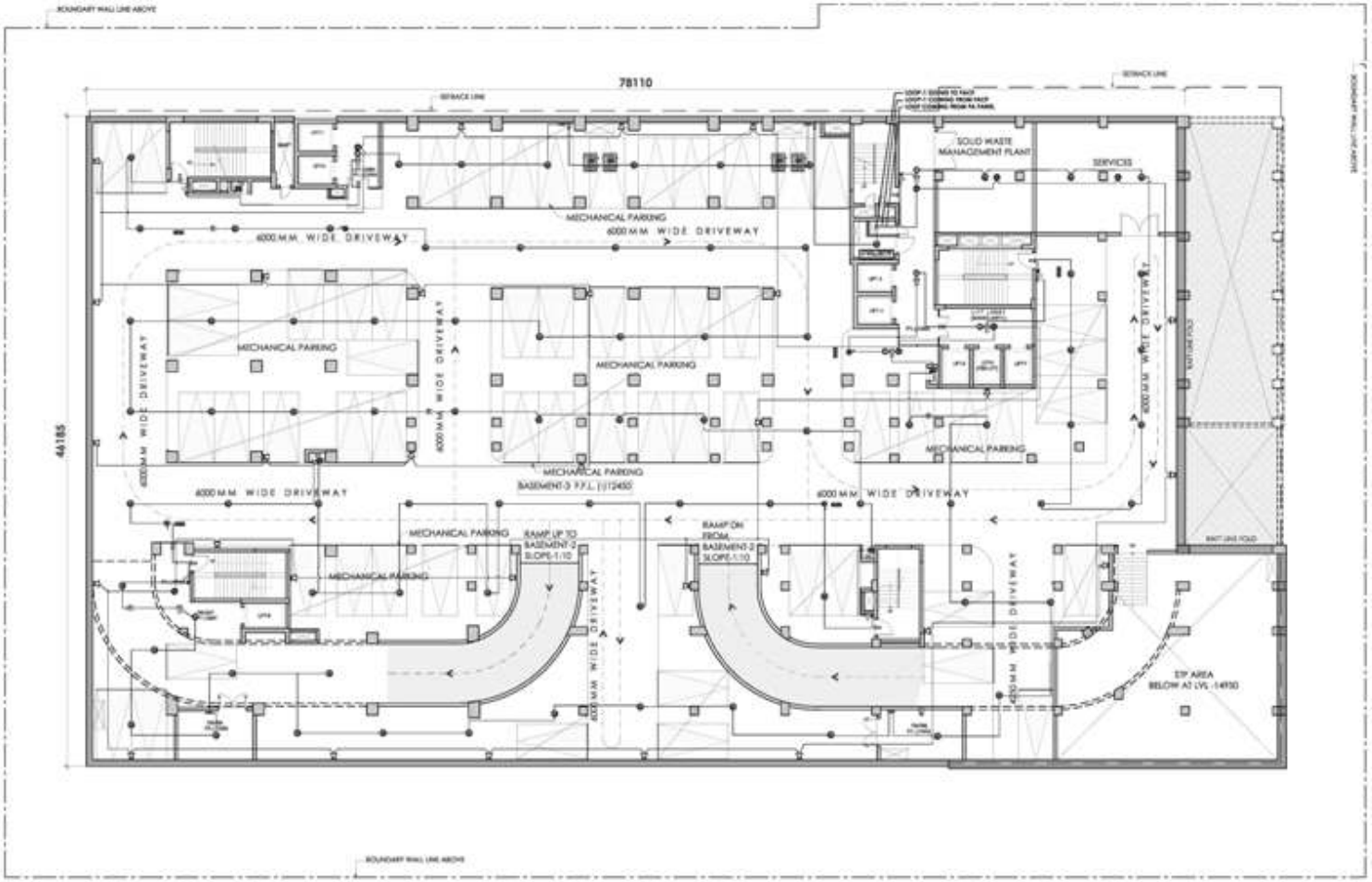
ARCHITECTS:
ACPL
ACPL Design LLP

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd.

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
BASEMENT-2
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:150(M) | 15.05.2017 | R0 |
| Drawing No. | | ORIENTATION |
| EL-02 | | N |




BASEMENT-3

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| MM | MONITOR MODULE |
| CM | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| EXIT | EXIT LIGHT |
| | RESPONSE INDICATOR |
| F | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FAMC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTION FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE INPUT ELECTRO MAGNETIC DOOR LIFT LOBBIES |
| RMP | RELAY MODULE FOR P. PANEL |
| RMC | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SN | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARAYANA

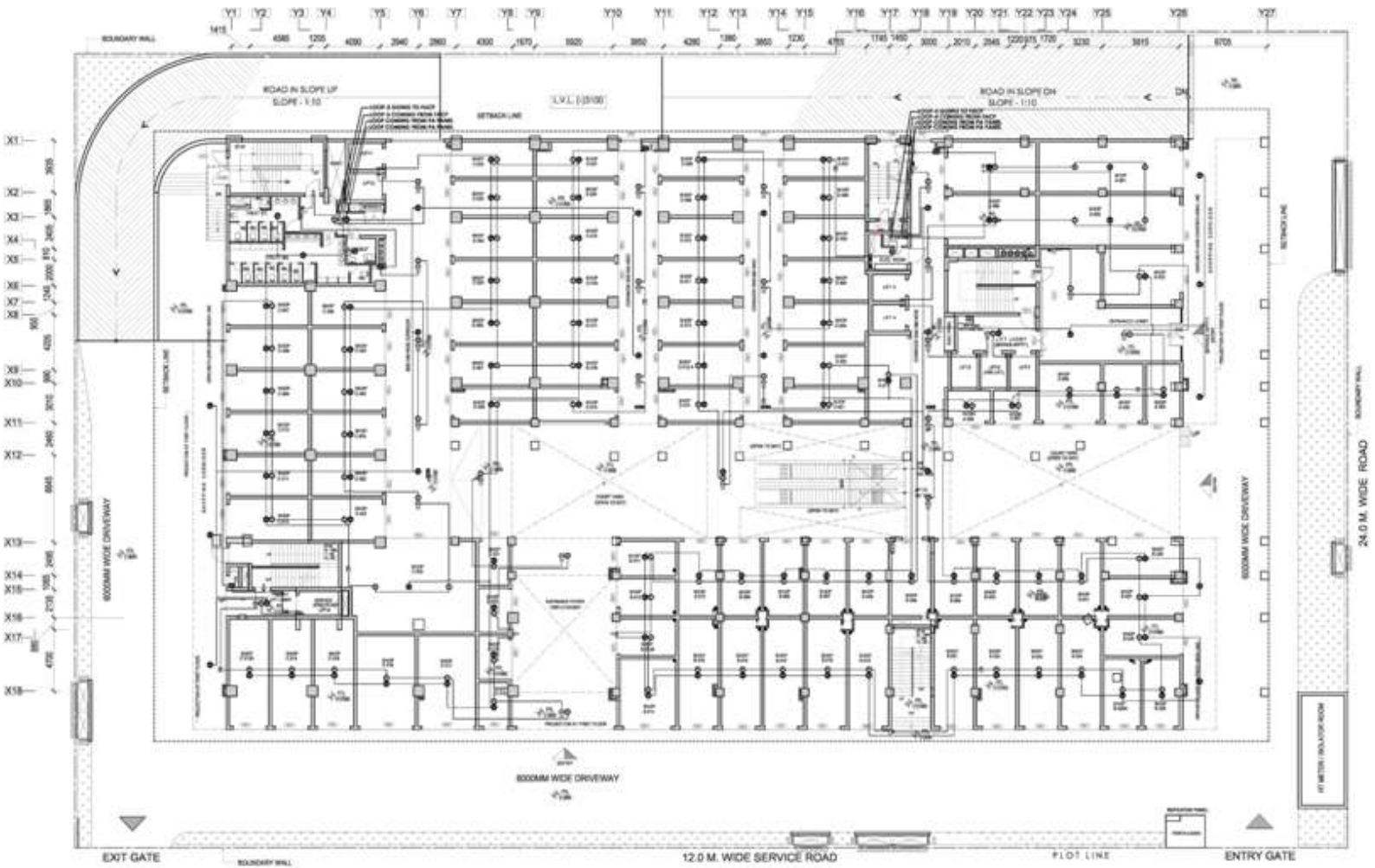
ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
BASEMENT-3
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | BANQ |
| Scale | Date | Rev. No. |
| 1:150(M) | 15.05.2017 | R0 |
| Drawing No. | | DIRECTION |
| EL-01 | | |




GROUND FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FAMC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTOR FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC COIL (F.F.LOMBER) |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SR | DATE | DETAILS |
|---|---|---|
| | | |

REVISIONS

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

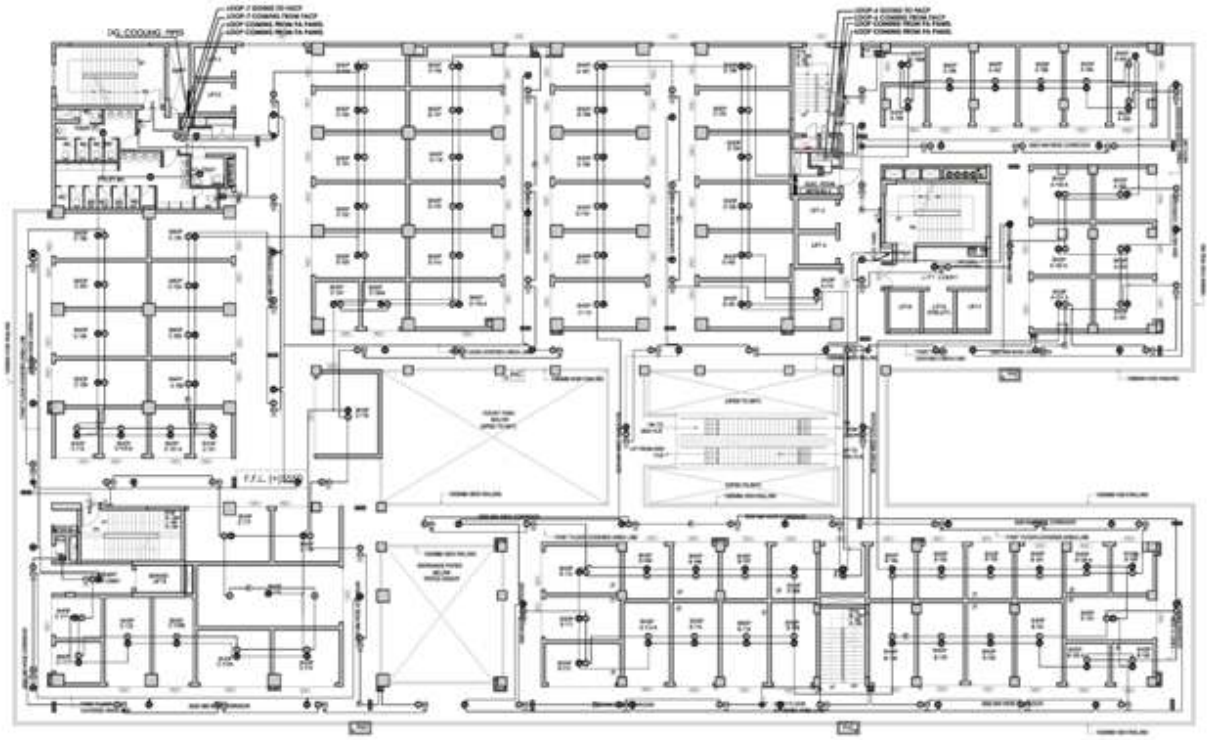
ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C.T.O.C. Services Consultants Pvt. Ltd.

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
GROUND FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:100(M) | 15.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-04 | | IN |



FIRST FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| MM | MONITOR MODULE |
| CM | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| EXIT | EXIT LIGHT |
| | RESPONSE INDICATOR |
| F | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FIMAC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTOR FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC CODE LIT LOMBER |
| RMP | RELAY MODULE FOR P. PANEL |
| RM | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SN | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

70 GRANDWALK

COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C TOC Services Consultants Pvt. Ltd

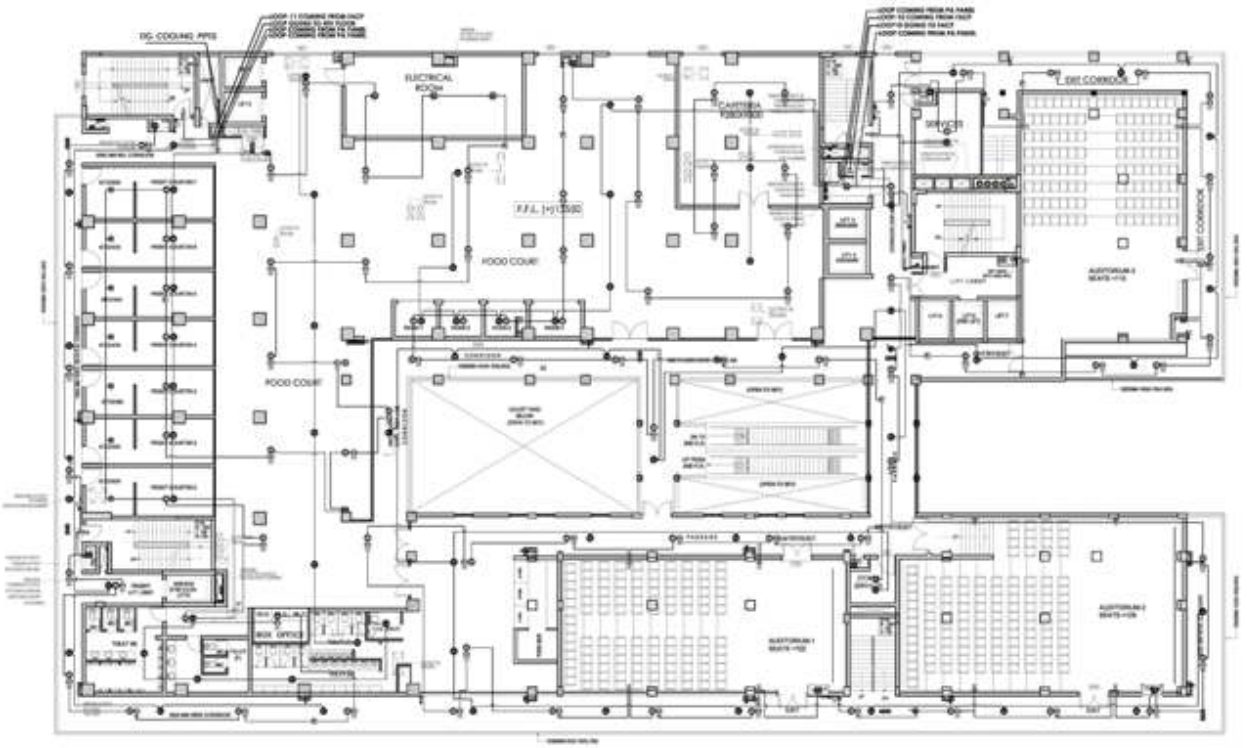
STAGE:

MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:

FIRST FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:100(M) | 15.05.2017 | R0 |
| Drawing No. | | ORIENTATION |
| EL-05 | | |




THIRD FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| CM | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| RM | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR FAMC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTOR FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE INPUT ELECTRO MAGNETIC DOOR LIFT LOBBIES |
| RMP | RELAY MODULE FOR P. PANEL |
| RMC | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| S.N. | DATE | DETAILS |
|---|---|---|
| | | |
| | | |
| | | |

REVISIONS

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARAYANA

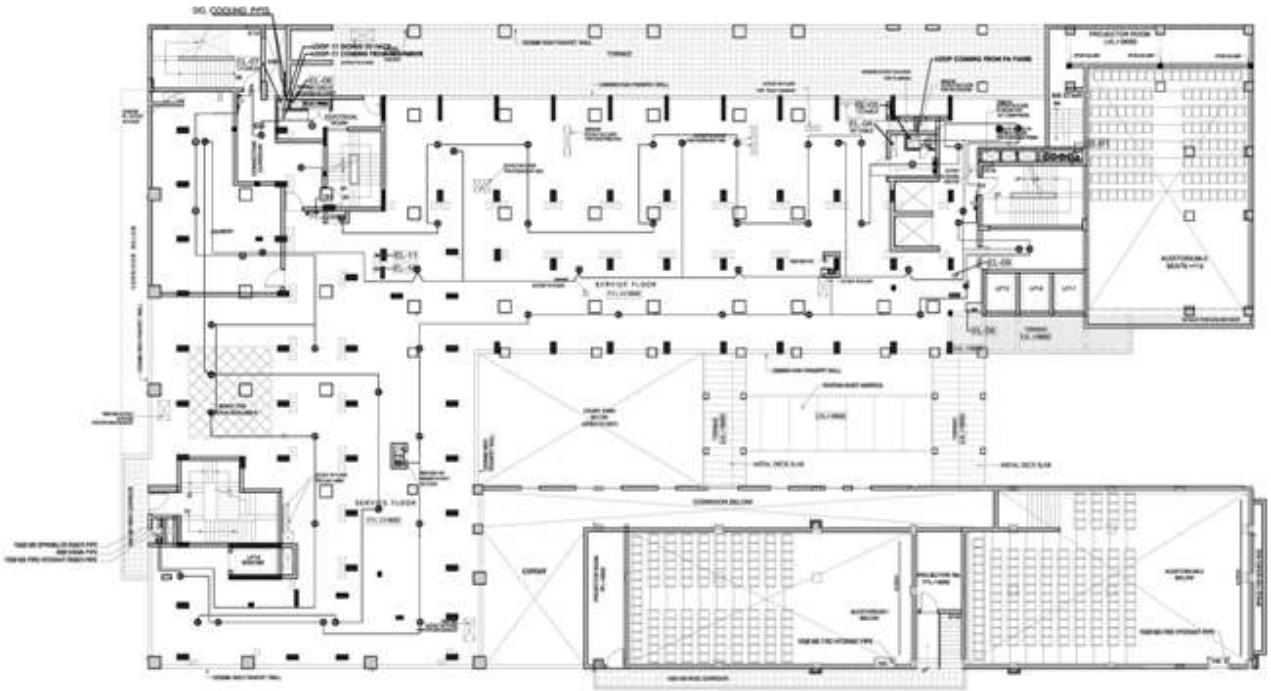
ARCHITECT:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
THIRD FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:100@A1 | 15.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-07 | | |



FOURTH FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (AUTOMATIC CLOSE) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRIC MAGNETIC FOR LIFT LOBBIES |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARAYANA

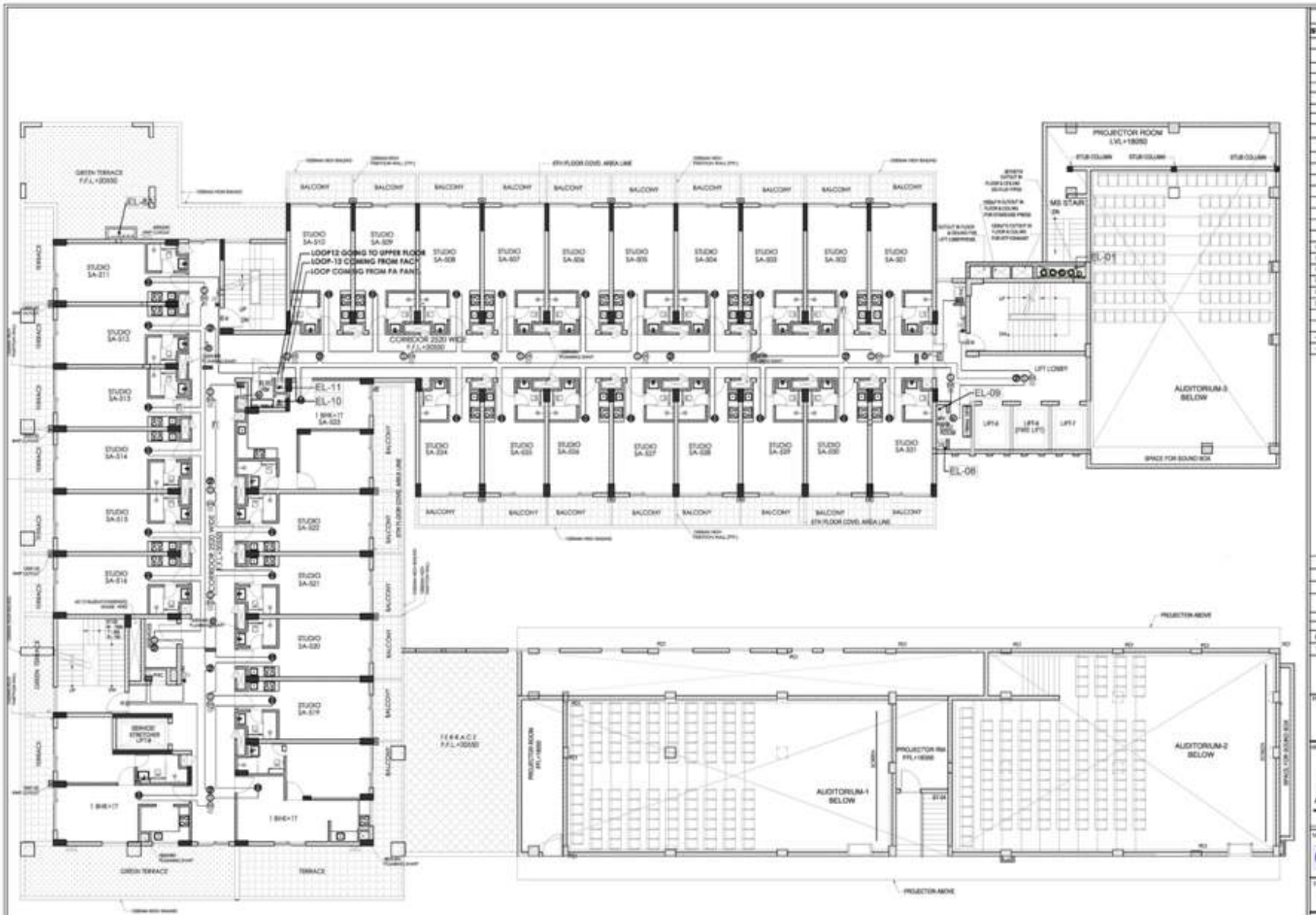
ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
FOURTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:150(M) | 15.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-08 | | |




FIFTH FLOOR PLAN (LVL.+20550)

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFU |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (STAIRCASE/FAHU) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC DOR (LIFT LOBBY) |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 20MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
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| | | |
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| | | |

REVISIONS

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

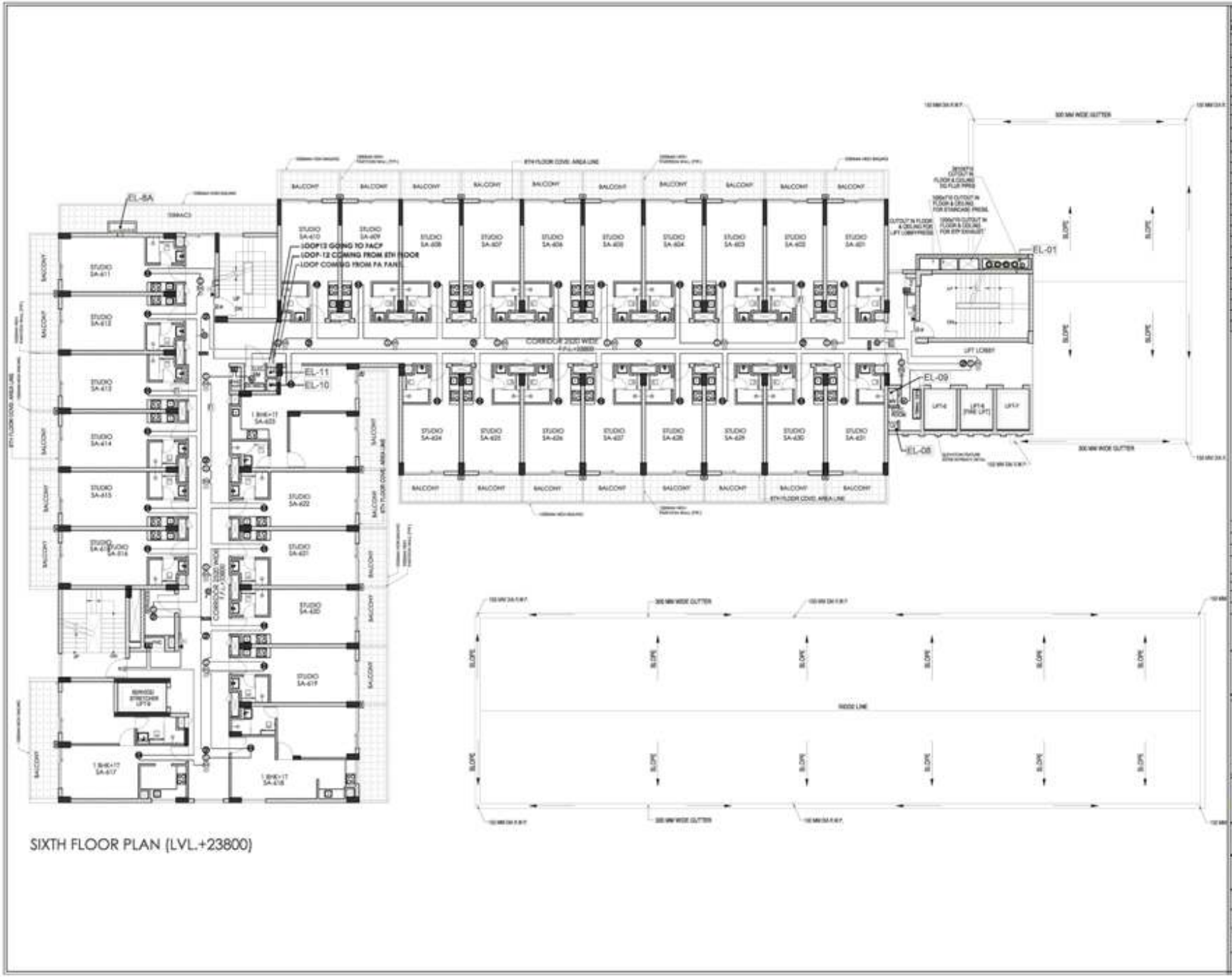
ARCHITECTS:
ACPL
ACPL Design LLP

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd.

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
FIFTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | SHAED |
| Scale | Date | Rev. No. |
| 1:100@A0 | 25.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-09 | | |




SIXTH FLOOR PLAN (LVL.+23800)


SEVENTH FLOOR PLAN (LVL.+27050)

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (ATTENUATION TANK) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRIC MAGNETIC DOR (LIFT LOBBY) |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 20MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR – 70,GURGAON HARYANA

ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
SEVENTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | MANEO |
| Scale | Date | Rev. No. |
| 1:100@A0 | 25.05.2017 | R0 |
| Drawing No. | | DIMENSIONS |
| FL-11 | | |


EIGHTH FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFU |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (ATTENUATOR/FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC FOR LIFT LOBBY |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 20MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SR. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR – 70,GURGAON HARYANA

ARCHITECTS:
ACPL
ACPL Design Ltd

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
EIGHTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | SHAED |
| Scale | Date | Rev. No. |
| 1:100@A3 | 25.05.2017 | R0 |
| Drawing No. | | DIMENSIONS |
| EL-12 | | |


NINTH & TENTH FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (ATTENUATION FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC DOR (LIFT LOBBY) |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

ARCHITECTS:
ACPL
ACPL Design LLP

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
NINTH AND TENTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | MANEO |
| Scale | Date | Rev. No. |
| 1:100(M/s) | 15.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-13 | | |


ELEVENTH FLOOR PLAN

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFA |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (STAIRCASE/TANK) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC DOR (LIFT LOBBY) |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

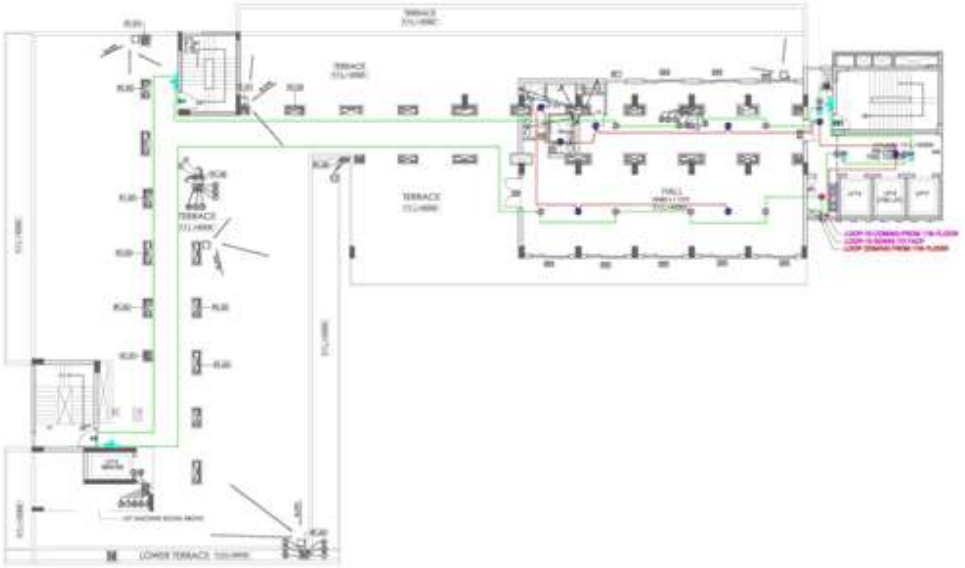
ARCHITECTS:
ACPL
ACPL Design LLP

MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd.

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
ELEVENTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S. | [illegible] |
| Scale | Date | Rev. No. |
| 1:100@A1 | 15.05.2017 | R0 |
| Drawing No. | | DIMENSION |
| EL-14 | | |




TWELVTH FLOOR PLAN
FFL+43400

## LEGEND:-

| SYMBOL | DESCRIPTION |
|---|---|
| | MANUAL CALL POINT |
| | HOOTER |
| | CONTROL MODULE FOR HOOTER |
| | MONITOR MODULE |
| | CONTROL MODULE |
| | TALK BACK UNIT |
| | HEAT DETECTOR |
| | SMOKE DETECTOR |
| | SMOKE DETECTOR ABOVE FALSE CEILING |
| | SMOKE DETECTOR WITH SOUNDER |
| | MULTICRITERIA DETECTOR |
| | CEILING SPEAKER |
| | WALL MOUNTED SPEAKER |
| | STROBE LIGHT |
| | EXIT LIGHT |
| | RESPONSE INDICATOR |
| | FAULT INDICATOR |
| | RELAY MODULE FOR AHU/FFU |
| | CONTROL MODULE FOR PANIC BAR |
| | BEAM DETECTOR (RECEIVER) |
| | BEAM DETECTOR (TRANSMITTER) |
| | RELAY MODULE FOR DAMPER (EXTRACTION FAN) |
| | CONTROL MODULE FOR DAMPER |
| | CONTROL MODULE WITH ELECTRO MAGNETIC FOR LIFT LOBBIES |
| | RELAY MODULE FOR P. PANEL |
| | RECALL MODULE CONTROL FOR LIFT |
| | 25MM Ø MS CONDUIT FOR FIRE ALARM |
| | 25MM Ø MS CONDUIT FOR PA SPEAKER |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:
70 GRANDWALK
COMMERCIAL PROJECT AT BADSHAPUR SECTOR-70,GURGAON HARYANA

ARCHITECTS:
ACPL
ACPL Design LLP

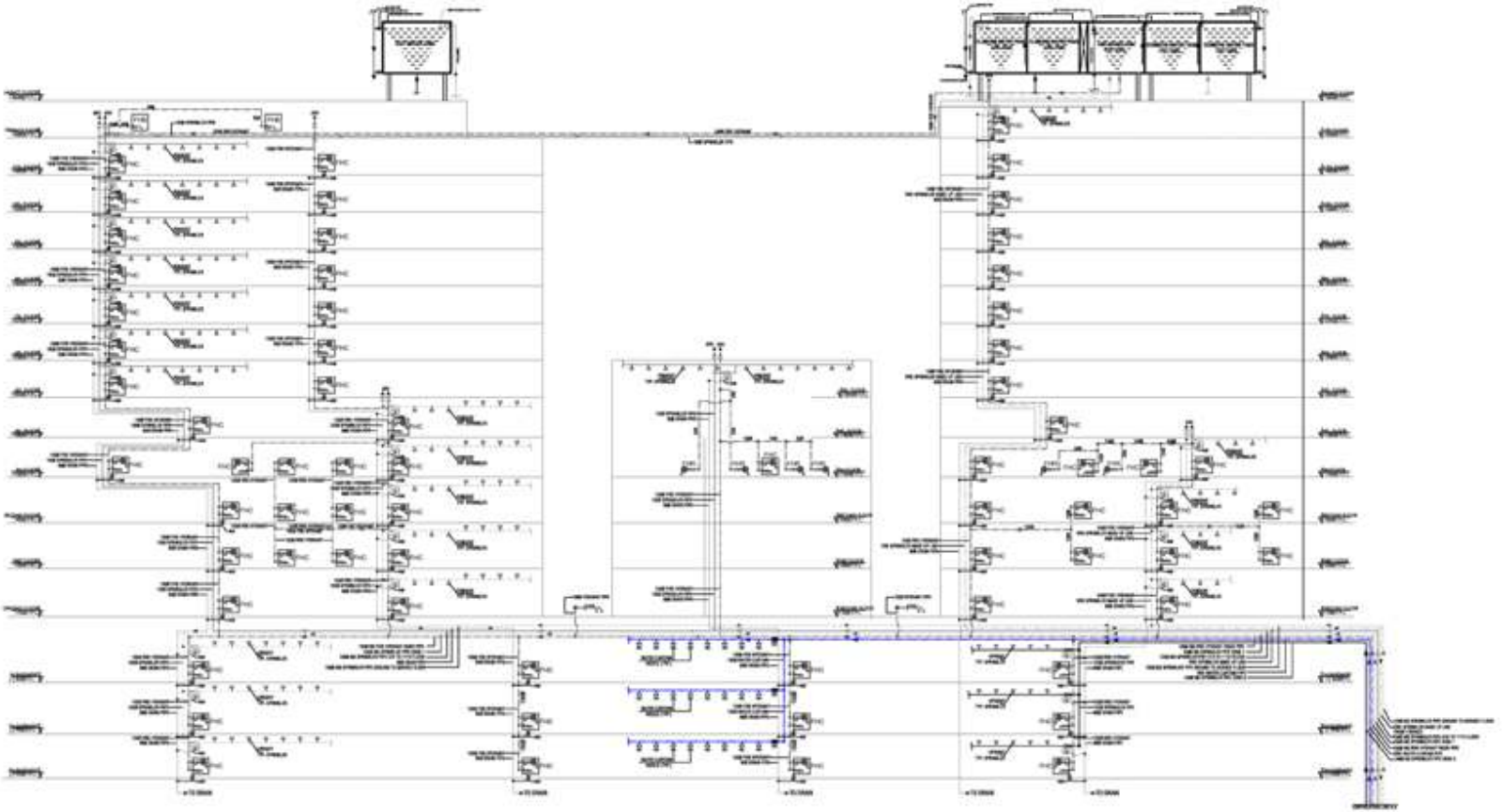
MEP CONSULTANTS:
C TOC Services Consultants Pvt. Ltd.

STAGE:
MUNICIPAL / FIRE SUBMISSION

DRAWING TITLE:
TWELVTH FLOOR PLAN
FIRE ALARM & PA LAYOUT

| Drawn | Checked | Approved |
|---|---|---|
| Thomas | V.S | MANEO |
| Scale | Date | Rev. No. |
| 1:100@A1 | 25.05.2017 | R0 |
| Drawing No. | | DIMENSIONS |
| EL-15 | | |


PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT



| FIRE LEGEND | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | FIRE HOSE REEL |
| | SPRINKLER(UP RIGHT) |
| | SPRINKLER(PENDANT) |
| | 100Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |
| | WATER CURTAIN NOZZLE |
| CV | CLOSE VALVE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | MAIN SPRINKLER LINE FOR BASEMENT (ZONE-1) |
| | MAIN SPRINKLER LINE FOR MEZZANINE (ZONE-2) |
| | MAIN SPRINKLER LINE GROUND TO SERVICE FLOOR |
| | MAIN SPRINKLER LINE 5th TO 11th FLOOR |
| | WATER CURTAIN LINE |
| NO | NORMALLY OPEN |
| NC | NORMALLY OPEN |
| | NON RETURN VALVE |
| | INSTALLATION CONTROL VALVE |
| | AIR RELEASE VALVE |
| | PRESSURE GAUGE |
| DFH | DEFERNAL FIRE HYDRANT |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

CTC Services Consultants Pvt. Ltd

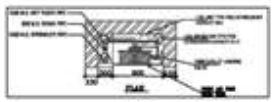
STAGE

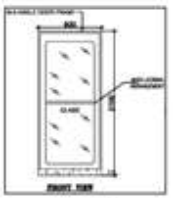
FIRE SUBMISSION

Drawing Title:

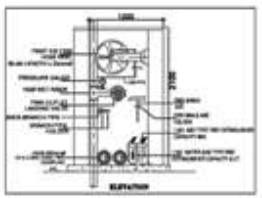
SCHEMATIC DIAGRAM (FIRE FIGHTING SYSTEM)

| Drawn | Checked | Approved |
|---|---|---|
| V.S.SANJEET | ARMIN | M.G. |
| Scale | Date | Rev. No. |
| N.T.S. | 07.06.2017 | R0 |
| Drawing No. | | DESIGN OFFICE |
| FF-SCH-01 | | —N |



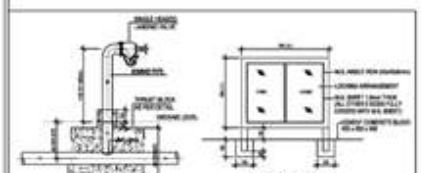


FRONT VIEW



ELEVATION

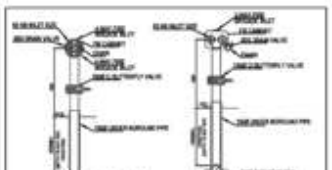
| S.No | DESCRIPTION | TAG. No | Nos | CAPACITY |
|---|---|---|---|---|
| 1. | STAND BY PUMP (DIESEL ENGINE OPERATED PUMP) | P1 | 1 | 2800 LPM @ 150M Head |
| 2. | MAIN HYDRANT PUMP (ELECTRICAL OPERATED) | P2 | 1 | 2800 LPM @ 150M Head |
| 3. | JOCKEY PUMP (ELECTRICAL OPERATED) | P3 | 1 | 180 LPM @ 150M Head |
| 4. | MAIN SPRINKLER PUMP (ELECTRICAL OPERATED) | P4 | 1 | 180 LPM @ 150M Head |
| 5. | JOCKEY PUMP (ELECTRICAL OPERATED) | P5 | 1 | 2800 LPM @ 150M Head |
| 6. | WATER CURTAIN PUMP (ELECTRICAL OPERATED) | P6 | 1 | 2800 LPM @ 60M Head |



FIRE HYDRANT

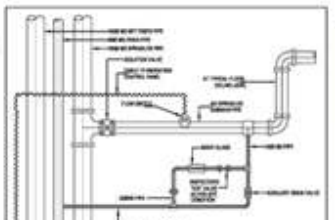
HOSE CABINET

TYPICAL DETAIL OF EXTERNAL FIRE HYDRANT & HOSE BOX

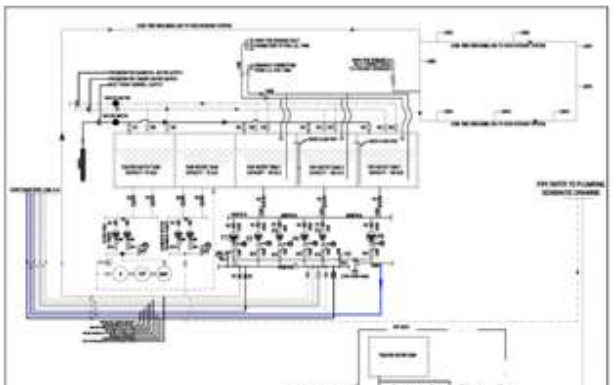


TYPICAL DETAIL

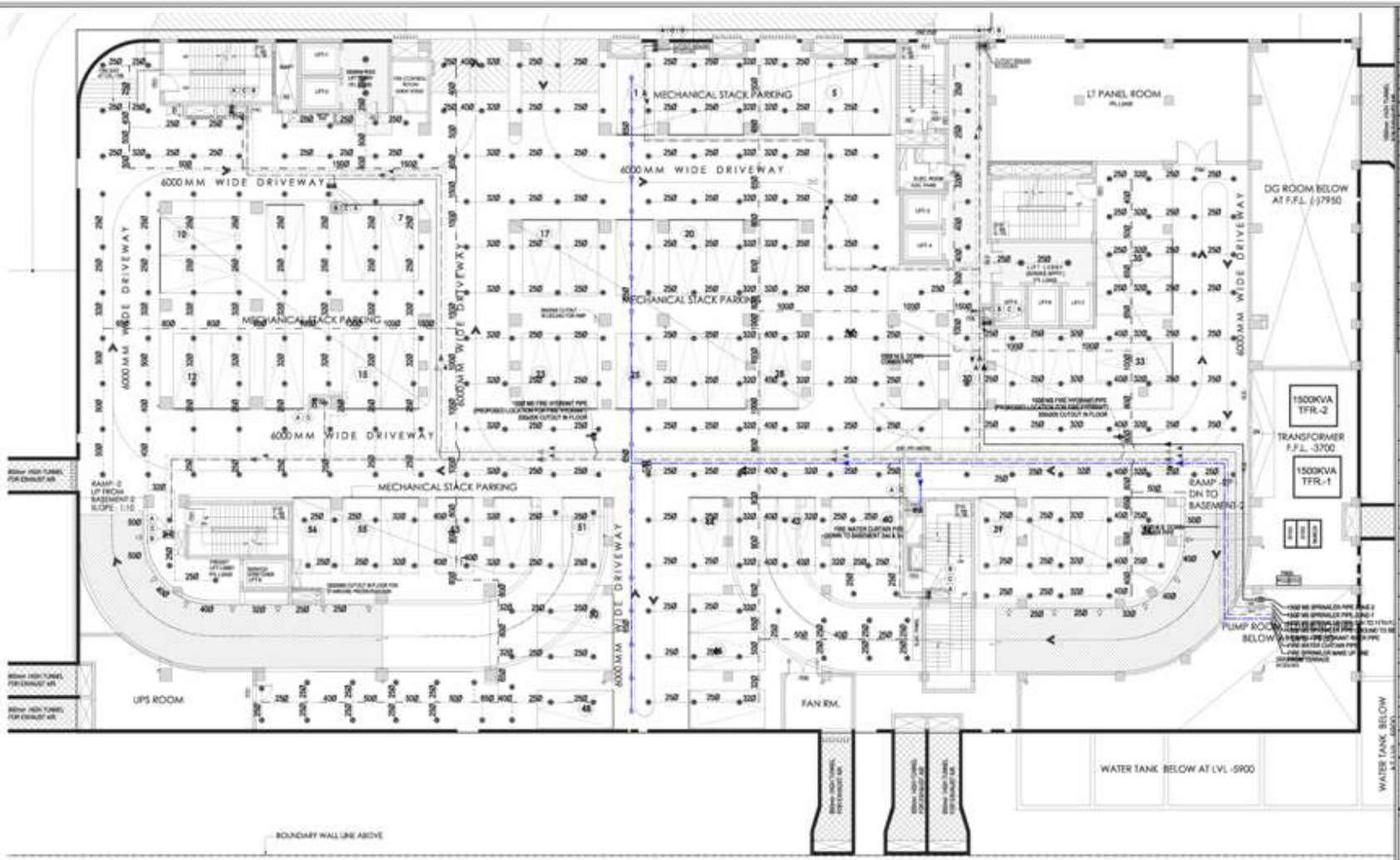
TYPICAL DETAIL



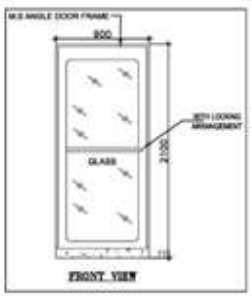
INSPECTOR'S TESTING ASSEMBLY(ITA)

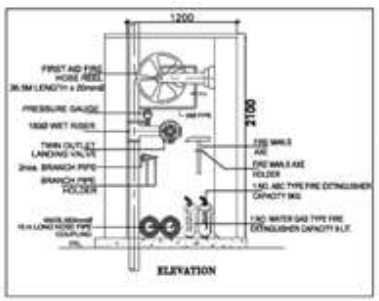


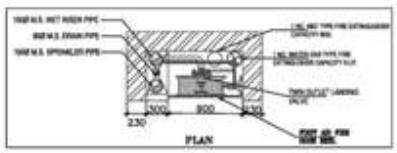
UNDERGROUND FIRE WATER TANKS & PUMP ROOM DETAIL

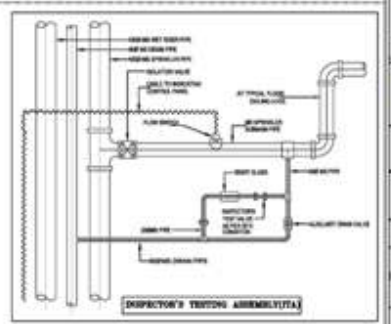



| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 50Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WARD UP PIPE |
| | SPRINKLER (PENDENT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 50Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |
| | SPRINKLER (UP RIGHT TYPE) |
| | WATER CURTAIN NOZZLE |
| DV | DELUGE VALVE |
| | 150Ø SPRINKLER WARD UP PIPE |
| | MAIN SPRINKLER LINE FOR BASEMENT ZONE-1 |
| | MAIN SPRINKLER LINE FOR BASEMENT ZONE-2 |
| | MAIN SPRINKLER LINE GROUND TO SERVICE FLOOR |
| | MAIN SPRINKLER LINE 5th TO 11th FLOOR |
| | WATER CURTAIN LINE |
| | BUTTER FLY VALVE |
| | NON RETURN VALVE |
| | INSTALLATION CONTROL VALVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SYM. | DATE | DETAILS |
|---|---|---|
| | | |

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C. Services Consultants Pvt. Ltd

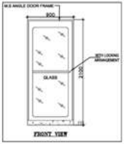
STAGE:

FIRE SUBMISSION

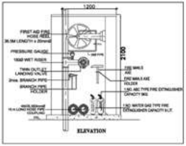
DRAWING TITLE:

BASEMENT-1 CEILING PLAN (FIRE FIGHTING LAYOUT)

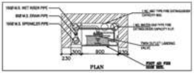
| Drawn | Checked | Approved |
|---|---|---|
| V.S.RAMAT | ARMN | R.G. |
| Scale | Date | Rev. No. |
| 1:120@A2 | 07.09.2017 | R0 |
| Drawing No. | | ORIENTATION |
| FF-02 | | N |



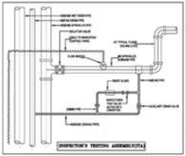
FRONT VIEW



ELEVATION



PLAN



INSPECTOR'S TESTING ASSEMBLY(ITA)

FIRE LEGEND

| | |
|---|---|
| ▨ | FIRE HOSE CABINET (FHC) |
| Ⓕ | 150Ø FIRE HYDRANT RISER PIPE |
| Ⓢ | 150Ø SPRINKLER RISER PIPE |
| Ⓓ | 80Ø SPRINKLER DRAIN PIPE |
| ● | SPRINKLER (PENDENT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| — · — | SPRINKLER HEADER PIPE |
| - - - | SPRINKLER BRANCH PIPE |
| - - - | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| — — | 150Ø FIRE HYDRANT LINE |
| ● | SPRINKLER (UP RIGHT TYPE) |
| ○ | WATER CURTAIN NOZZLE |
| DV | DELUGE VALVE |
| — · — | WATER CURTAIN LINE |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|

REVISIONS

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

STAGE:

**FIRE SUBMISSION**

DRAWING TITLE:

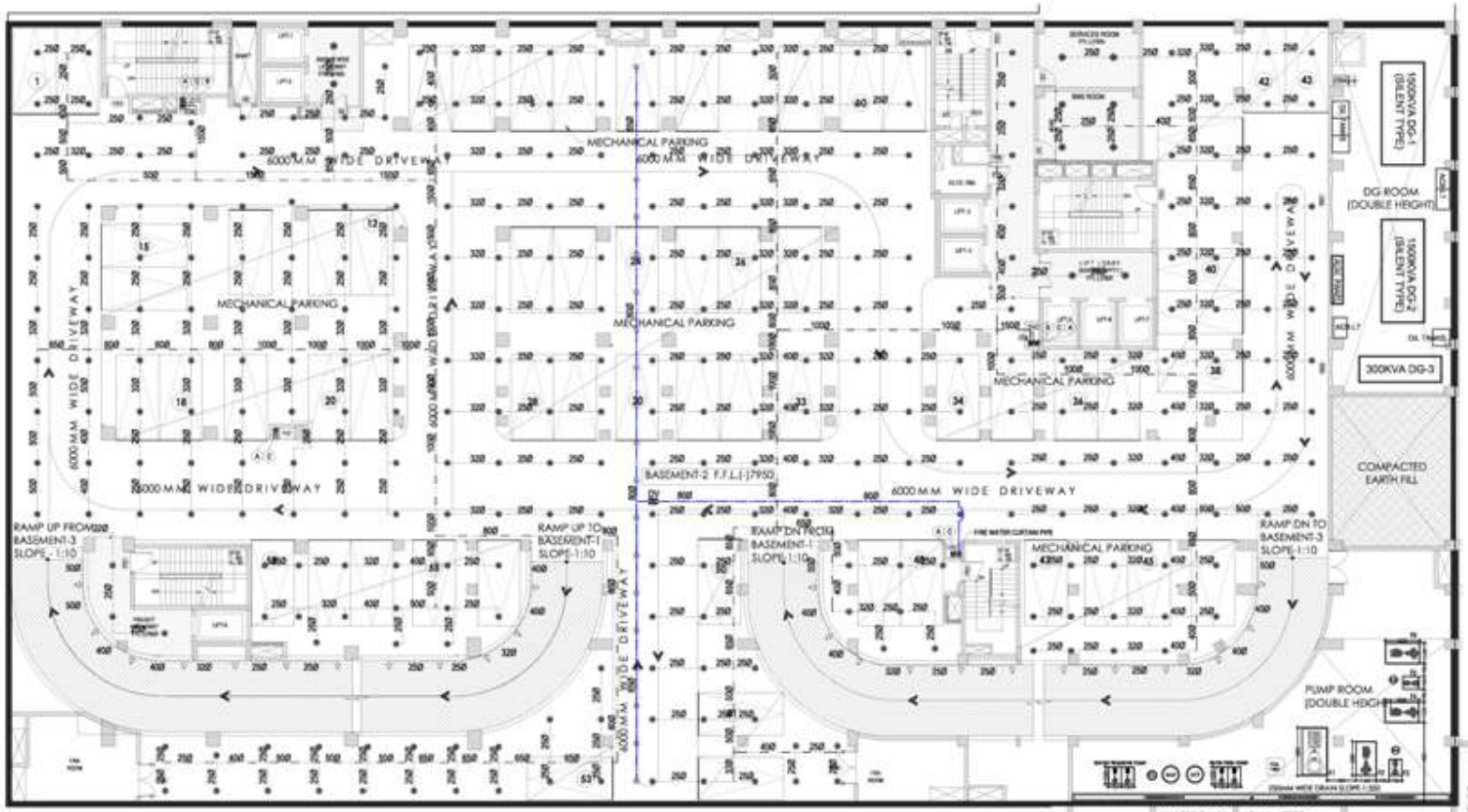
**BASEMENT-3 CEILING PLAN (FIRE FIGHTING LAYOUT)**

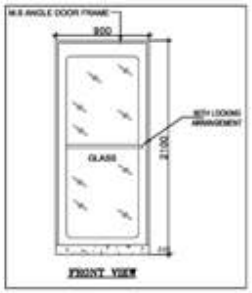
| Drawn | Checked | Approved |
|---|---|---|
| V.S.RAWAT | AMAN | [illegible] |

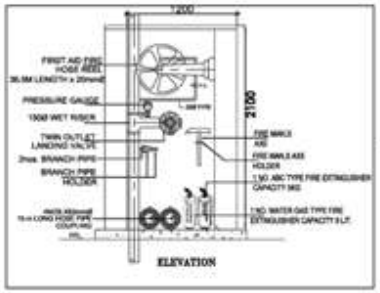
| Scale | Date | Rev. No. |
|---|---|---|
| 1:125@A1 | 07.09.2017 | R0 |

Drawing No.: FF-03

ORIENTATION: N

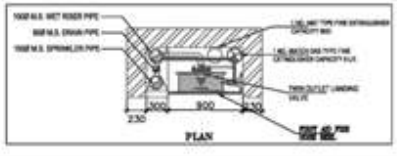


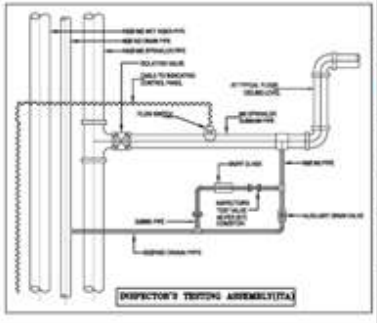




## SCHEDULE OF FIRE PUMP DETAIL

| S.No. | DESCRIPTION | TAG. No. | Nos. | CAPACITY |
|---|---|---|---|---|
| 1. | STAND BY PUMP (DIESEL ENGINE OPERATED PUMP) | P1 | 1 | 2500 LPM @ 120M head |
| 2. | MAIN HYDRANT PUMP (ELECTRICAL OPERATED) | P2 | 1 | 2500 LPM @ 120M head |
| 3. | JOCKEY PUMP (ELECTRICAL OPERATED) | P3 | 1 | 180 LPM @ 120M head |
| 4. | MAIN SPRINKLER PUMP (ELECTRICAL OPERATED) | P4 | 1 | 180 LPM @ 120M head |
| 5. | JOCKEY PUMP (ELECTRICAL OPERATED) | P5 | 1 | 2500 LPM @ 120M head |
| 6. | WATER CURTAIN PUMP (ELECTRICAL OPERATED) | P6 | 1 | 2500 LPM @ 60M head |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | SPRINKLER (PENDENT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |
| | SPRINKLER (UP RIGHT TYPE) |
| | WATER CURTAIN NOZZLE |
| DV | DELUGE VALVE |
| | WATER CURTAIN LINE |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| | | |
| | | |

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C T I-C Services Consultants Pvt. Ltd

STAGE

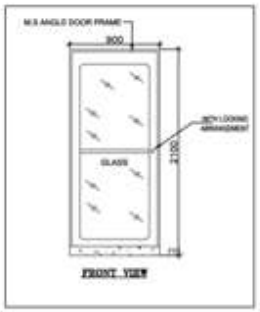
FIRE SUBMISSION

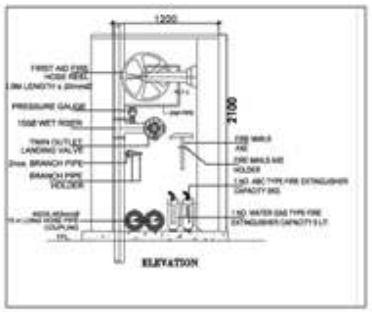
DRAWING TITLE

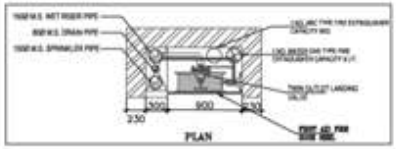
BASEMENT-2 CEILING (FIRE FIGHTING LAYOUT)

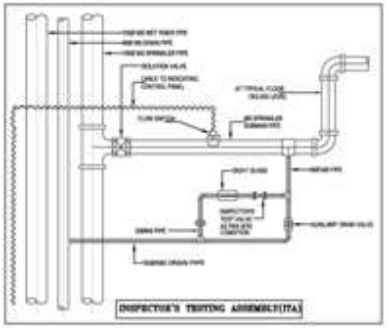
| Drawn | Checked | Approved |
|---|---|---|
| V.S.SHANT | ARMN | M.G. |
| Scale | Date | Rev. No. |
| 1:150@A1 | 07.06.2017 | R0 |
| Drawing No. | | DIMENSIONS |
| FF-02 | | MM |


BOUNDARY WALL
ROAD IN SLOPE UP
SLOPE - 1:10
L.V.L. (-)3100
SETBACK LINE
ROAD IN SLOPE DN
SLOPE - 1:10
6000MM WIDE DRIVEWAY
6000MM WIDE DRIVEWAY
FIRE LEGEND
PIPE DIA (mm)
NUMBER OF SPRINKLER
25Ø 1-2
32Ø 3
40Ø 4-5
50Ø 6-10
65Ø 11-18
80Ø 19-40
100Ø 41-100
150Ø 101 & ABOVE
ACPL
FIRE SUBMISSION
GROUND FLOOR PLAN
(FIRE FIGHTING LAYOUT)
FRONT VIEW
ELEVATION
PLAN
INSPECTOR'S TESTING ASSEMBLY(ITA)


FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |
| | SPRINKLER (UP RIGHT TYPE) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
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| | | |

| NO | DATE | DETAILS |
|---|---|---|
| | | |
| | | |
| | | |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd

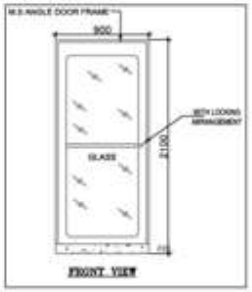
STAGE

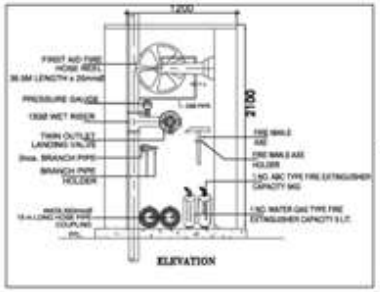
FIRE SUBMISSION

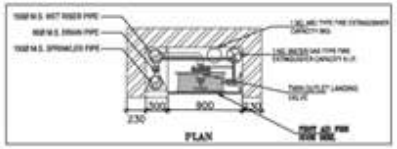
DRAWING TITLE

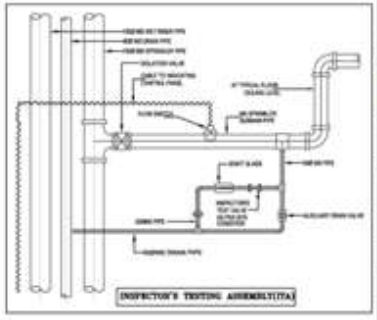
FIRST FLOOR PLAN
(FIRE FIGHTING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAMAT | AMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:125(Min) | 07.06.2017 | R0 |
| Drawing No. | | ORIENTATION |
| FF-05 | | N |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |
| | SPRINKLER (UP RIGHT TYPE) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| NO. | DATE | DETAILS |
|---|---|---|
| | | |
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| | | |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd

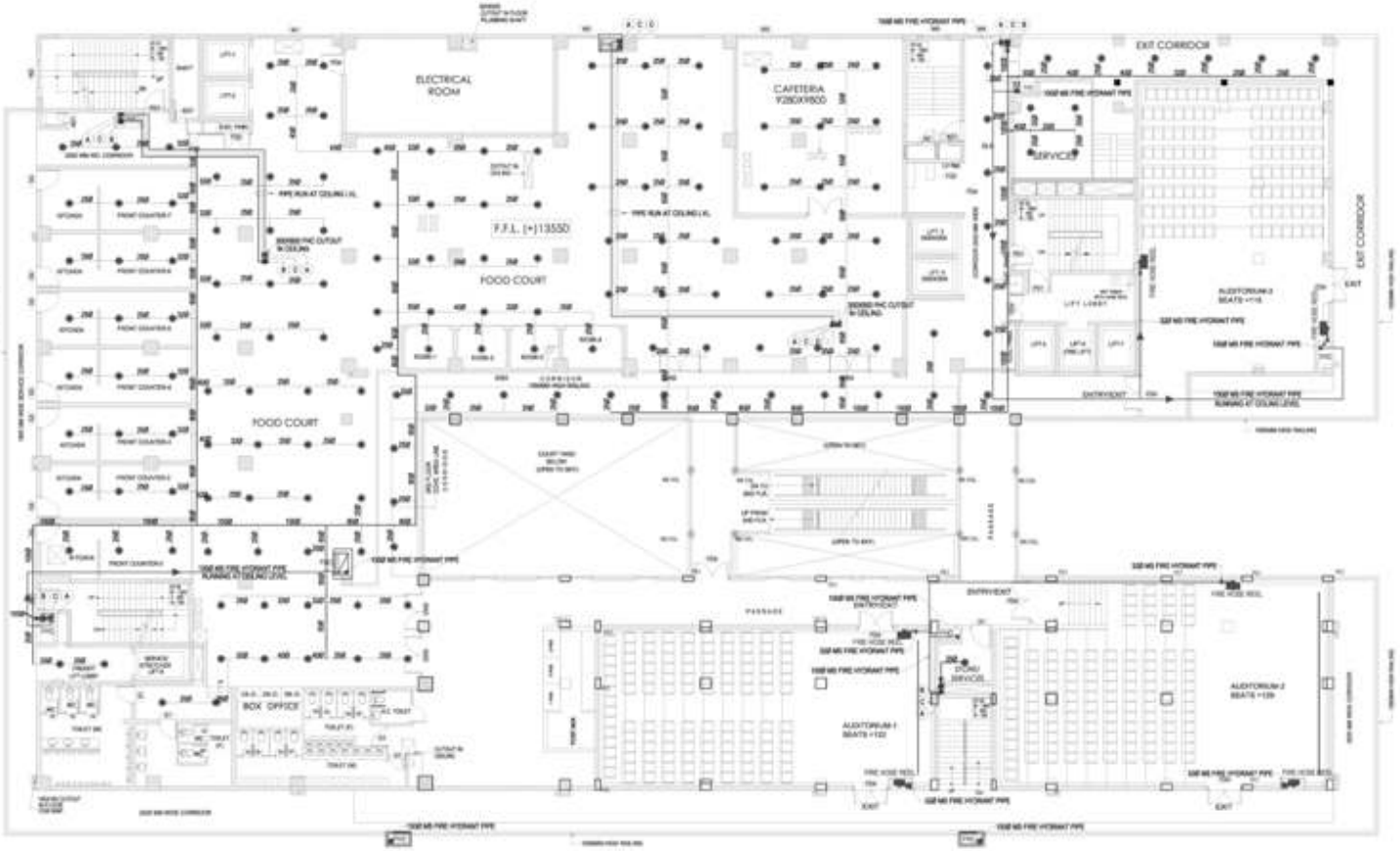
STAGE

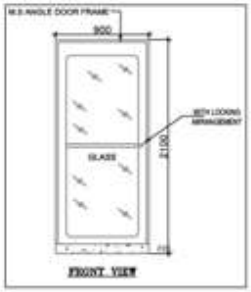
FIRE SUBMISSION

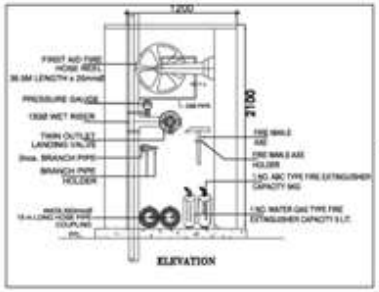
DRAWING TITLE

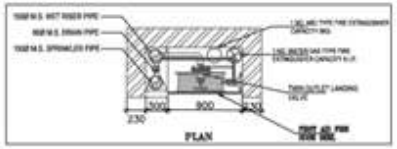
SECOND FLOOR PLAN
(FIRE FIGHTING LAYOUT)

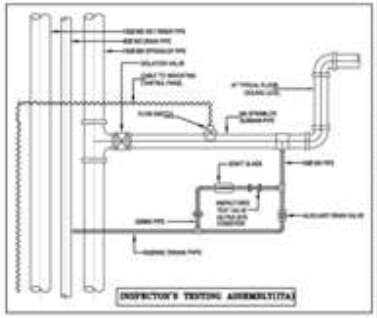
| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAUSHAT | JAMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:125(MM) | 07.08.2017 | R0 |
| Drawing No. | | CONSULTING |
| FF-06 | | N |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |
| | 150Ø FIRE HYDRANT LINE |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| S/N | DATE | DETAILS |
|---|---|---|
| | | |
| | | |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C T O C Services Consultants Pvt. Ltd

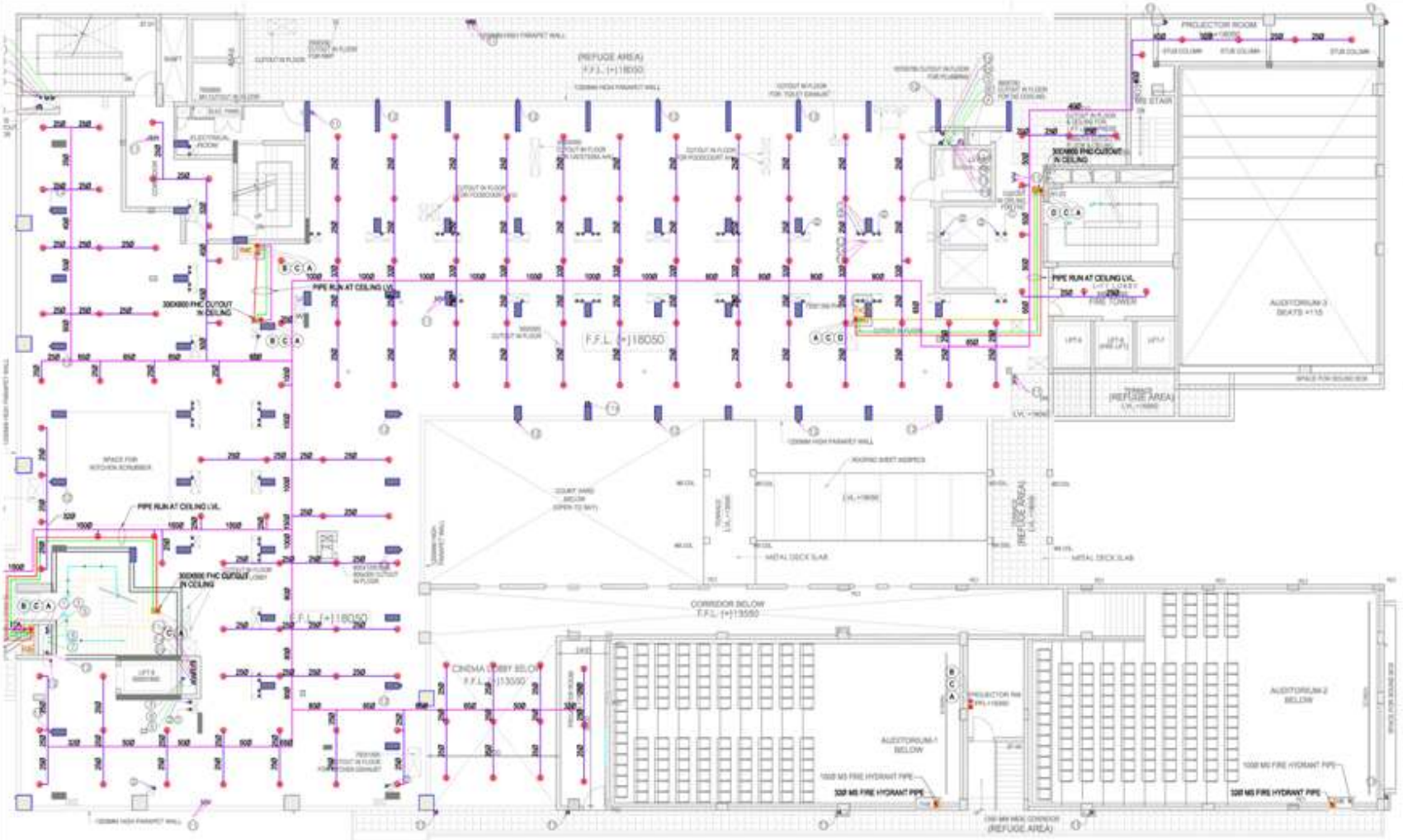
STAGE

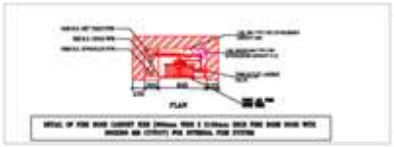
FIRE SUBMISSION

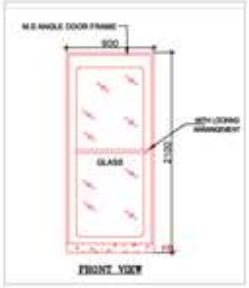
DRAWING TITLE

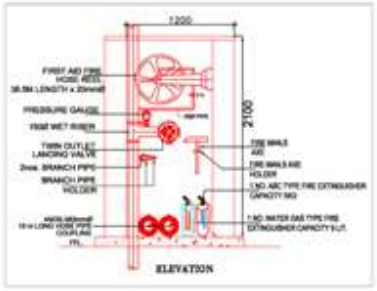
THIRD FLOOR PLAN
(FIRE FIGHTING LAYOUT)

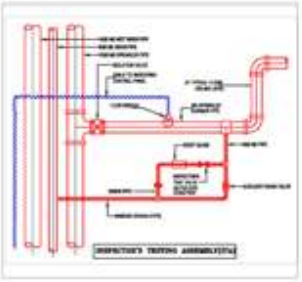
| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAUSHAT | AMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:125(MM) | 07.08.2017 | R0 |
| Drawing No. | | CONSULTANTS |
| FF-07 | | N |




LEGEND

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| BY | | |
|---|---|---|
| S.N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C T-I-C Services Consultants Pvt. Ltd.

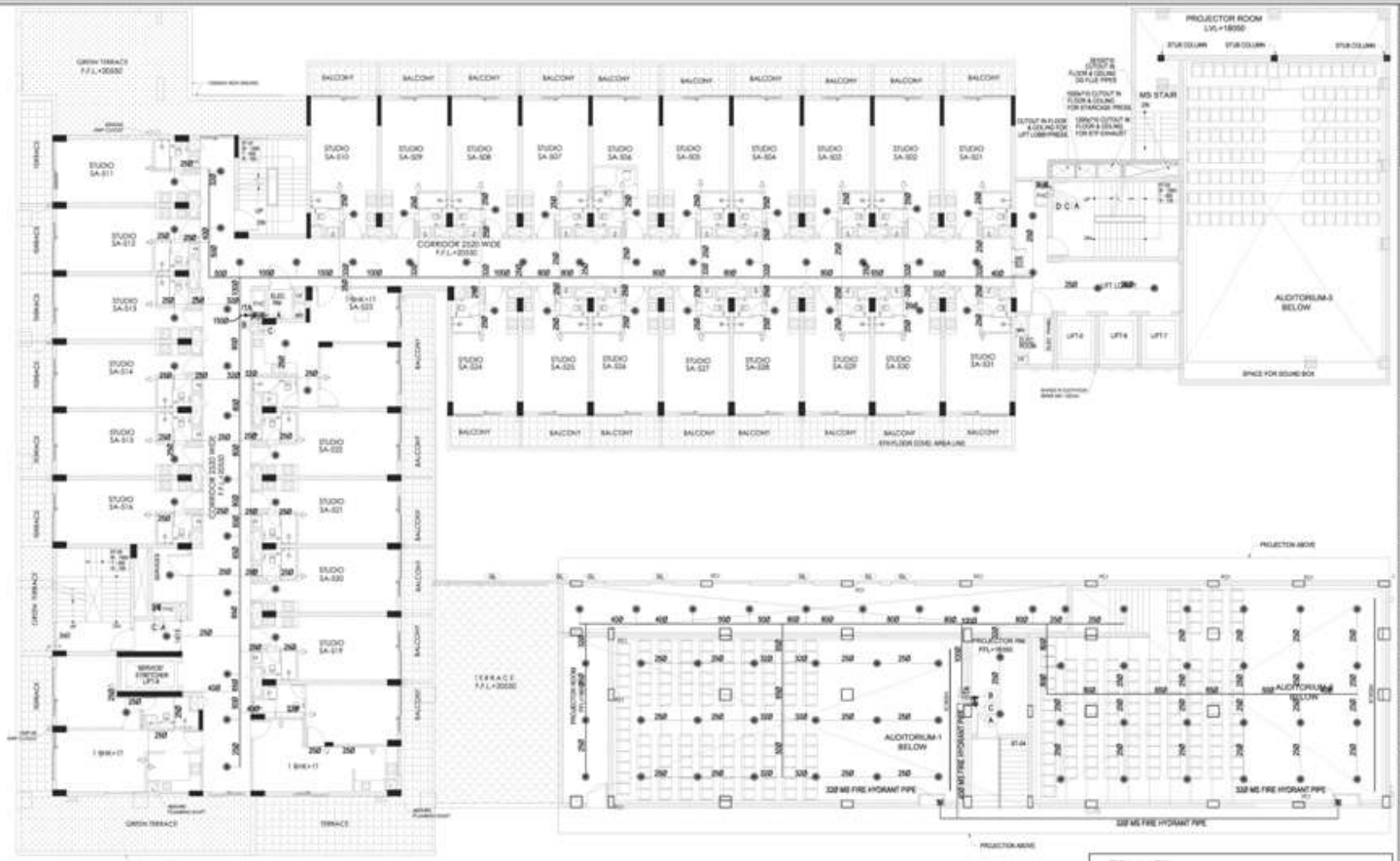
STAGE

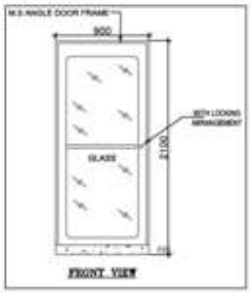
FIRE SUBMISSION

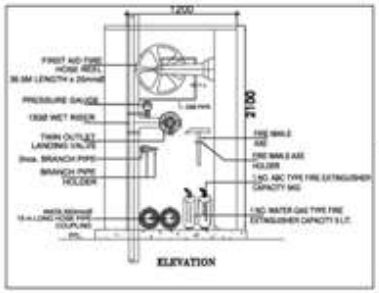
DRAWING TITLE

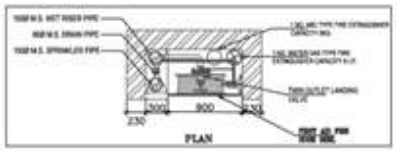
SERVICE / FOURTH FLOOR PLAN (FIRE FIGHTING LAYOUT)

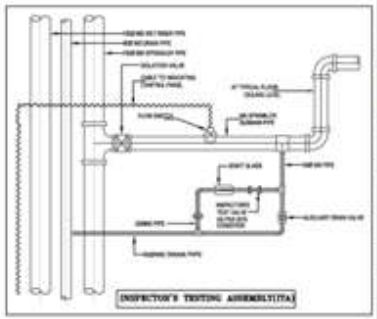
| Drawn | Checked | Approved |
|---|---|---|
| V.S.SHAKTI | ARMN | R.G. |
| Scale | Date | Rev. No. |
| 1:100(BA) | 07.06.2017 | R0 |
| Drawing No. | | ORIENTATION |
| FF-08 | | N |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| R/I | | |
|---|---|---|
| S/N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd.

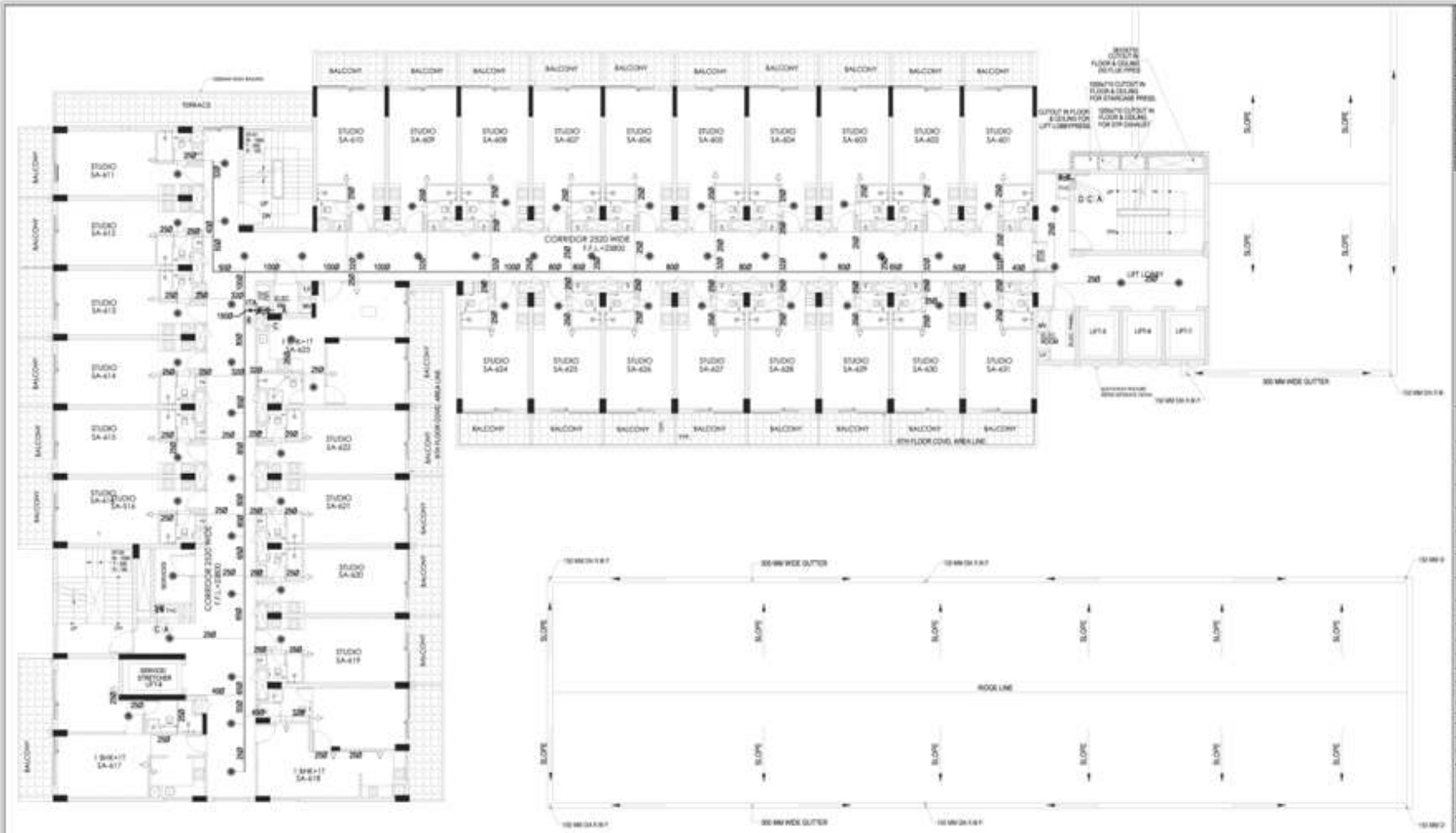
STAGE

FIRE SUBMISSION

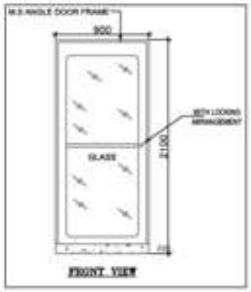
DRAWING TITLE

FIFTH FLOOR PLAN
(FIRE FIGHTING LAYOUT)

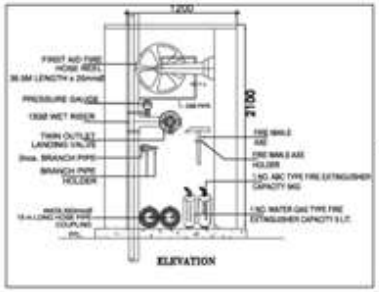
| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAMAT | AMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:100(Bdy) | 07.08.2017 | R0 |
| Drawing No. | | CONSTRUCTION |
| FF-09 | | —N |



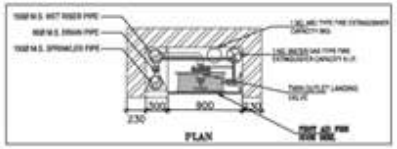

SIXTH FLOOR PLAN (LVL.+23800)



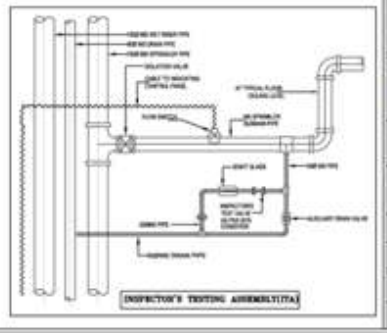

FRONT VIEW




ELEVATION




PLAN



INSPECTOR'S TESTING ASSEMBLY(ITA)

FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| R/I | | |
|---|---|---|
| S/N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd.

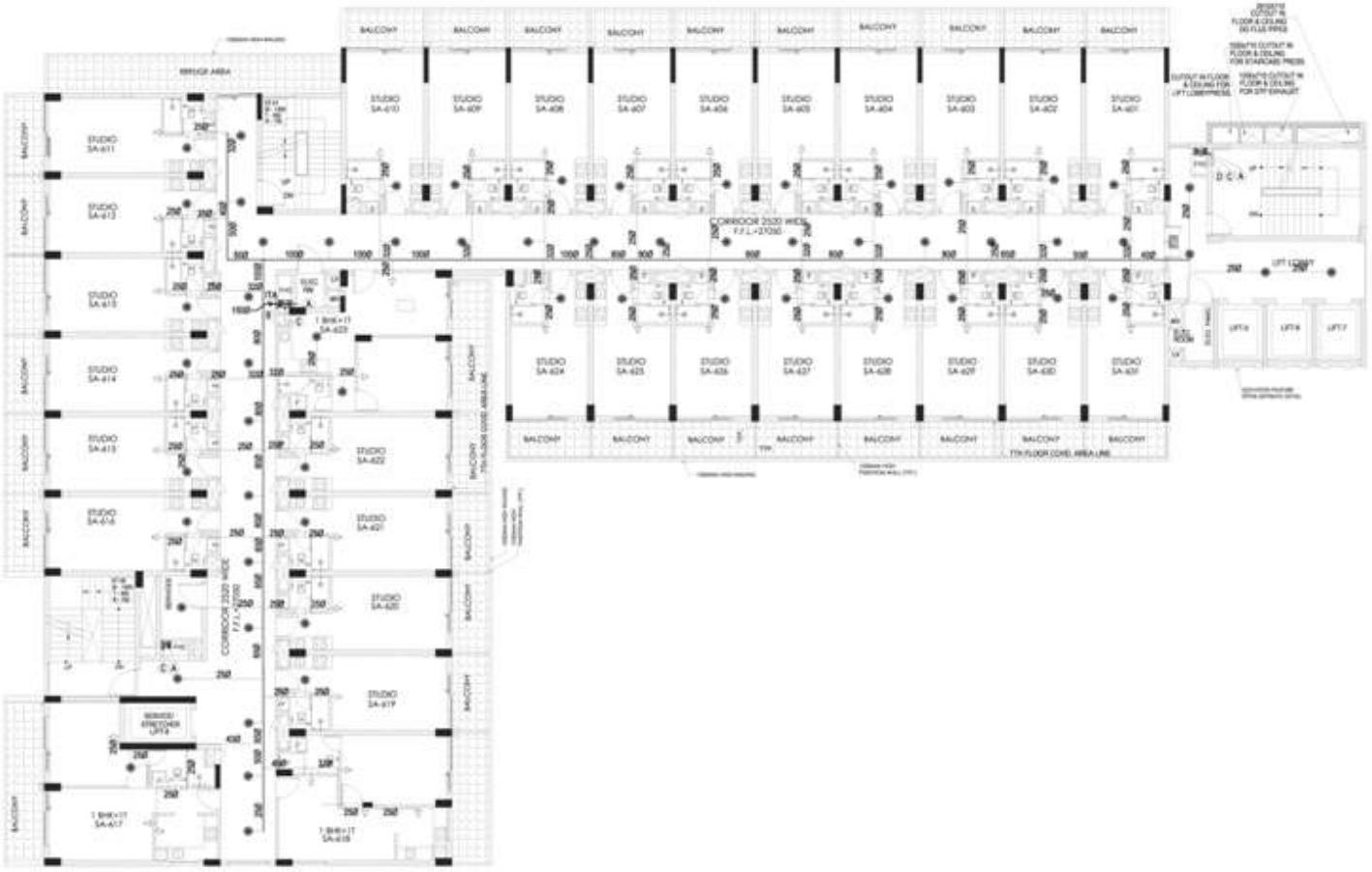
STAGE

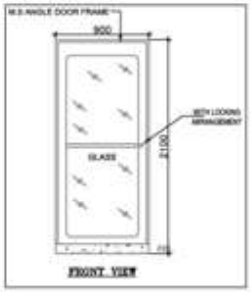
FIRE SUBMISSION

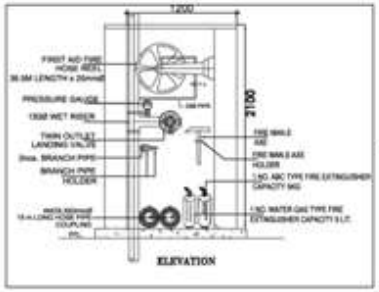
DRAWING TITLE

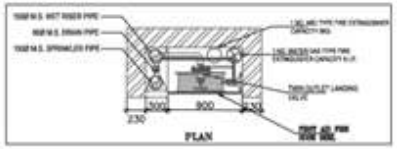
SIXTH FLOOR PLAN
(FIRE FIGHTING LAYOUT)

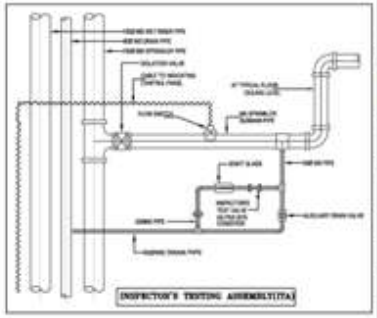
| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAUSHAT | AMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:100(Min) | 07.08.2017 | R0 |
| Drawing No. | | CONSULTING |
| FF-10 | | N |




FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 65Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 65Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| 01 | CLIENT | 31.05.16 |

| R1 | | |
|---|---|---|
| S/N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

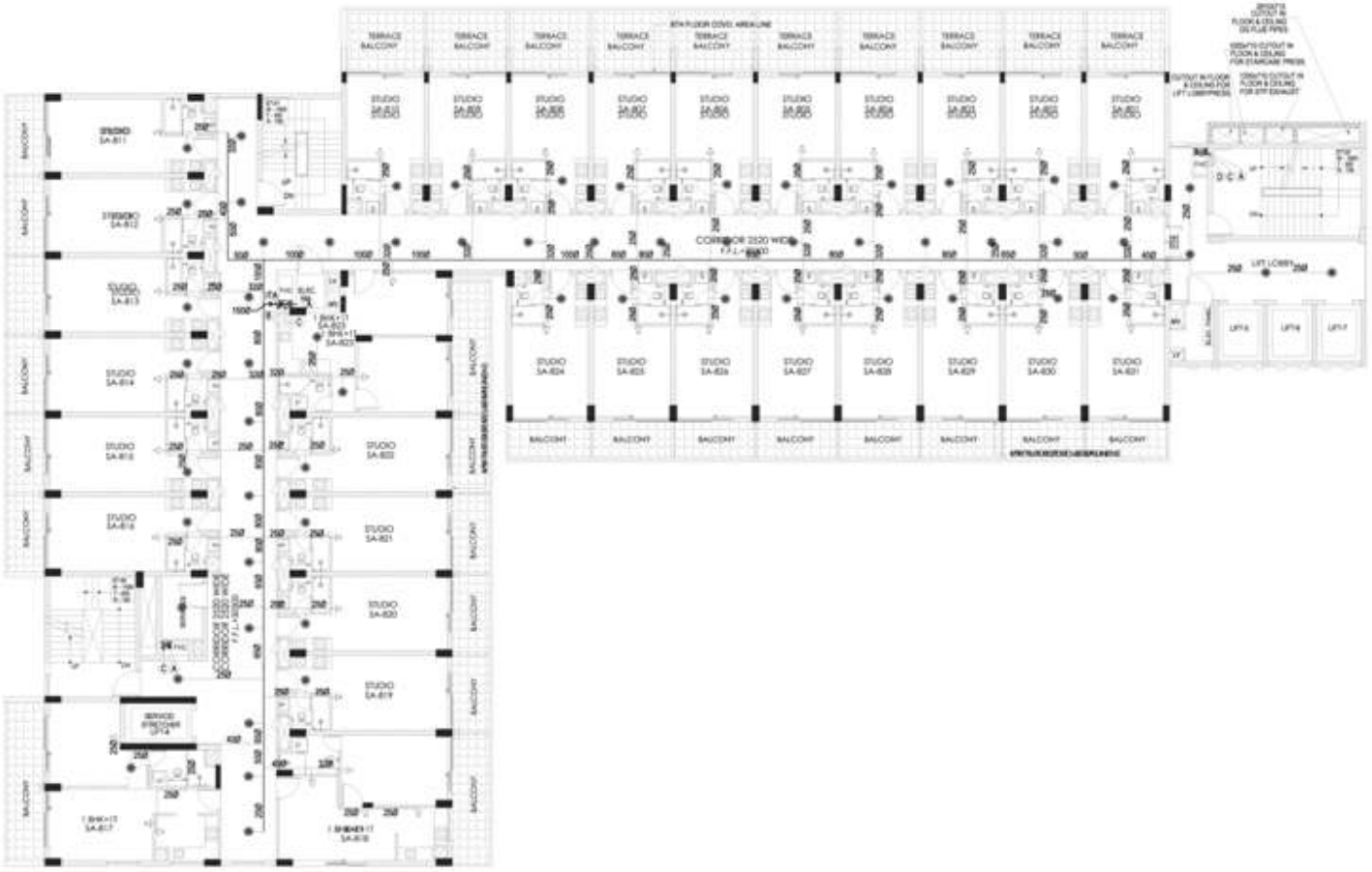
STAGE:

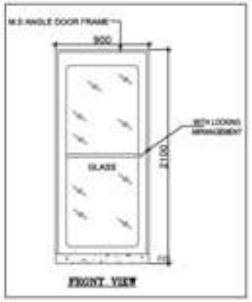
FIRE SUBMISSION

DRAWING TITLE:

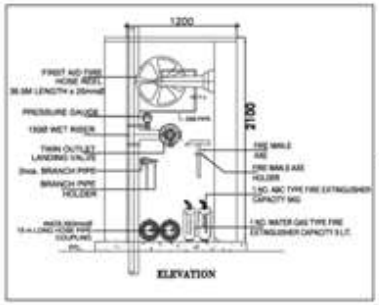
SEVENTH FLOOR PLAN
(FIRE FIGHTING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAUSHAT | APURVA | M.N. |
| Scale | Date | Rev. No. |
| 1:100(MM) | 27.05.2017 | R02 |
| Drawing No. | | CONSULTING |
| FF-11 | | — N |

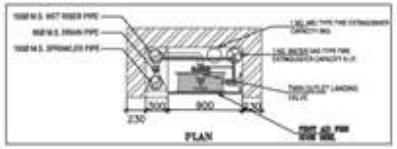




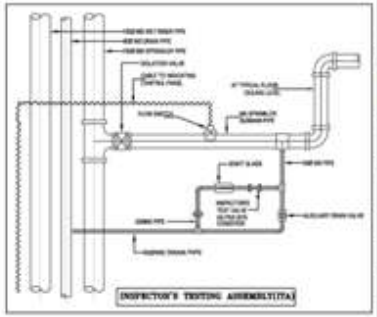

FRONT VIEW




ELEVATION




PLAN



INSPECTOR'S TESTING ASSEMBLY(ITA)

FIRE LEGEND

| | |
|---|---|
| | FIRE HOSE CABINET (FHC) |
| | 150Ø FIRE HYDRANT RISER PIPE |
| | 150Ø SPRINKLER RISER PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | 150Ø SPRINKLER WAKE UP PIPE |
| | SPRINKLER (PENDANT TYPE) |
| | EXTENDED THROW SIDE WALL SPRINKLER |
| | SPRINKLER HEADER PIPE |
| | SPRINKLER BRANCH PIPE |
| | 80Ø SPRINKLER DRAIN PIPE |
| | INSPECTOR'S TESTING ASSEMBLY(ITA) |

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| R1 | | |
|---|---|---|
| S/N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd

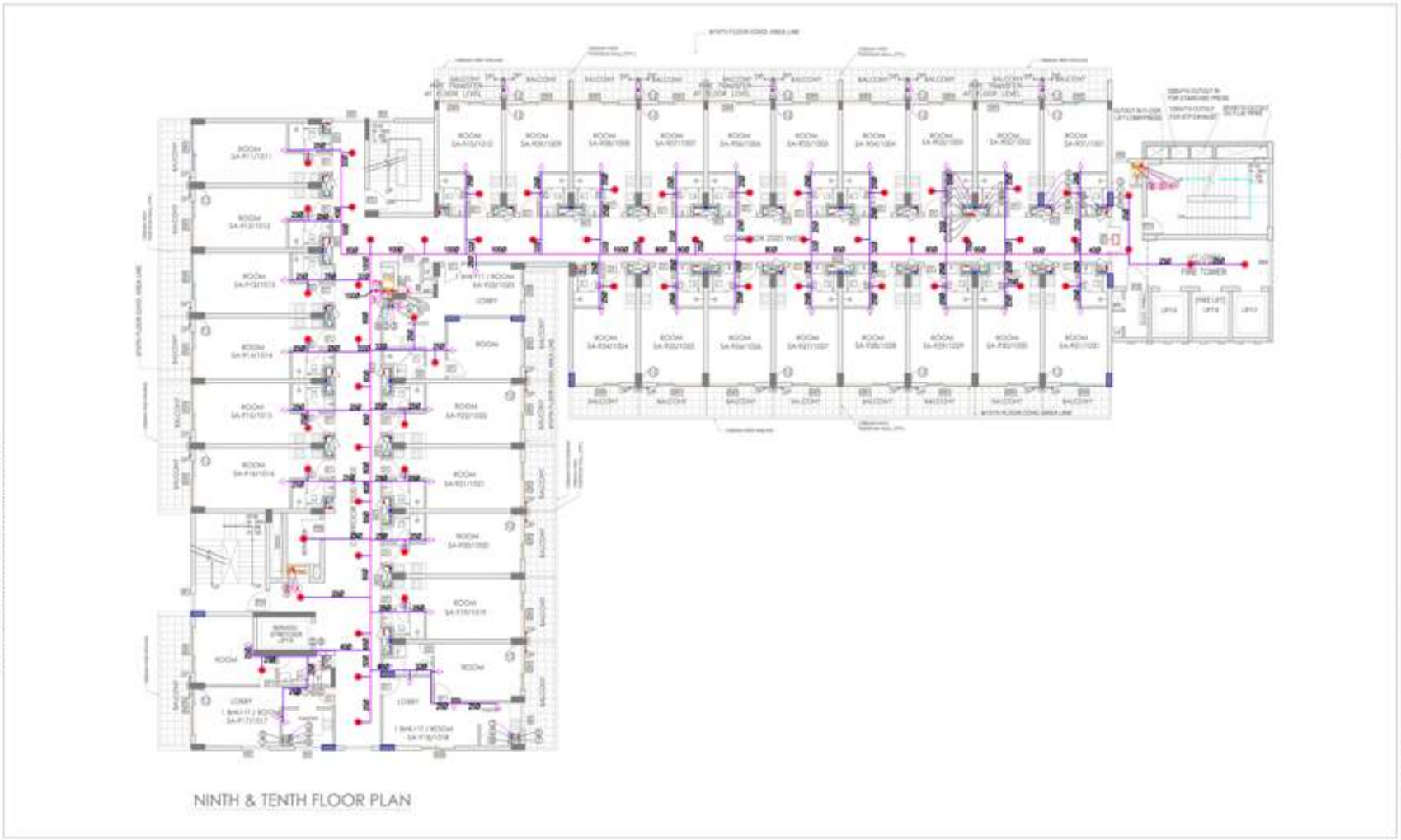
STAGE

FIRE SUBMISSION

DRAWING TITLE

EIGHTH FLOOR PLAN
(FIRE FIGHTING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| U.S.KAMAT | AMAN | M.N. |
| Scale | Date | Rev. No. |
| 1:100(Min) | 07.08.2017 | R0 |
| Drawing No. | | CONSULTING |
| FF-12 | | — N |




LEGEND

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| 01 | CLIENT | 31.08.18 |

| BY | | |
|---|---|---|
| S.N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd.

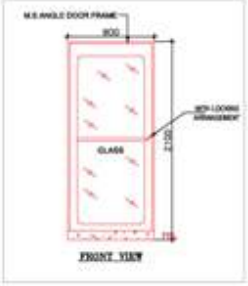
STAGE

FIRE SUBMISSION

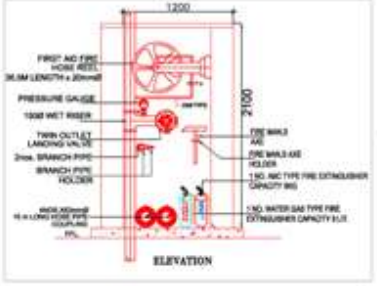
DRAWING TITLE

NINTH & TENTH FLOOR PLAN (FIRE FIGHTING LAYOUT)

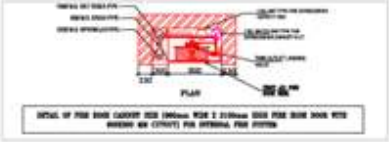
| Drawn | Checked | Approved |
|---|---|---|
| V.S.SHAKTI | ARMN | M.G. |
| Scale | Date | Rev. No. |
| 1:100(BA) | 07.06.2017 | 02 |
| Drawing No. | | DESIGNATION |
| FF-13 | | N |



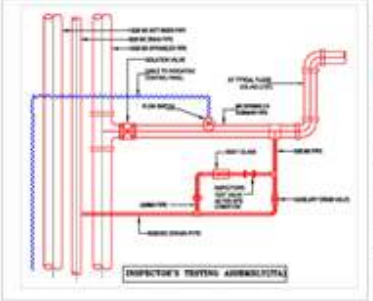

FRONT VIEW

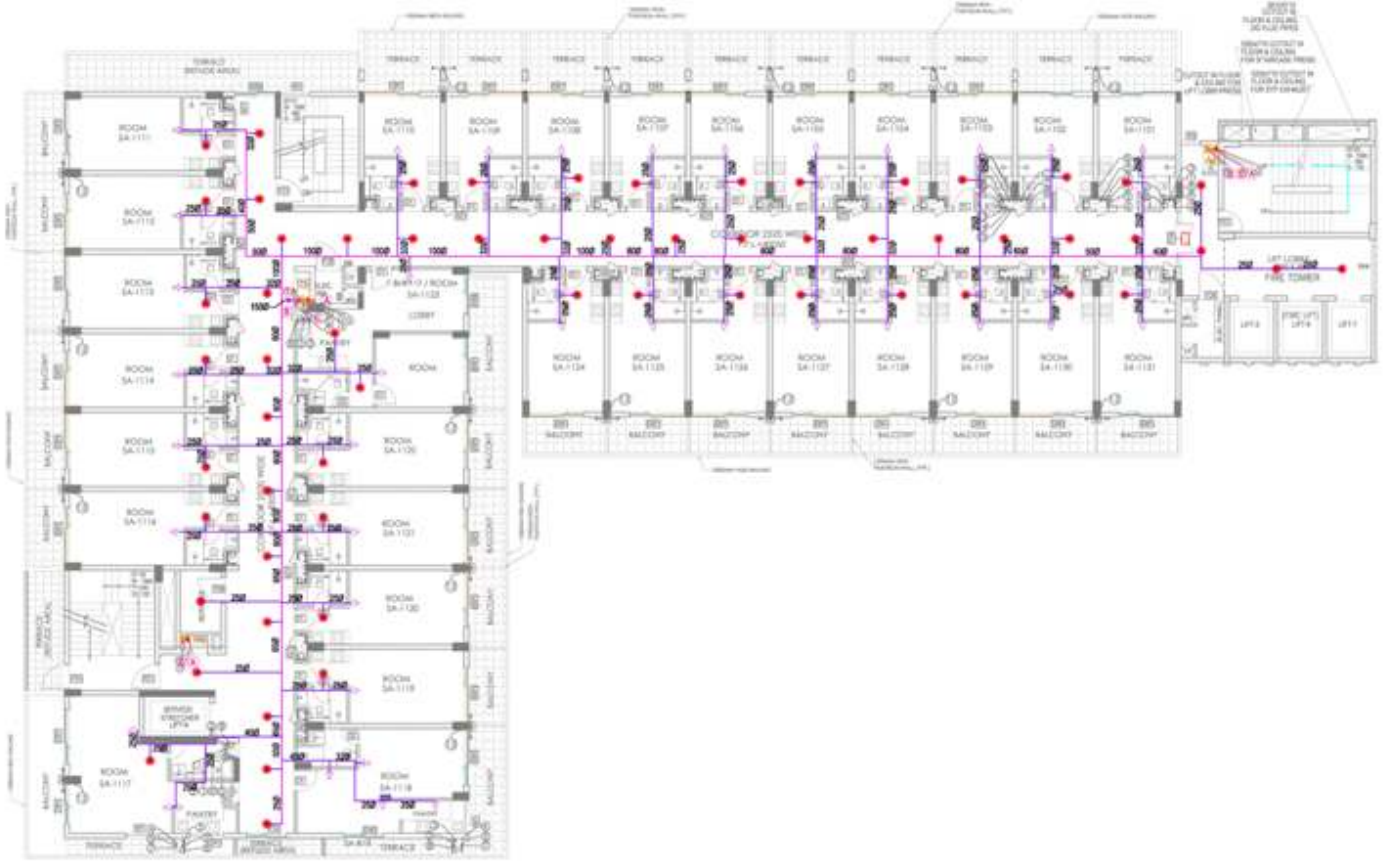



ELEVATION

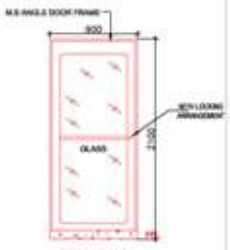



DETAIL OF FIRE HOSE CABINET SIZE (900mm WIDE X 2100mm HIGH FIRE HOSE BOX WITH HOSEREEL AS CITRATE) FOR INTERNAL FIRE SYSTEM

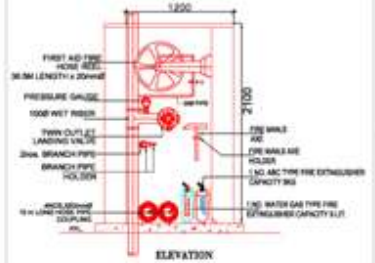




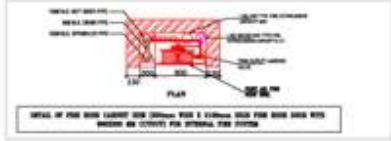
ELEVENTH FLOOR PLAN



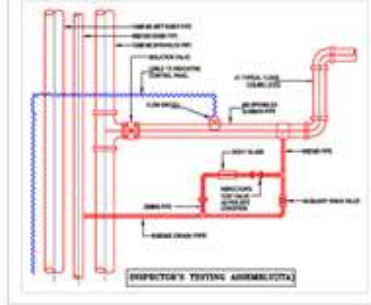
FRONT VIEW



ELEVATION



PLAN



INSPECTOR'S TESTING ASSEMBLY(ITA)

LEGEND

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

STAGE

FIRE SUBMISSION

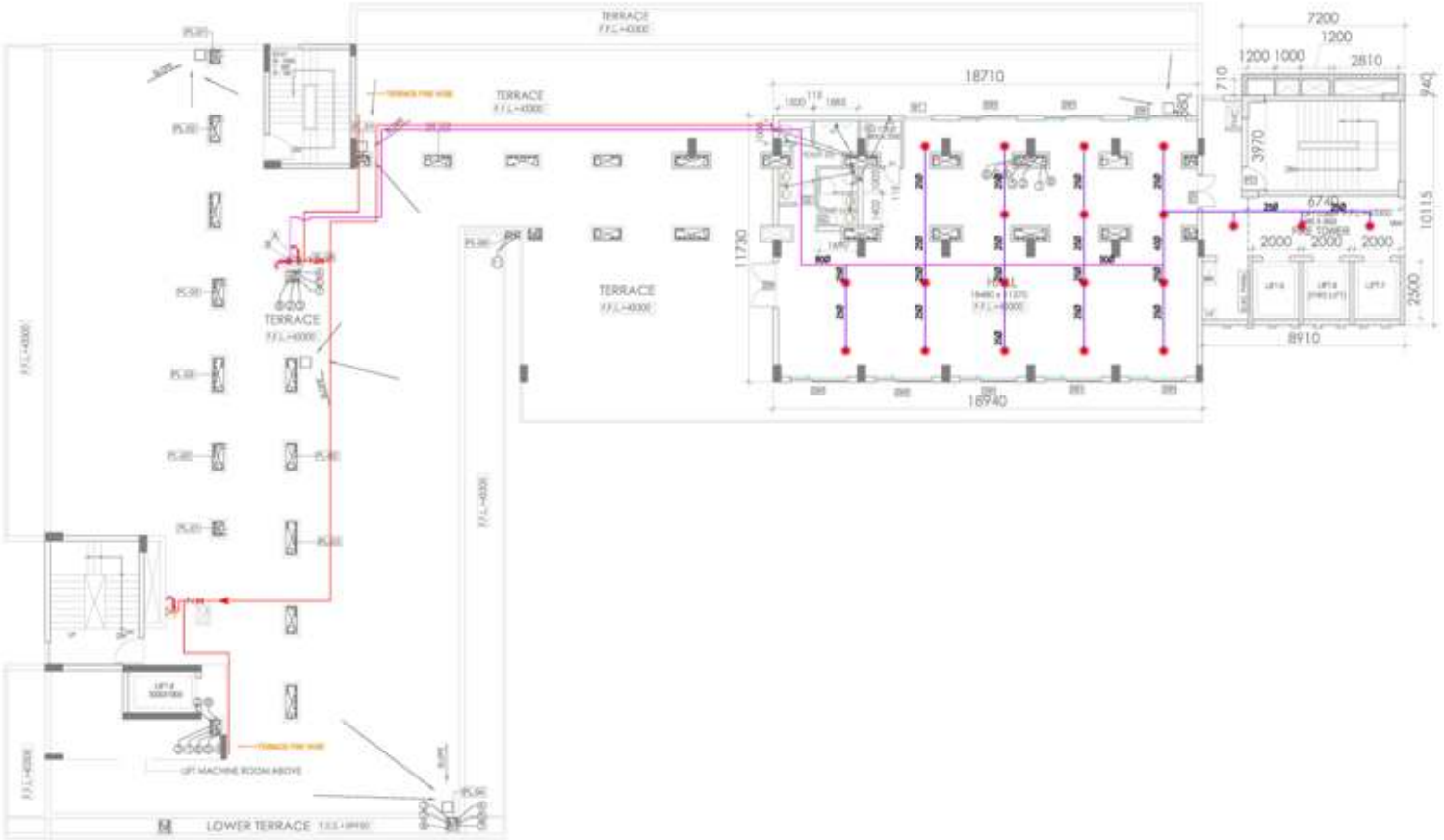
DRAWING TITLE

ELEVENTH FLOOR PLAN (FIRE FIGHTING LAYOUT)

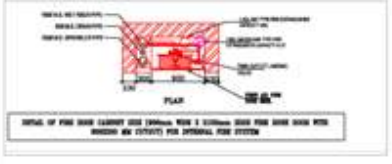
| Drawn | Checked | Approved |
|---|---|---|
| V.S.SHANKAR | ARMAN | M.G. |
| Scale | Date | Rev. No. |
| 1:100(BA) | 07.06.2017 | 00 |

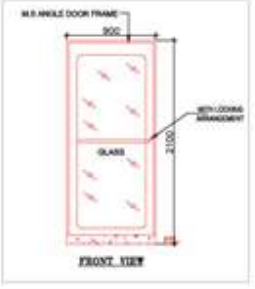
Drawing No. FF-14

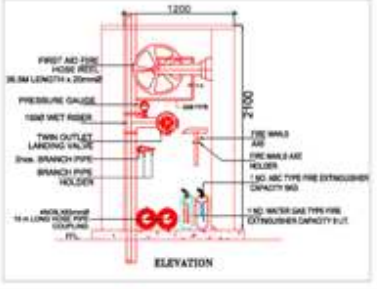
ORIENTATION: N

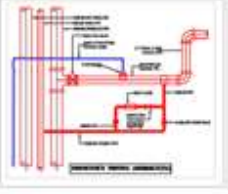


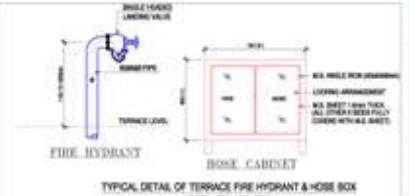

TWELVTH FLOOR PLAN
FFL+43400






TYPICAL DETAIL OF TERRACE FIRE HYDRANT & HOSE BOX
(SIZE - 750x600x300)

FIRE LEGEND

LEGEND

| PIPE DIA (mm) | NUMBER OF SPRINKLER |
|---|---|
| 25Ø | 1-2 |
| 32Ø | 3 |
| 40Ø | 4-5 |
| 50Ø | 6-10 |
| 65Ø | 11-18 |
| 80Ø | 19-40 |
| 100Ø | 41-100 |
| 150Ø | 101 & ABOVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| BY | | |
|---|---|---|
| S.N. | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

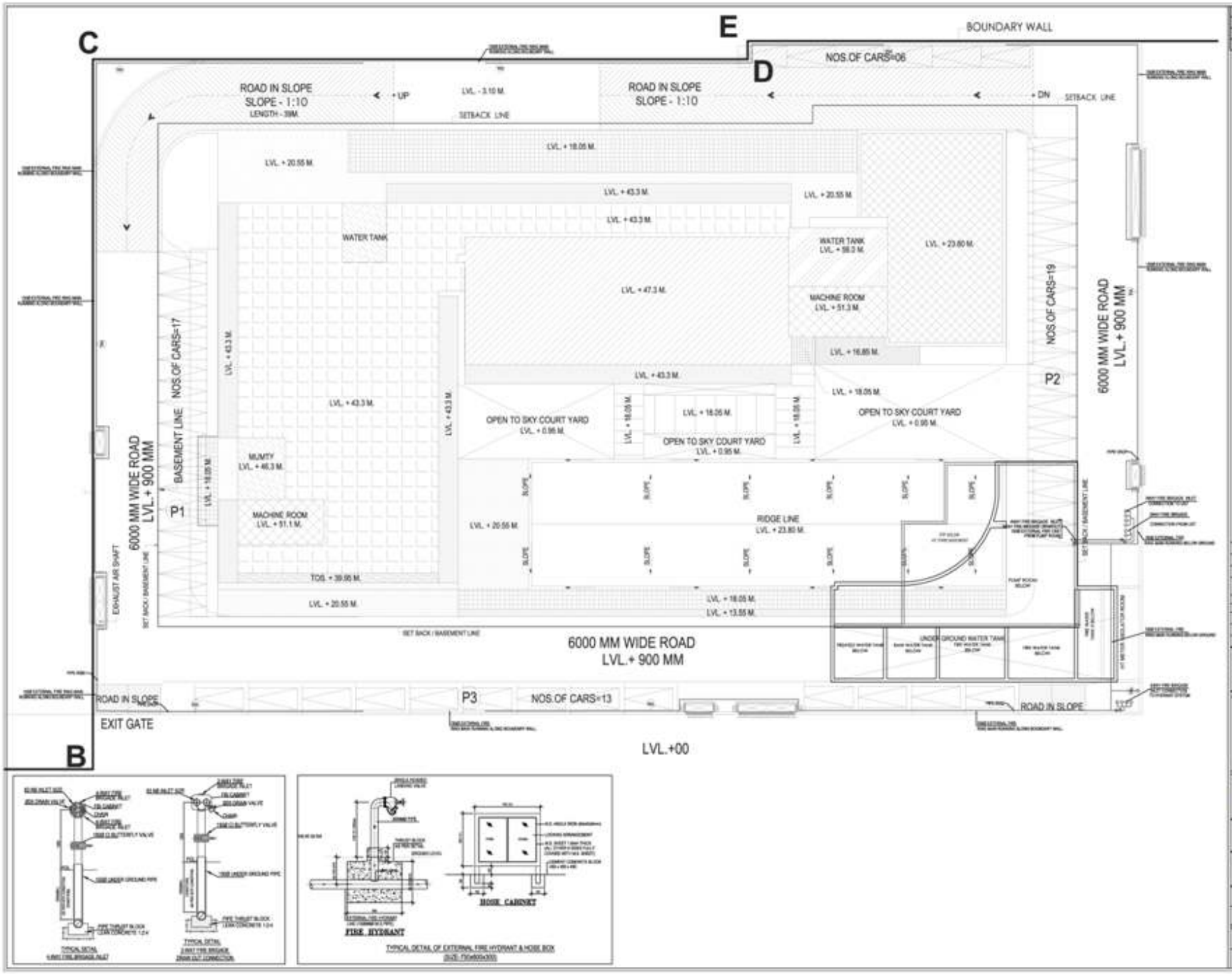
STAGE

FIRE SUBMISSION

DRAWING TITLE

TERRACE / TWELFTH FLOOR PLAN
(FIRE FIGHTING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| V.S.SHANKAR | ARMAN | M.G. |
| Scale | Date | Rev. No. |
| 1:100(BA) | 07.06.2017 | R0 |
| Drawing No. | | DESIGNATION |
| FF-15 | | N |










| FIRE LEGEND | |
|---|---|
| | FIRE HYDRANT |
| | BUTTER FLY VALVE |
| | NON RETURN VALVE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| | | |

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

TO-C Services Consultants Pvt. Ltd

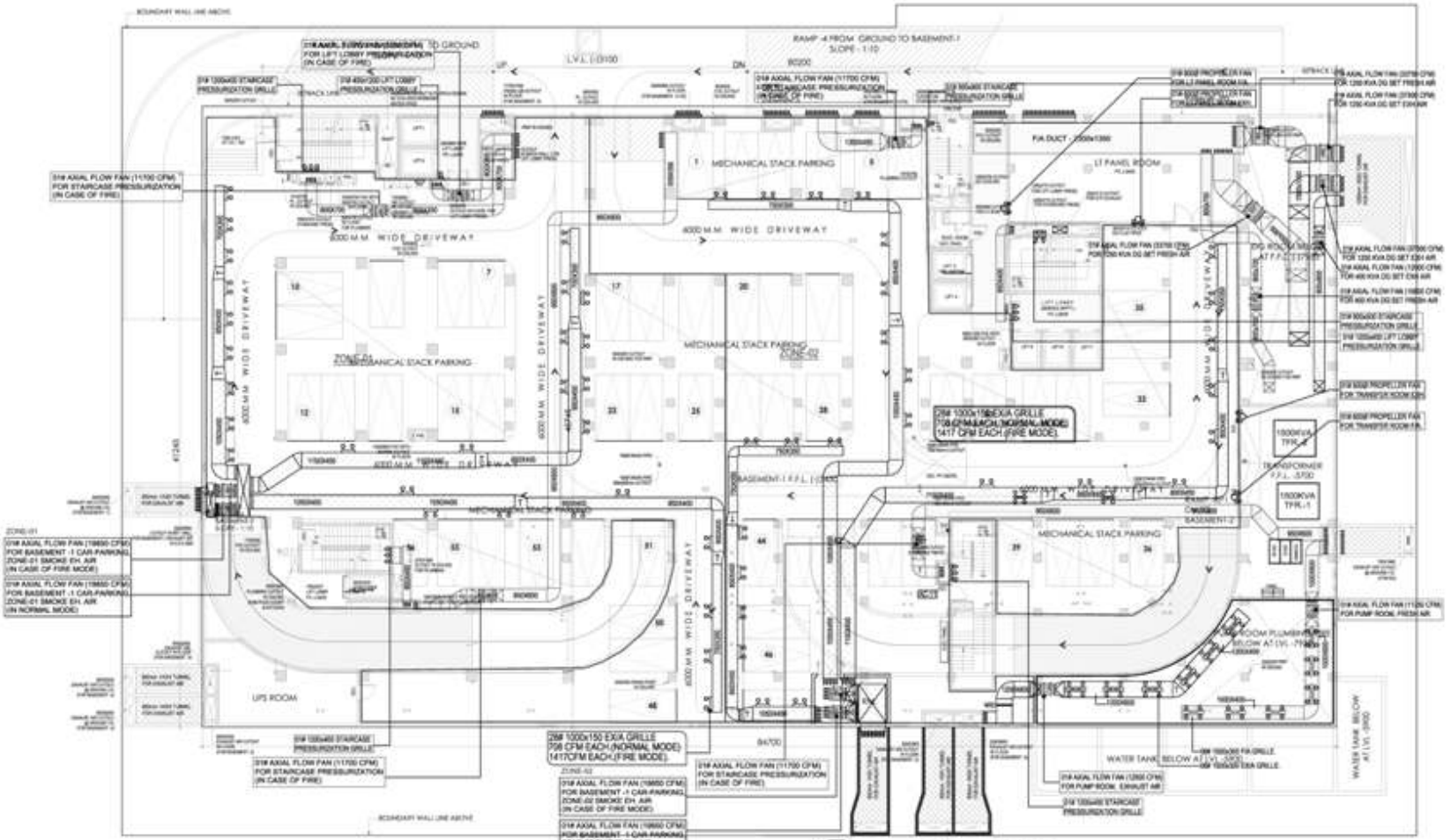
STAGE

FIRE SUBMISSION

DRAWING TITLE

EXTERNAL SITE PLAN
(FIRE FIGHTING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| V.S.RAMAT | AMAN | M.N. |
| Scale | Date | Rev. No. |
| 1 : 150(MM) | 07.06.2017 | R0 |
| Drawing No. | | DIMENSIONS |
| FF-101 | | — N |




# BASEMENT-1

| | SYMBOL |
|---|---|
| duct | |
| duct | |
| duct | |
| air pipes | |
| down | |
| rise | |
| diffuser | |
| diffuser | |
| fire damper (open) | NO |
| fire damper (close) | NC |
| ceiling | |
| | |
| | |
| TS | |
| EL | |
| unit | |
| | |
| fan | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

ARCHITECT:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

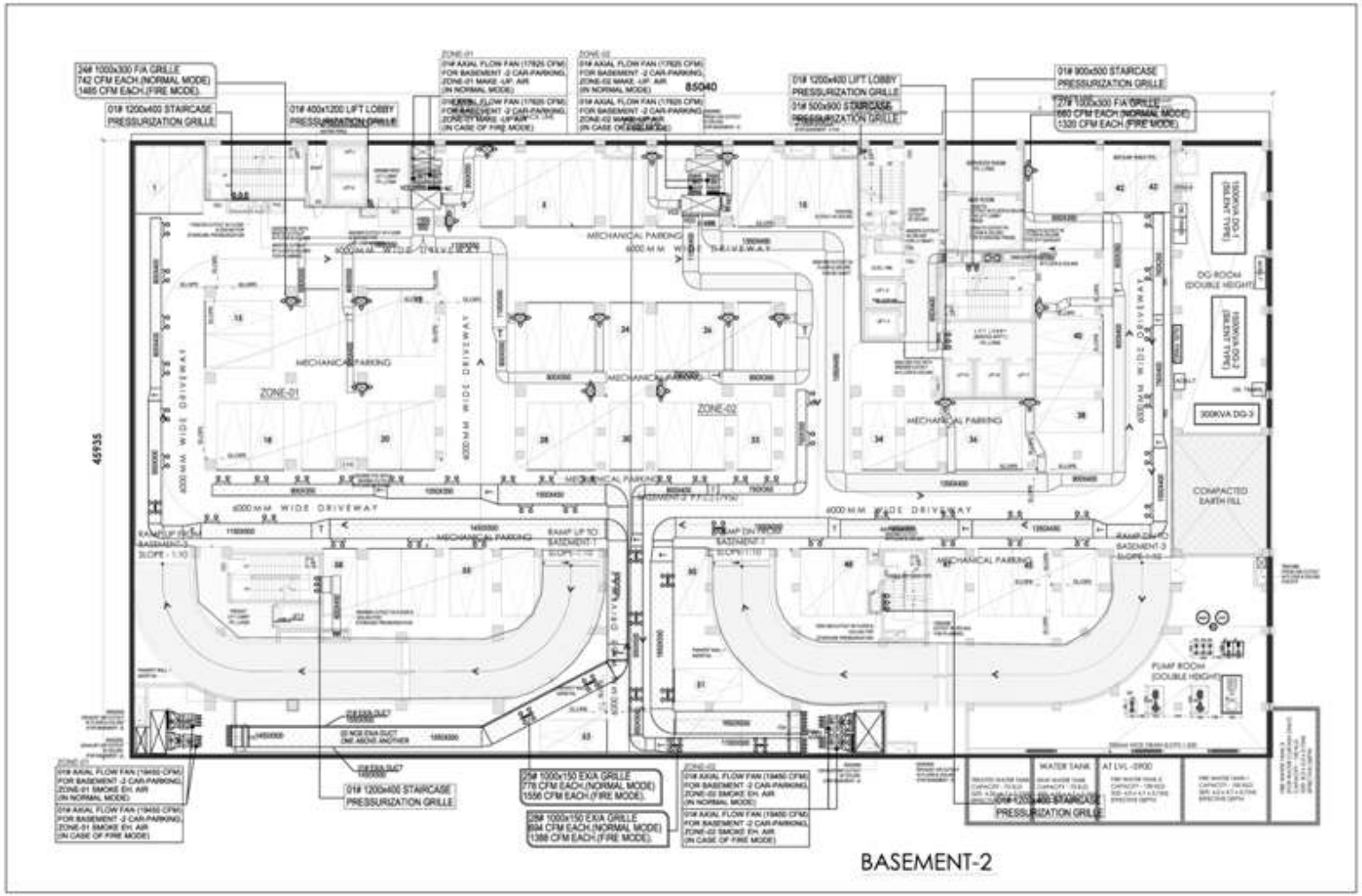
STAGE:

**FIRE SUBMISSION**

DRAWING TITLE:

**BASEMENT-1 CEILING (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| MUKESH | A.D | NITAN |
| Scale | Date | Rev. No. |
| 1:150(Min) | 25.09.2017 | R2 |
| Drawing No. | | ORIENTATION |
| CTOC.SBPL.15103.AC-03 | | N |




BASEMENT-2

HVAC LEGEND

| S.No | DESCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | F/A DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFRIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (500Wh) | |
| 08. | S/R GRILLE (500E) | |
| 09. | F/A SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | RETNET | |
| 17. | THERMOSTATE | |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | OBJECT TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

STAGE:

FIRE SUBMISSION

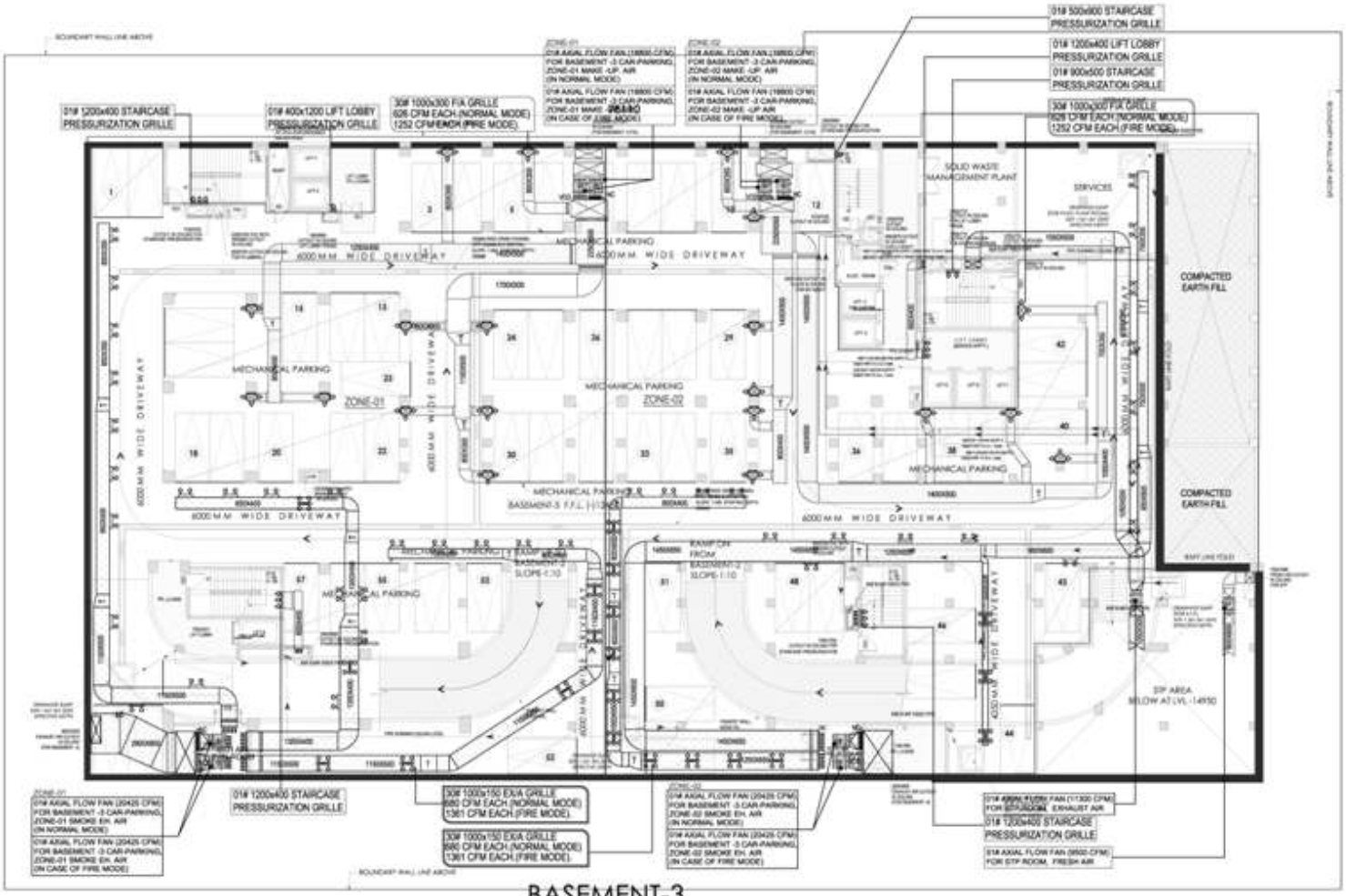
DRAWING TITLE:

BASEMENT-2 CEILING (HVACLAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| MUNEEB | A.D | NITAN |
| Scale | Date | Rev. No. |
| 1:150(Min) | 25.09.2017 | R0 |

Drawing No.: CTOC.MPL.15103.AC-02

ORIENTATION: N




# BASEMENT-3

**NO. OF CAR PARKING = 60X2 = 120**

| | SYMBOL |
|---|---|
| VCD | |
| DUCT | |
| JET DUCT | |
| JT PIPES | |
| IC(WPM) | |
| IC(E) | |
| DIFFUSER | |
| DIFFUSER | |
| FIRE DAMPER (FRED) | NO |
| FIRE DAMPER (LOUD) | NC |
| TRCL | |
| | |
| | |
| E | |
| C | |
| UNIT | |
| | |
| RH | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| S/N | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd

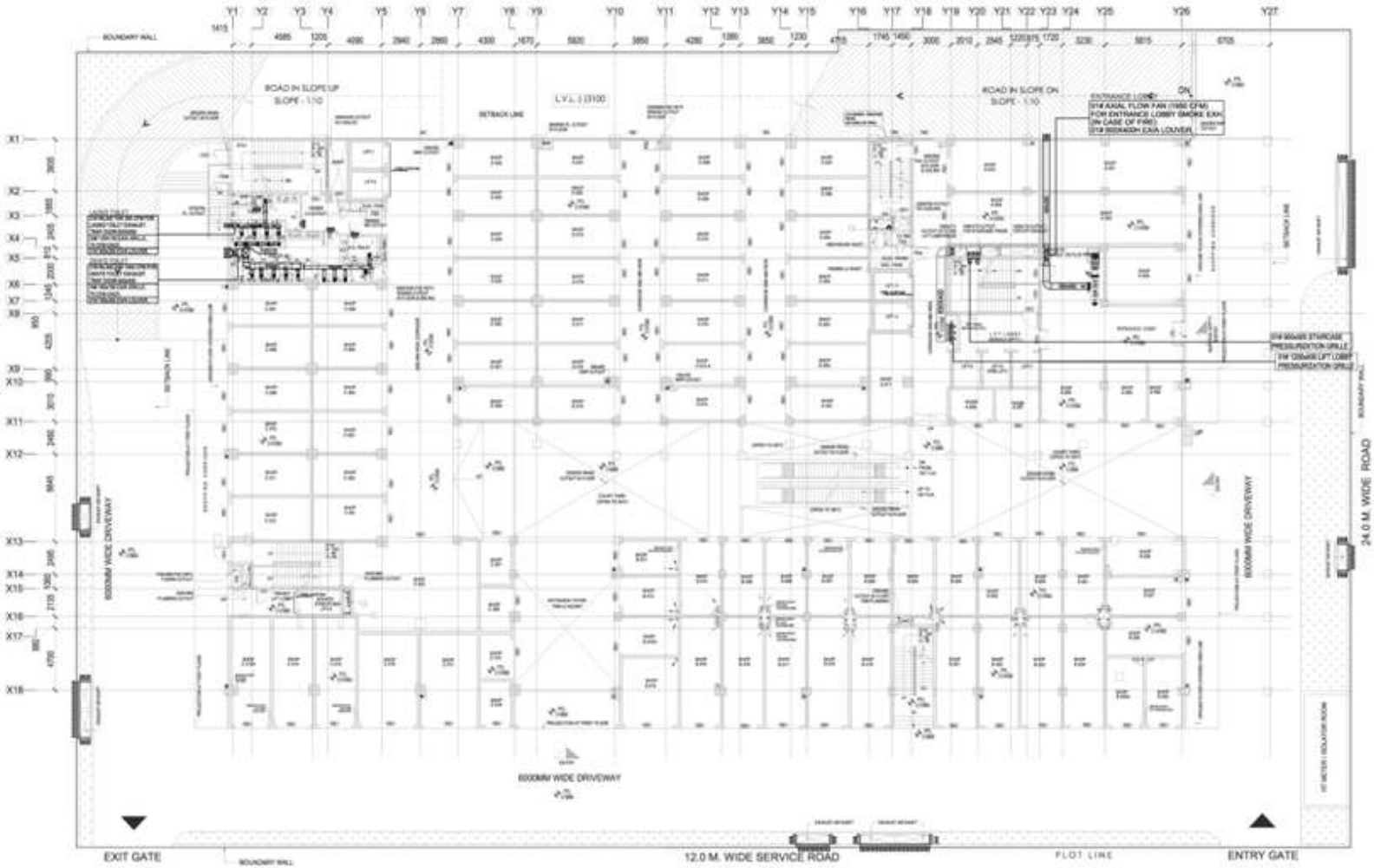
STAGE:

**FIRE SUBMISSION**

DRAWING TITLE:

**BASEMENT-3 CEILING (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| | P.S | |
| Scale | DATE | Rev. No. |
| 1:125(MM) | | 00 |
| Drawing No. | | DIMENSIONS |
| CTOC.SMFL.15103.AC-01 | | —N |




# GROUND FLOOR PLAN

| S.No. | DESCRIPTION | SYMBOL |
|---|---|---|
| 01 | SUPPLY AIR DUCT | |
| 02 | TFA DUCT | |
| 03 | EXHAUST AIR DUCT | |
| 04 | SMOKE EXHAUST DUCT | |
| 05 | REFRIGERANT PIPES | |
| 06 | DRAIN PIPES | |
| 07 | S/R GRILLE (DOWN) | |
| 08 | S/R GRILLE (SIDE) | |
| 09 | TFA SUPPLY DIFFUSER | |
| 10 | EXHAUST AIR DIFFUSER | |
| 11 | DISC VALVE | |
| 12 | MOTORIZED FIRE DAMPER (NORMAL OPEN) | MD |
| 13 | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | MD |
| 14 | VOLUME CONTROL DAMPER (MCD) | |
| 15 | LOUVER | |
| 16 | REPORT | RP |
| 17 | THERMOSTATE | T |
| 18 | ACCESS PANEL | |
| 19 | GRILL IN DOOR UNIT | |

| NO. OF PRINTS | OBJECT TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design LLP

MEP CONSULTANTS:

C T O C Services Consultants Pvt. Ltd.

STAGE:

**FIRE SUBMISSION**

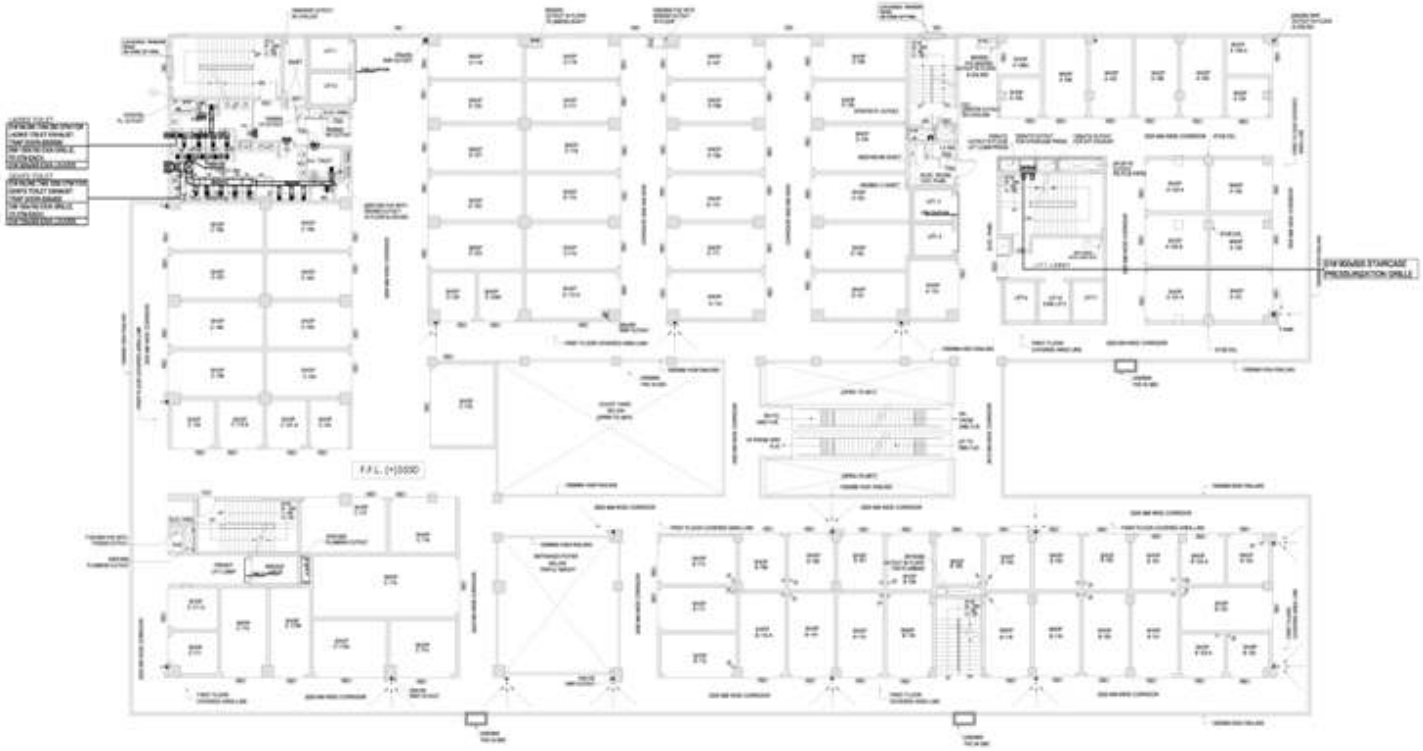
DRAWING TITLE:

**GROUND FLOOR CEILING (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| MUNEEB | A.D | NITAN |
| Scale | Date | Rev. No. |
| 1:150(MM) | 25.09.2017 | R0 |

Drawing No.: CTOC.SBPL.15103.AC-04

ORIENTATION: N




HVAC LEGEND

| S.No. | DESCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | RECTENGULAR PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (CEIRNG) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | CRD, VIN, VD | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | RETRET | |
| 17. | THERMOSTATS | |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

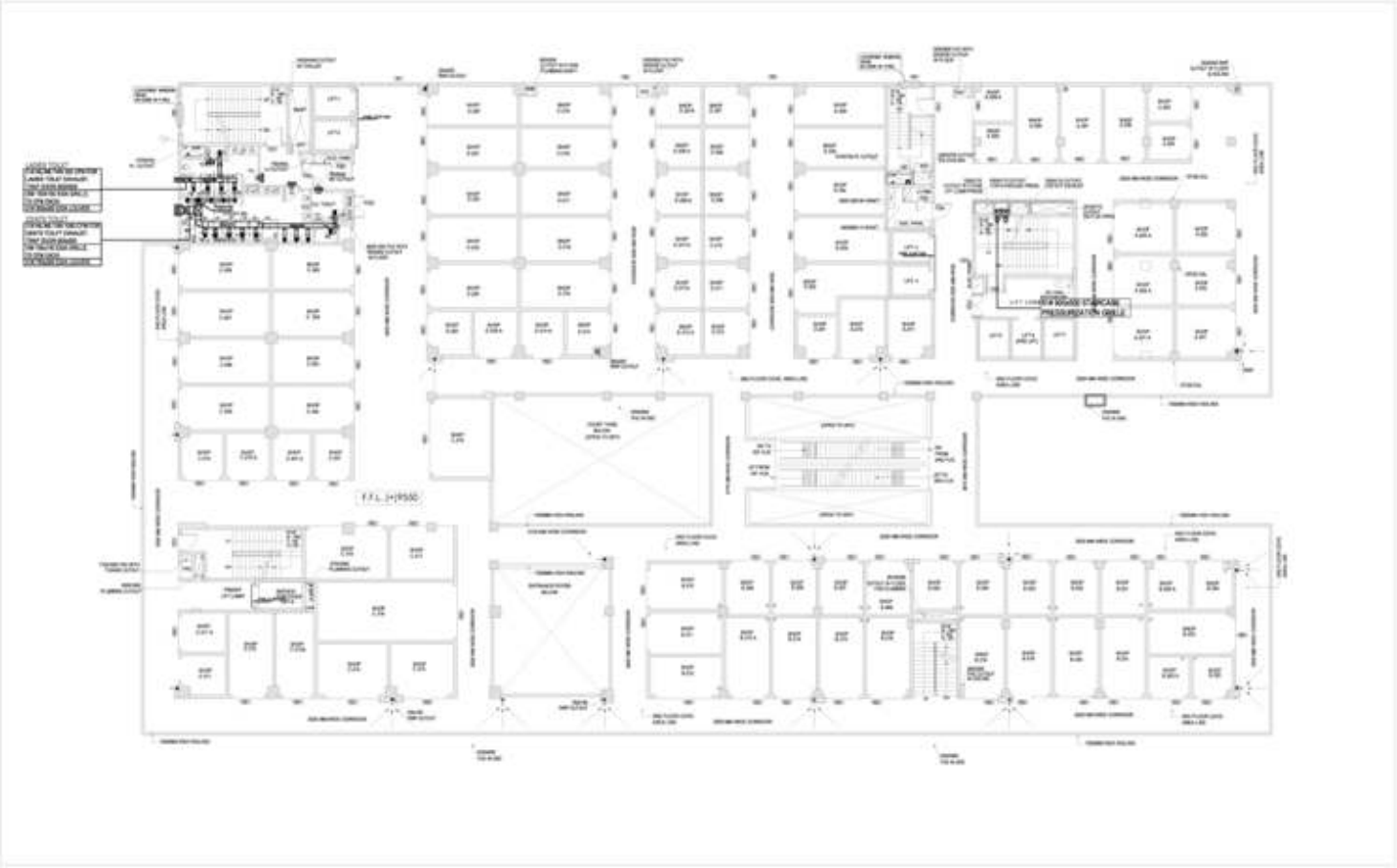
STAGE:

**FIRE SUBMISSION**

DRAWING TITLE

**FIRST FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| MUNEEM | A.D | NITAN |
| Scale | Date | Rev. No. |
| 1:150(Min) | 25.09.2017 | R0 |
| Drawing No. | | ORIENTATION |
| CTOC.SBPL.15103.AC-05 | | N |



| NO. | LEGEND DESCRIPTION | SYMBOL |
|---|---|---|
| | SUPPLY AIR DUCT | |
| | TFA DUCT | |
| | EXHAUST AIR DUCT | |
| | SMOKE EXHAUST DUCT | |
| | REFRIGERANT PIPES | |
| | DRAIN PIPES | |
| | S/R GRILLE (DOWN) | |
| | S/R GRILLE (SIDE) | |
| | TFA SUPPLY DIFFUSER | |
| | EXHAUST AIR DIFFUSER | |
| | DISC VALVE | |
| | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| | VOLUME CONTROL DAMPER (VCD) | |
| | CLOSURE | |
| | REFNET | |
| | THERMOSTATS | |
| | ACCESS PANEL | |
| | VARIABLE REFRIGERANT | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |
| | | |
| | | |

| S/N | DATE | DETAILS |
|---|---|---|
| | | |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL Design Ltd

MEP CONSULTANTS:

C TO C Services Consultants Pte Ltd.

STAGE:

**FIRE SUBMISSION**

DRAWING TITLE:

**SECOND FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| [illegible] | PS | [illegible] |
| Scale | Date | Rev. No. |
| 1:150(A0) | 25.09.2017 | R2 |
| Drawing No. | | DIMENSIONS |
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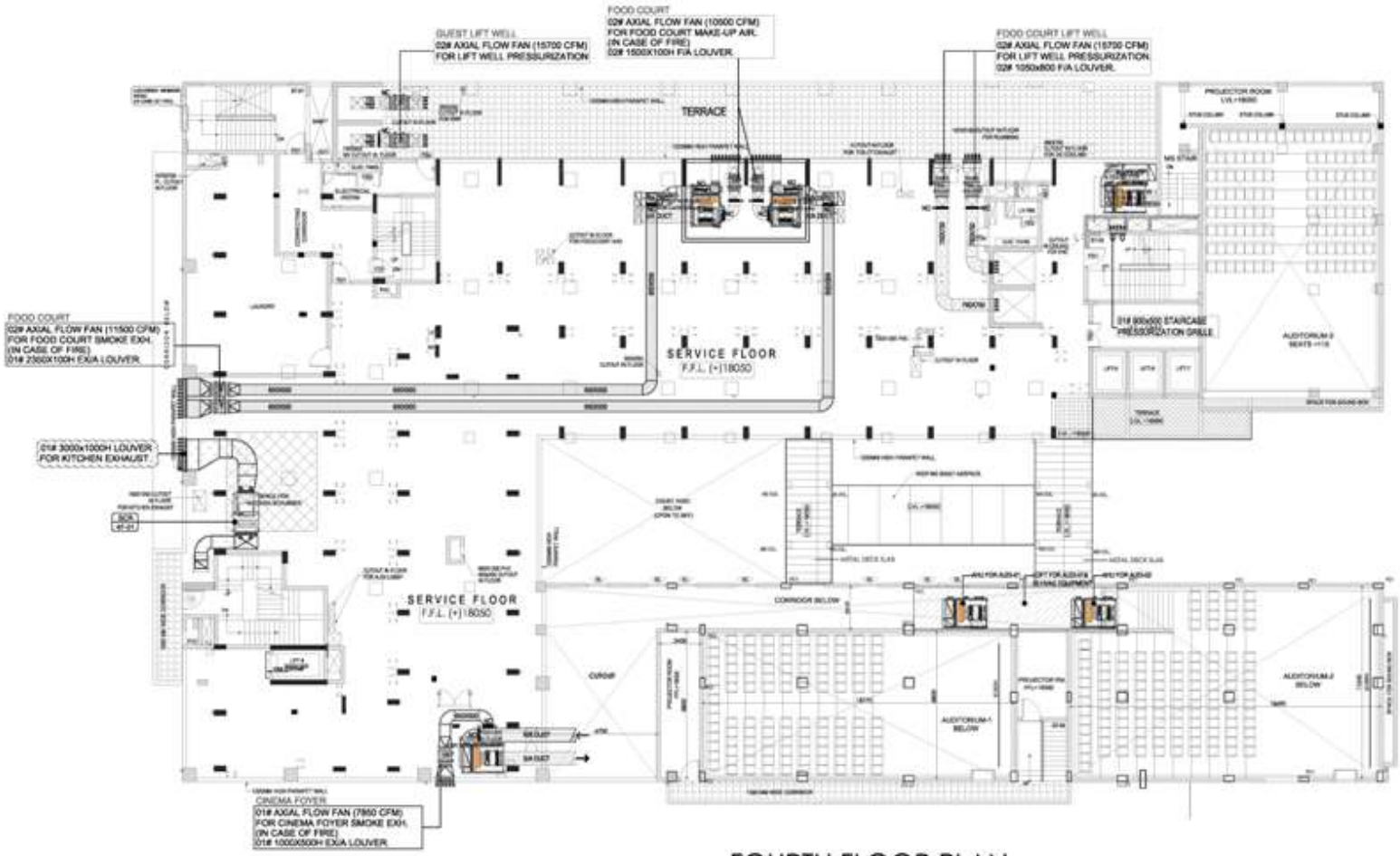



# FOURTH FLOOR PLAN

| NO. | DESCRIPTION | SYMBOL |
|---|---|---|
| | SUPPLY AIR DUCT | |
| | TFA DUCT | |
| | EXHAUST AIR DUCT | |
| | SMOKE EXHAUST DUCT | |
| | REFRIGERANT PIPES | |
| | DRAIN PIPES | |
| | S/R GRILLE (DOWN) | |
| | S/R GRILLE (SIDE) | |
| | TFA SUPPLY DIFFUSER | |
| | EXHAUST AIR DIFFUSER | |
| | DISC VALVE | |
| | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| | VOLUME CONTROL DAMPER (VCD) | |
| | LOUVER | |
| | REPHEET | RP |
| | THERMOSTATS | T |
| | ACCESS PANEL | |
| | VRV IN DOOR UNIT | |
| | INLINE FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| R.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

CTOC Services Consultants Pvt. Ltd

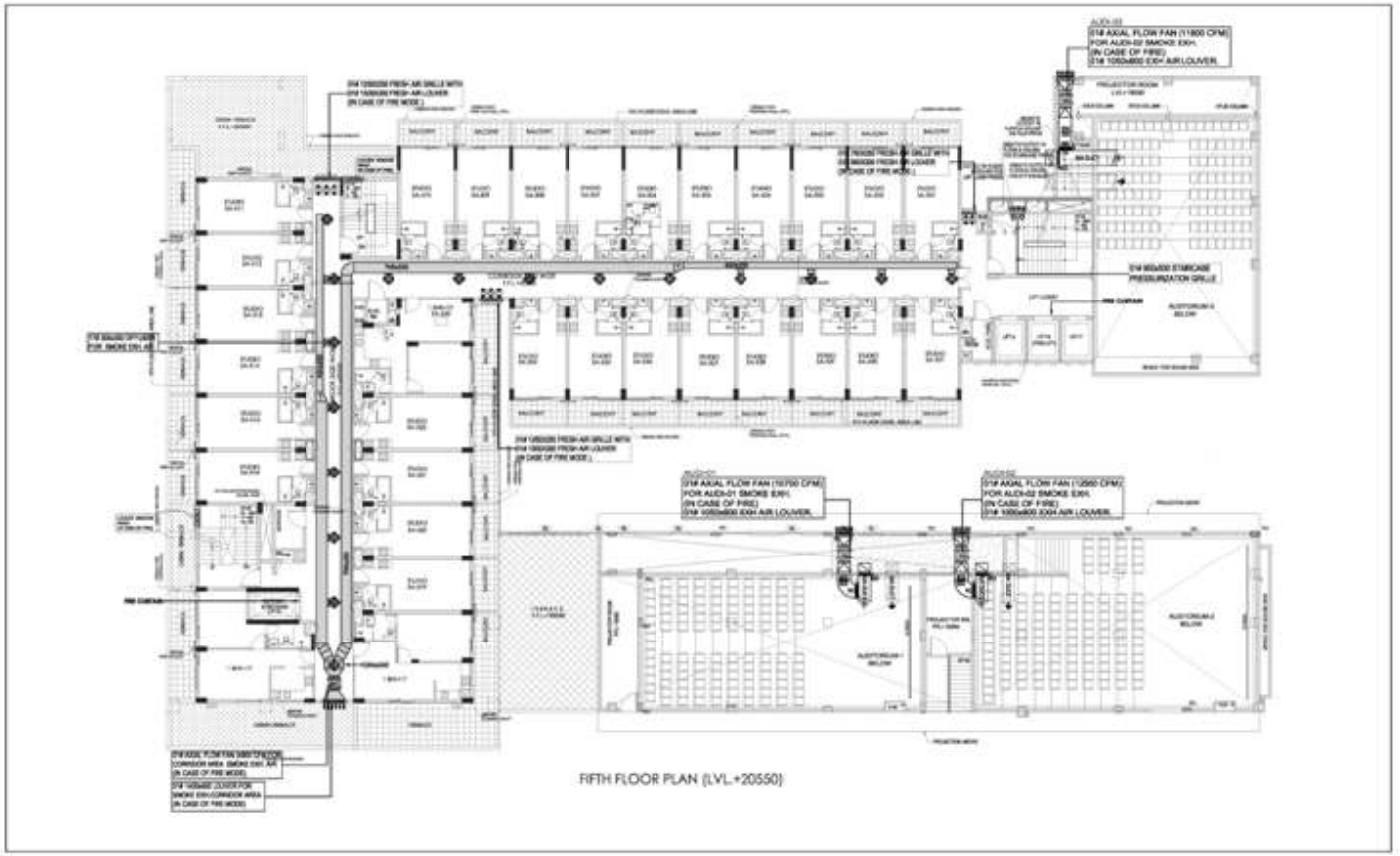
STAGE

**FIRE SUBMISSION**

Drawing Title:

**FOURTH FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| MUNESH | PG | NITIN |
| Scale | Date | Rev. No. |
| 1:100@A1 | 26.09.2017 | R0 |
| Drawing No. | | DESIGNATION |
| CTOC.MPL.15103.AC-08 | | —N |




FIFTH FLOOR PLAN (LVL.+20550)

HVAC LEGEND

| S.No. | DISCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFRIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | REFNET | BP |
| 17. | THARMOSTATE | |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
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| SI. | | |
|---|---|---|
| S.N. | DATE | DETAILS |
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

STAGE

**FIRE SUBMISSION**

DRAWING TITLE

**FIFTH FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| SIDHAT | MUKESH | AETAN |
| Scale | Date | Rev. No. |
| 1:150(MAX) | 25.05.2017 | 00 |
| Drawing No. | | |
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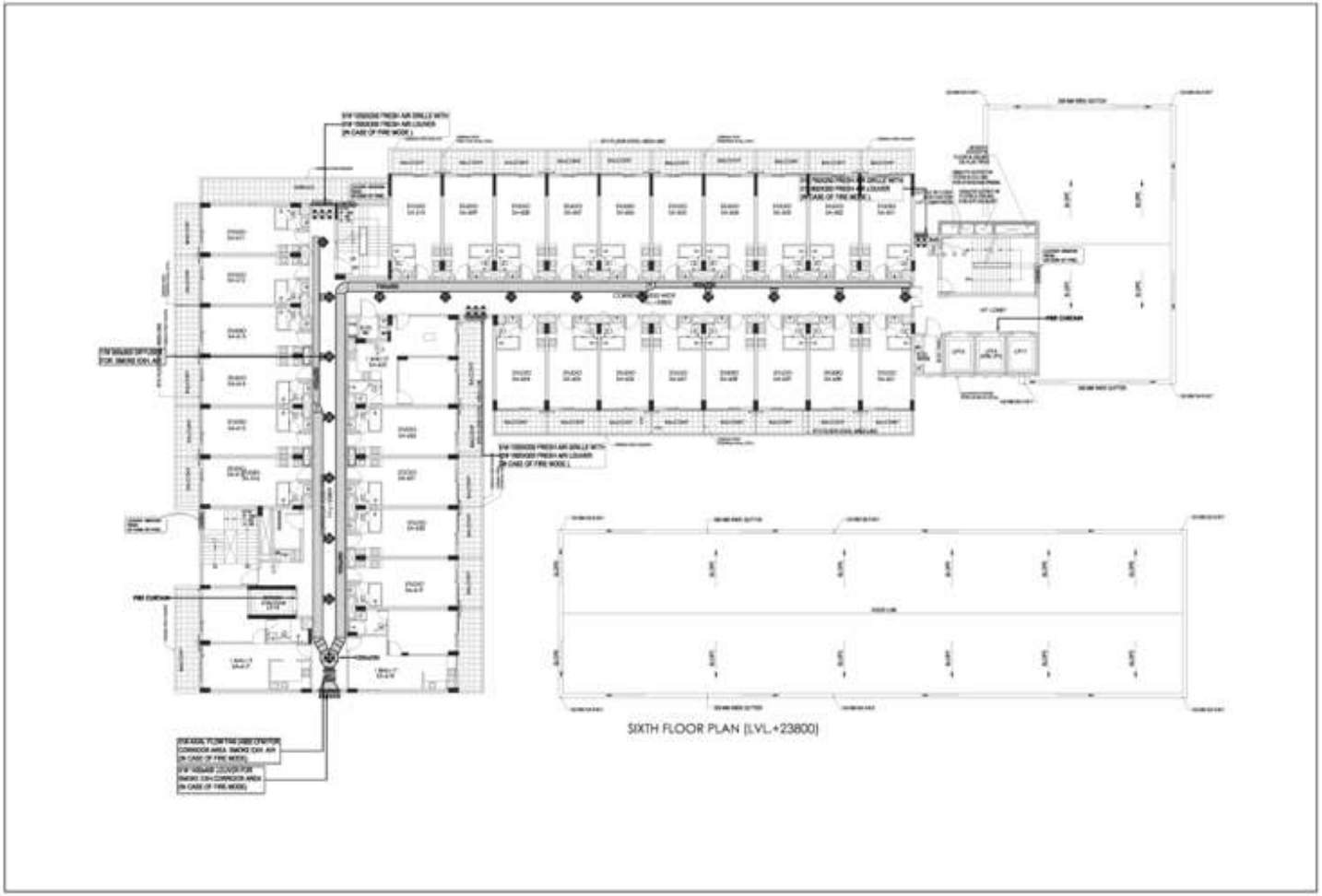


HVAC LEGEND

| S.No. | DESCRIPTION | SYMBOL |
|---|---|---|
| 01 | SUPPLY AIR DUCT | |
| 02 | TFA DUCT | |
| 03 | EXHAUST AIR DUCT | |
| 04 | SMOKE EXHAUST DUCT | |
| 05 | REFRIGERANT PIPES | |
| 06 | DRAIN PIPES | |
| 07 | S/R GRILLE (COMM) | |
| 08 | S/R GRILLE (RESI) | |
| 09 | TFA SUPPLY DIFFUSER | |
| 10 | EXHAUST AIR DIFFUSER | |
| 11 | DISC VALVE | |
| 12 | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13 | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14 | VOLUME CONTROL DAMPER (VCD) | |
| 15 | LOUVER | |
| 16 | RETRET | |
| 17 | THERMOSTATE | |
| 18 | ACCESS PANEL | |
| 19 | VRV IN DOOR UNIT | |
| 20 | INLINE FAN | |
| 21 | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUE TO | DATE |
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| SI. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

CTOC Services Consultants Pvt. Ltd.

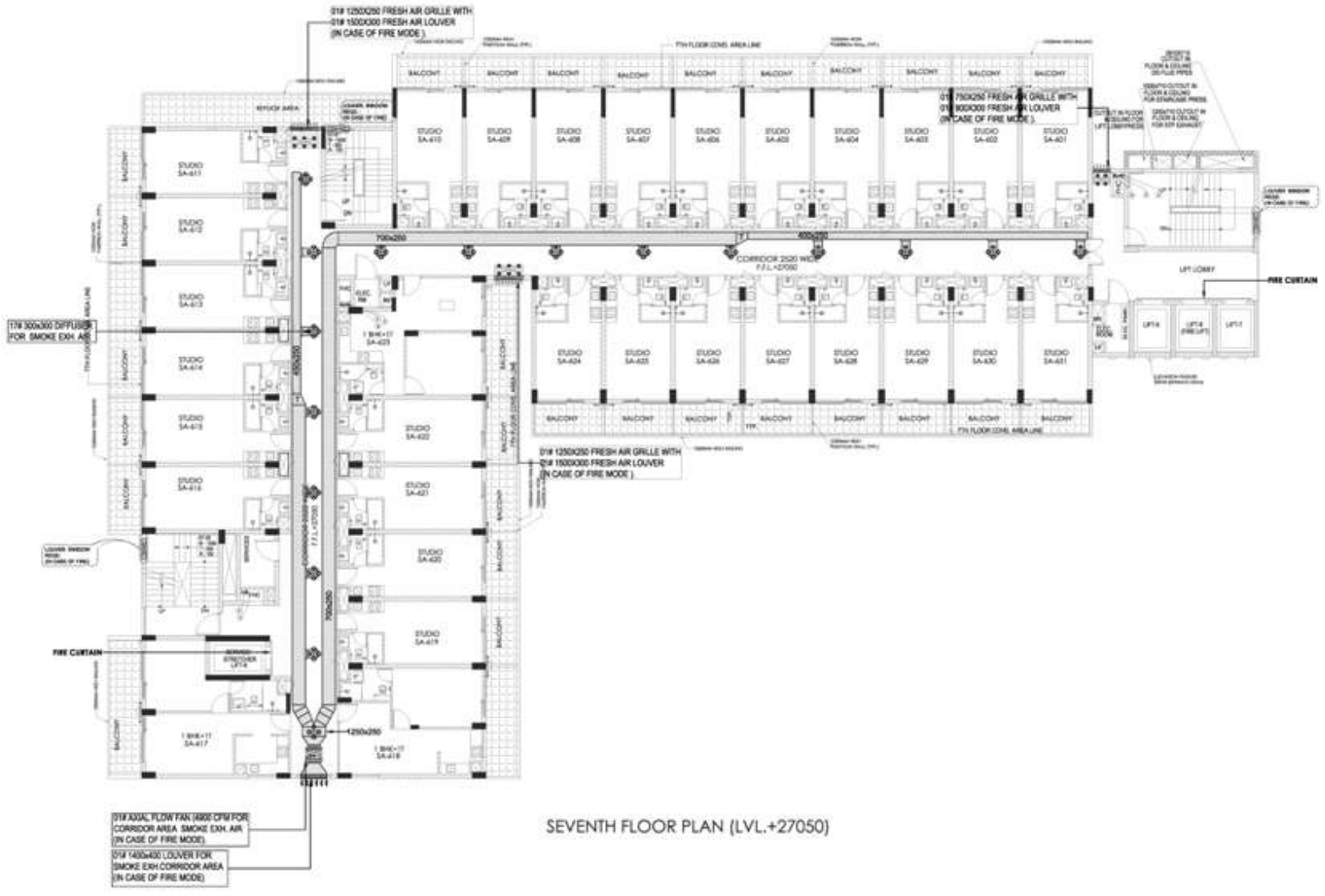
STAGE

**FIRE SUBMISSION**

DRAWING TITLE

**SIXTH FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| SEONAT | MUNEESH | AETAN |
| Scale | Date | Rev. No. |
| 1:150(MAX) | 25.09.2017 | R0 |
| Drawing No. | | |
| CTOC.SBPL.15103.AC-010 | | N |




SEVENTH FLOOR PLAN (LVL.+27050)

HVAC LEGEND

| S.No. | DISCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFERIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | REFNET | BP |
| 17. | THARMOSTATE | T |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SI. | | |
|---|---|---|
| SI. | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

CTOC Services Consultants Pvt. Ltd

STAGE

FIRE SUBMISSION

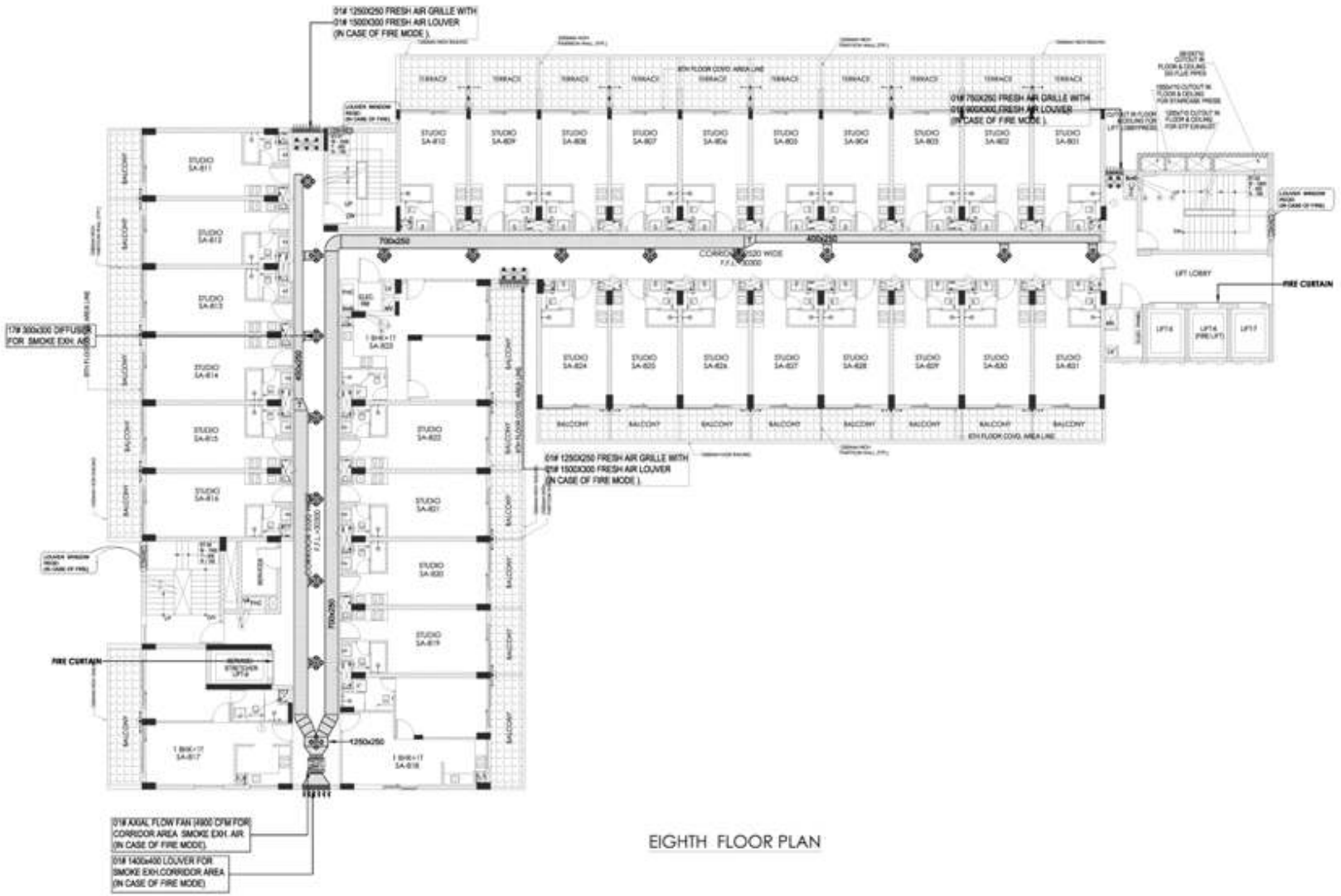
DRAWING TITLE

SEVENTH FLOOR PLAN
(HVAC LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| SEONT | MUKESH | NITIN |
| Scale | Date | Rev. No. |
| 1:100(MAJ) | 25.05.2017 | 00 |

Drawing No. CTOC.SRPL.15103.AC-011

SHEET SIZE: A1




EIGHTH FLOOR PLAN

HVAC LEGEND

| S.No. | DISCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFRIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | REF NET | |
| 17. | THARMOSTATE | |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| SI. | DATE | DETAILS |
|---|---|---|
| R1 | | |

PROJECT TITLE

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C.T.O.C Services Consultants Pvt. Ltd

STAGE

FIRE SUBMISSION

DRAWING TITLE

EIGHTH FLOOR PLAN
(HVAC LAYOUT)

| Drawn | Checked | Approved |
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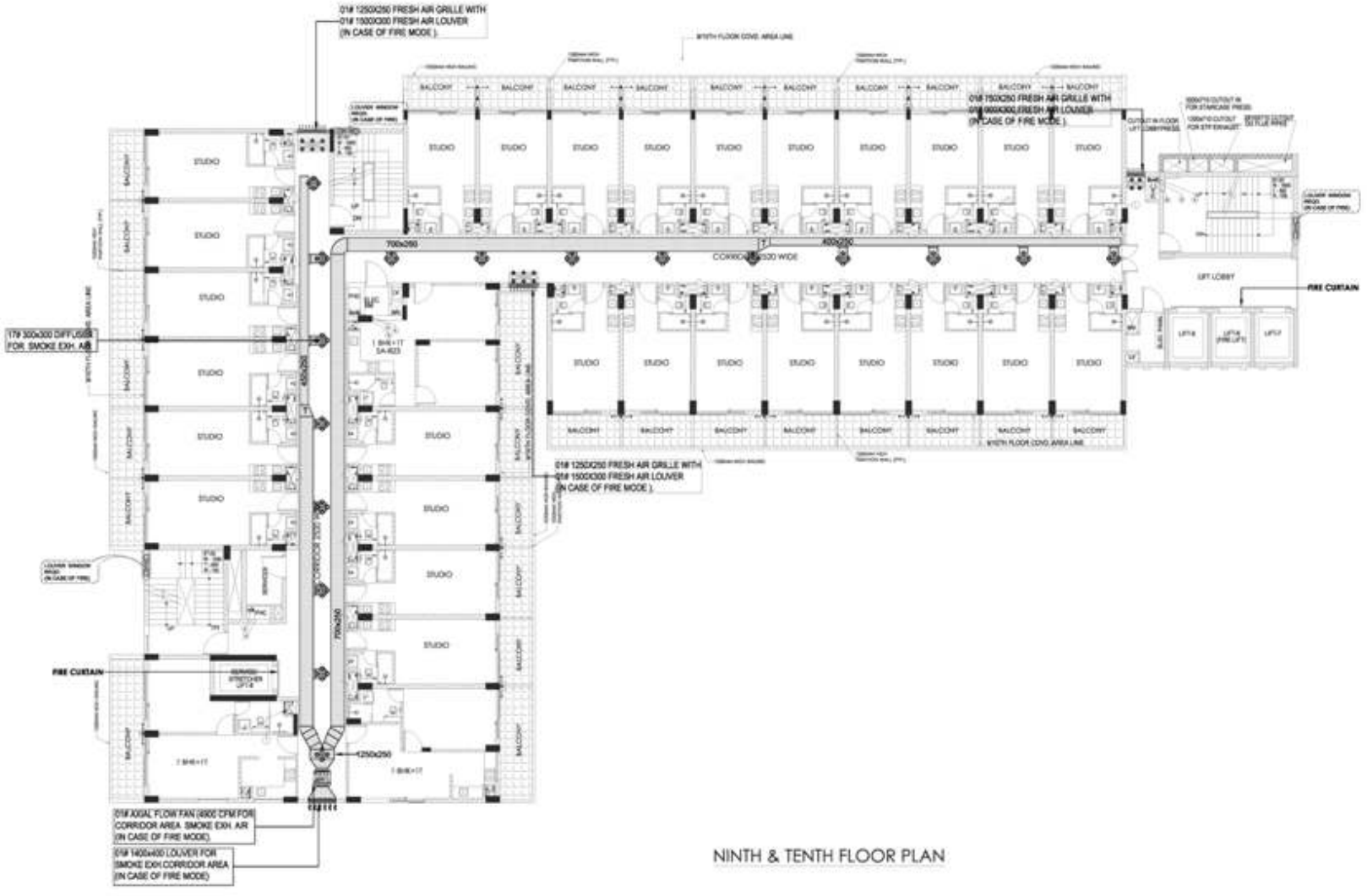
| SEENAT | MAHESH | HETAN |
| Scale | Date | Rev. No. |
| 1:100(MAX) | 25.09.2017 | R0 |

Drawing No. CTOC/SBPL.15163.AC-012

Sheet No. N




NINTH & TENTH FLOOR PLAN

HVAC LEGEND

| S.No. | DISCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFRIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | MO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | MC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | RETNET | RF |
| 17. | THARMOSTATE | |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| R01/01/018 | | |

PROJECT TITLE

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C.T.O.C Services Consultants Pvt. Ltd

STAGE

FIRE SUBMISSION

DRAWING TITLE

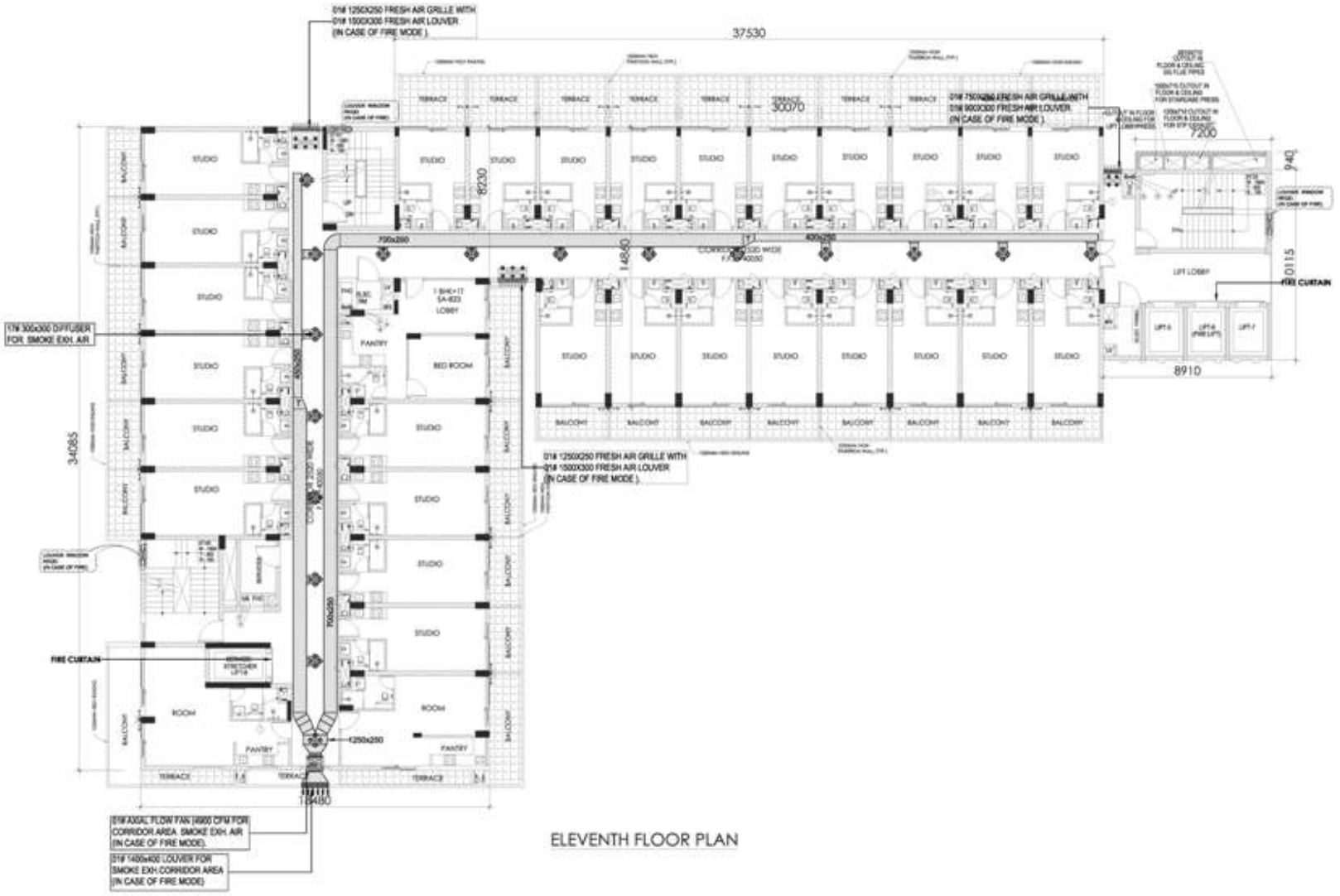
NINTH & TENTH FLOOR PLAN
(HVAC LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| SEONAT | MUKESH | NITIN |

| Scale | Date | Rev. No. |
|---|---|---|
| 1:100(MAX) | 25.09.2017 | R02 |

Drawing No. CTOC.MPL.15103.AC-013

Sheet No. —N




ELEVENTH FLOOR PLAN

HVAC LEGEND

| S.No. | DESCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFRIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DISC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | RETNET | RF |
| 17. | THERMOSTATE | T |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C.T.O.C. Services Consultants Pvt. Ltd.

STAGE

FIRE SUBMISSION

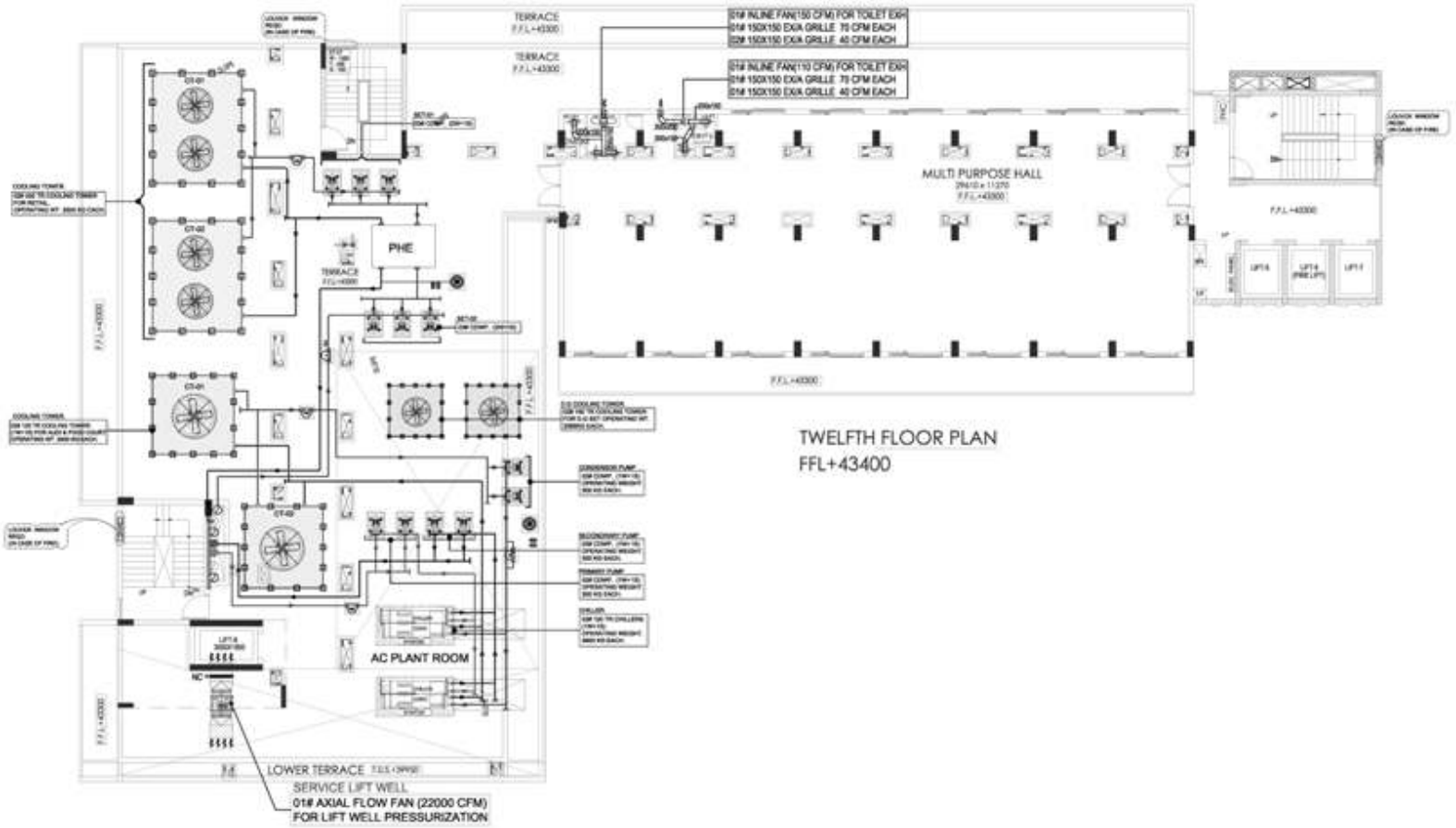
DRAWING TITLE

ELEVENTH FLOOR PLAN (HVAC LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| NISHAT | MUKESH | AETAN |
| Scale | Date | Rev. No. |
| 1:100(MAX) | 25.09.2017 | R0 |

Drawing No. C70C.SBPL.ES103.AC-01A

Rev. N




HVAC LEGEND

| S.No | DESCRIPTION | SYMBOL |
|---|---|---|
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFERIGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DIBC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | REPMET | |
| 17. | THERMOSTATS | T |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| R01 | 01/01/2018 | |

PROJECT TITLE

PROPOSED BUILDING PLAN OF COMMERCIAL COLONY MEANDER CAMP AT PATNA DISTRICT NO. 01 OF MULTI STORY (14 BASEMENT BUILDING TO ACCOMMODATE MEANDER CAMP) ON PATNA DISTRICT LAND BY TRIMA BUILDCON PVT. LTD.

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C.T.O.C Services Consultants Pvt. Ltd

STAGE

FIRE SUBMISSION

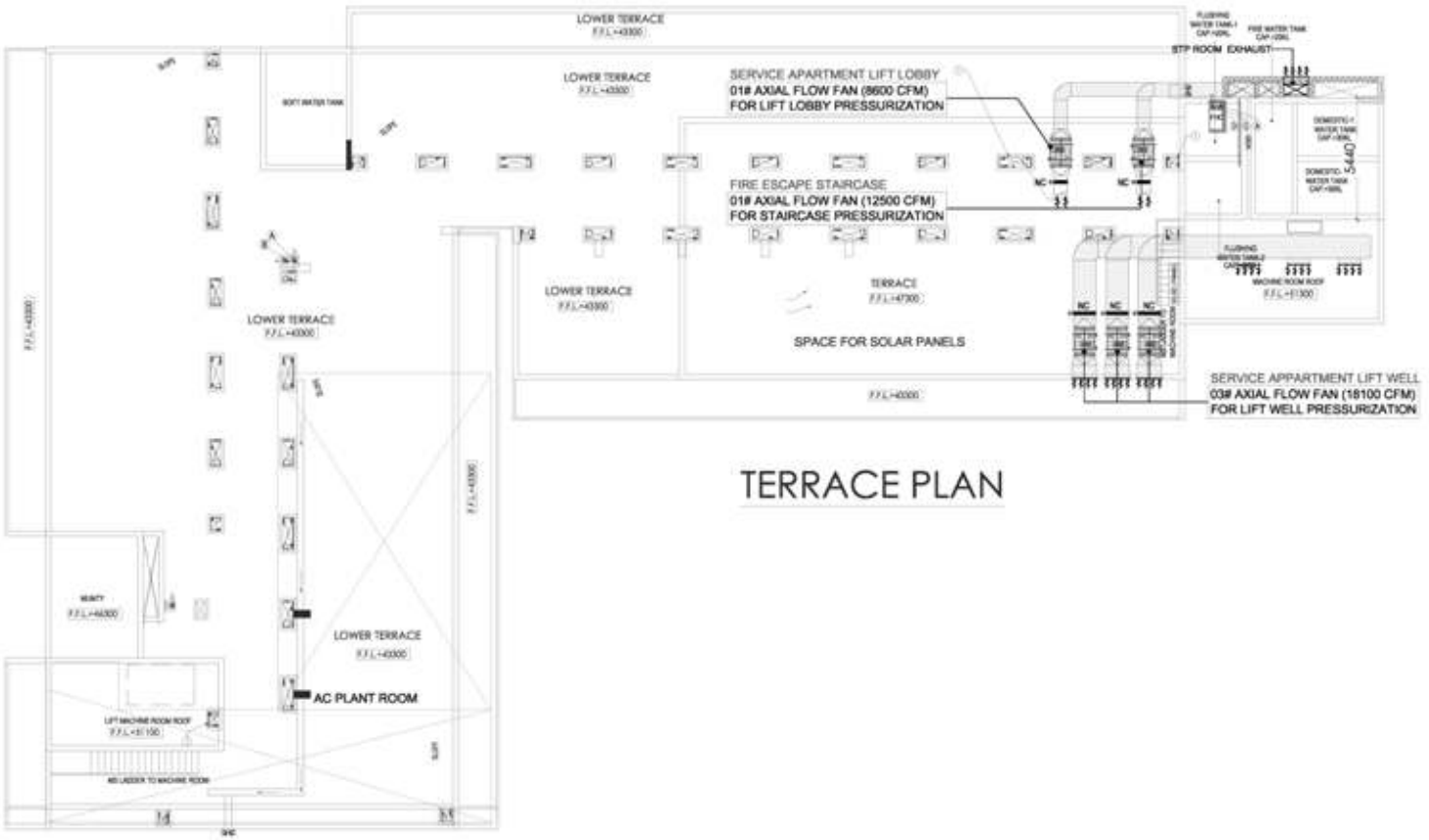
DRAWING TITLE

TWELFTH FLOOR PLAN
(HVAC LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| SEENAT | MUKESH | AETAB |
| Scale | Date | Rev. No. |
| 1:100(MAX) | 25.05.2017 | R0 |

Drawing No.: CTOC-SBRL-15103-AC-015

Dimensions: —N




# TERRACE PLAN

| HVAC LEGEND | | |
|---|---|---|
| S. No | DESCRIPTION | SYMBOL |
| 01. | SUPPLY AIR DUCT | |
| 02. | TFA DUCT | |
| 03. | EXHAUST AIR DUCT | |
| 04. | SMOKE EXHAUST DUCT | |
| 05. | REFERGERANT PIPES | |
| 06. | DRAIN PIPES | |
| 07. | S/R GRILLE (DOWN) | |
| 08. | S/R GRILLE (SIDE) | |
| 09. | TFA SUPPLY DIFFUSER | |
| 10. | EXHAUST AIR DIFFUSER | |
| 11. | DBC VALVE | |
| 12. | MOTORIZED FIRE DAMPER (NORMAL OPEN) | NO |
| 13. | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | NC |
| 14. | VOLUME CONTROL DAMPER (VCD) | |
| 15. | LOUVER | |
| 16. | REPMET | |
| 17. | THERMOSTATS | T |
| 18. | ACCESS PANEL | |
| 19. | VRV IN DOOR UNIT | |
| 20. | INLINE FAN | |
| 21. | AXIAL FLOW FAN | |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| | | |

| SR. | DATE | DETAILS |
|---|---|---|
| | | |

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

CTOC Services Consultants Pvt. Ltd

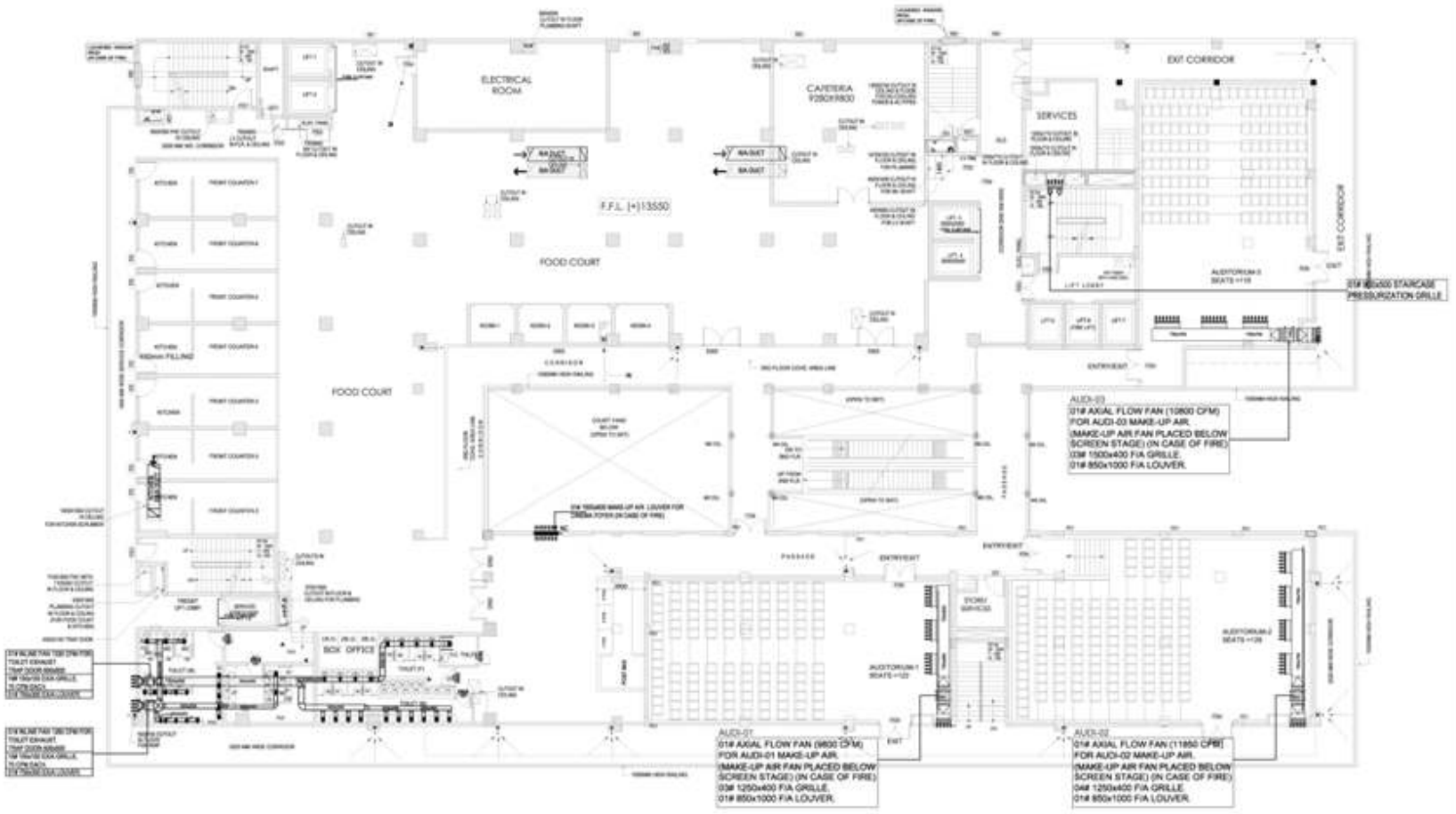
STAGE

**FIRE SUBMISSION**

DRAWING TITLE

**TERRACE FLOOR PLAN (HVAC LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| SEONAT | MUKESH | NITIN |
| Scale | Date | Rev. No. |
| 1:100@A2 | 25.05.2017 | 02 |
| Drawing No. | | |
| CTOC-SBR_15103-AC-009 | | N |




# THIRD FLOOR PLAN

HVAC LEGEND

| No. | DESCRIPTION | SYMBOL |
|---|---|---|
| 1 | SUPPLY AIR DUCT | |
| 2 | T/A DUCT | |
| 3 | EXHAUST AIR DUCT | |
| 4 | SMOKE EXHAUST DUCT | |
| 5 | REFRIGERANT PIPES | |
| 6 | DRAIN PIPES | |
| 7 | SIR GRILLE (EXHAN) | |
| 8 | SIR GRILLE (SIDE) | |
| 9 | T/A SUPPLY DIFFUSER | |
| 10 | EXHAUST AIR DIFFUSER | |
| 11 | DISC VALVE | |
| 12 | MOTORIZED FIRE DAMPER (NORMAL OPEN) | SD |
| 13 | MOTORIZED FIRE DAMPER (NORMAL CLOSE) | SD |
| 14 | VOLUME CONTROL DAMPER (VCD) | |
| 15 | LOUVER | |
| 16 | REPNET | |
| 17 | THERMOSTATS | |
| 18 | ACCESS PANEL | |
| 19 | VRV IN DOOR UNIT | |
| 20 | INLINE FAN | |

| NO. OF PRINTS | OBJECT TO | DATE |
|---|---|---|
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| | | |
| | | |
| | | |
| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design LLP

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

STAGE:

**FIRE SUBMISSION**

DRAWING TITLE:

**THIRD FLOOR PLAN (HVAC LAYOUT)**

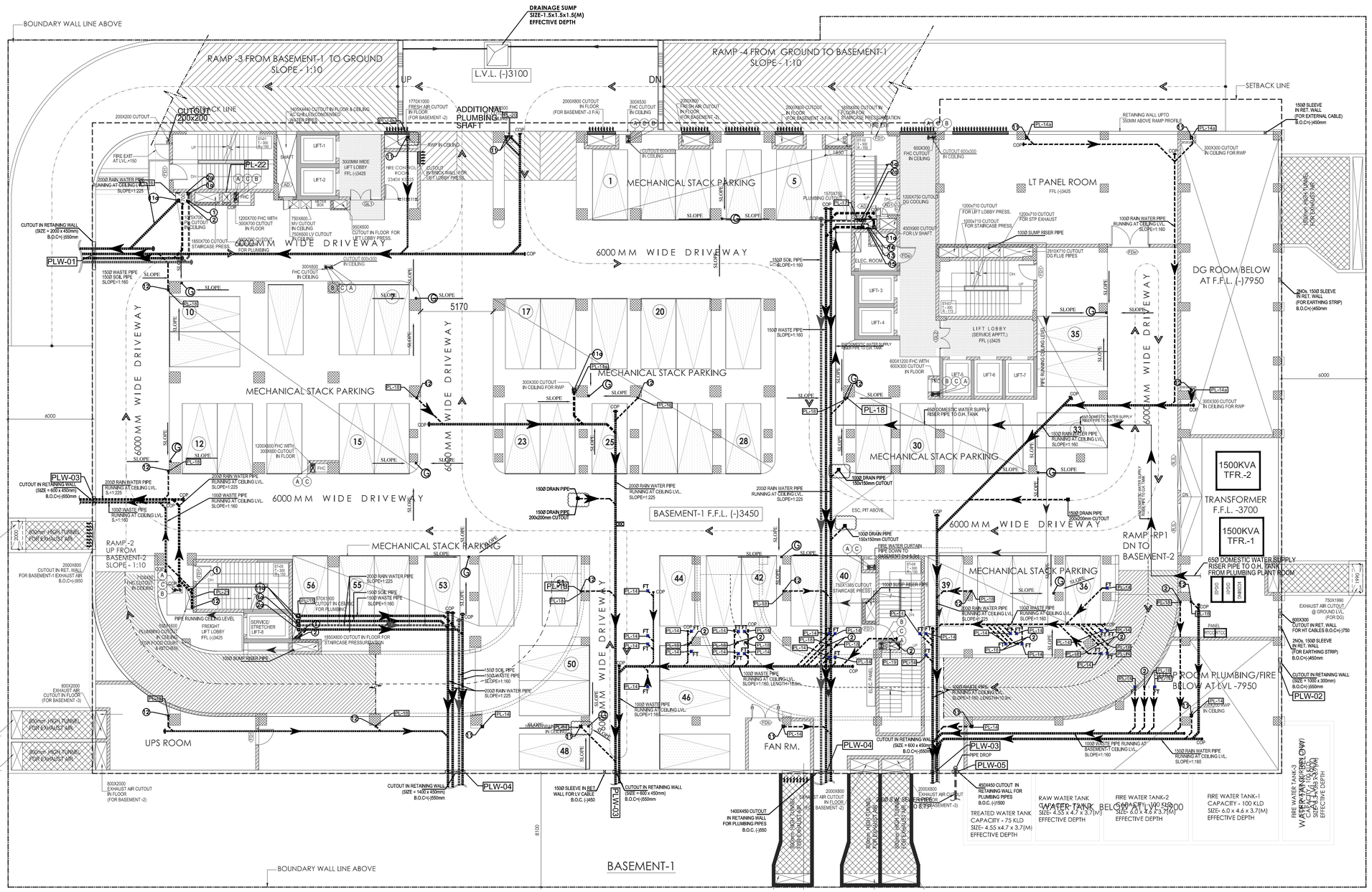
| Drawn | Checked | Approved |
|---|---|---|
| MUNEESH | PG | NITIN |
| Scale | Date | Rev. No. |
| 1:125(Min) | 25.09.2017 | R2 |

Drawing No.: CTOC.SBPL.15103.AC-07

ORIENTATION: N

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUNMETIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 11a | 210 OD uPVC RAIN WATER PIPE |
| 12 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 13 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 14 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 15 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| A | 150Ø FIRE HYDRANT RISER PIPE |
| B | 150Ø SPRINKLER RISER PIPE |
| C | 80Ø SPRINKLER DRAIN PIPE |
| D | 150Ø SPRINKLER MAKE UP PIPE |
| G | 110(OD) BASEMENT DRAINAGE PIPE |
| FT | FLOOR TRAP 110X110mm (uPVC SWR 'P' TRAP) WITH S.S GRATING |
| FD | FLOOR DRAIN (110X63mm) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 50X50MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| | | |

| S.N. | DATE | DETAILS |
|---|---|---|
| R1 | 09.06.2017 | REVISE AS PER NEW ARCH. |
| R0 | 26.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE:
REVISED BUILDING PLAN OF COMMERCIAL COLONY MEASURING 2.893 ACRES (LICENSE NO. 34 OF 2012 DATED 15-4-2012) IN SECTOR 70, GURGAON MANESAR URBAN COMPLEX BEING DEVELOPED BY SHINE BUILDCON PVT. LTD.


ARCHITECTS:
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MEP CONSULTANTS:
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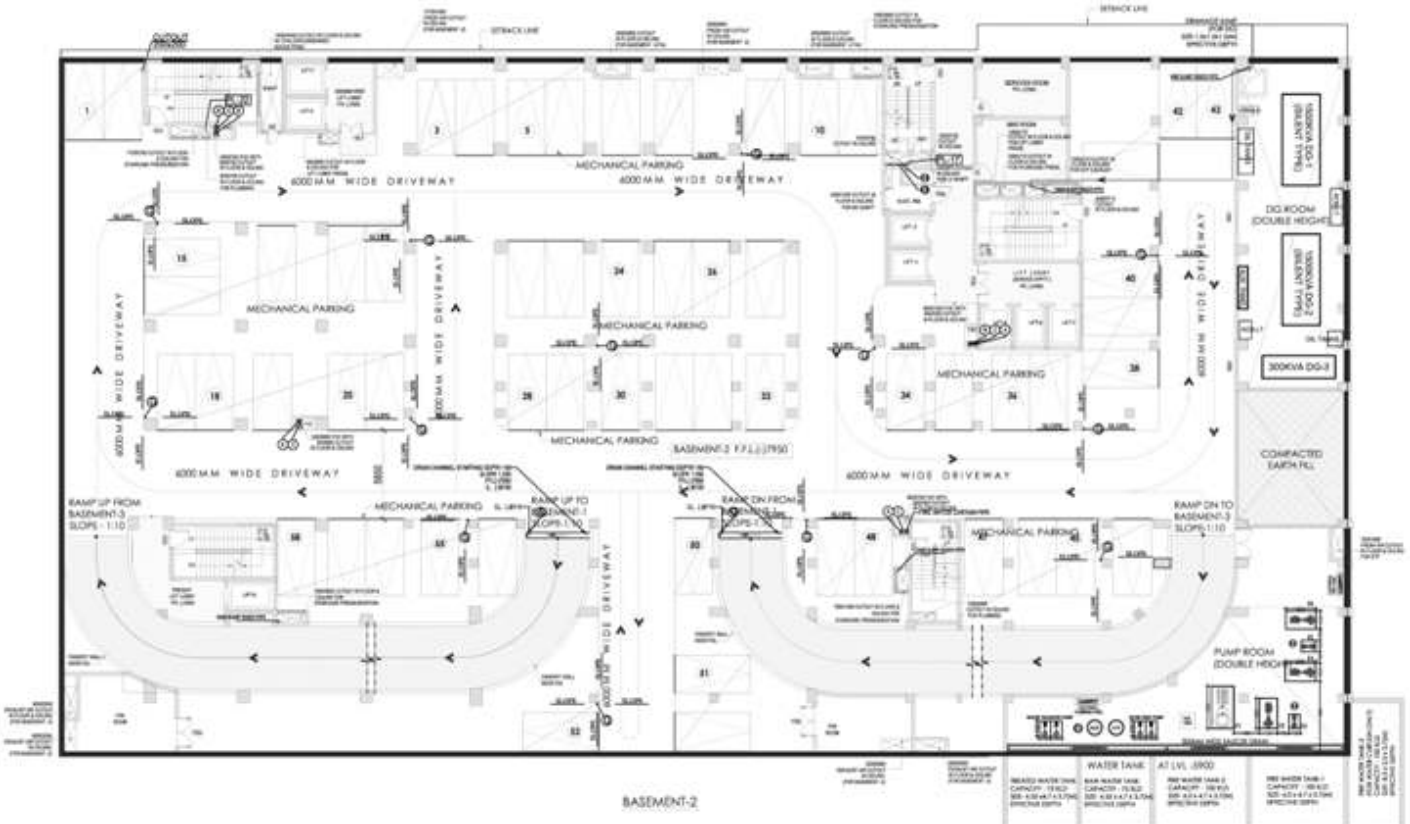
Tel.: 41618888, 41618866
E-mail: ctocinfo@ctocconsultants.com


STAGE:
**MUNICIPAL SUBMISSION**

DRAWING TITLE:
**BASEMENT-1 (PLUMBING LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | AMAN | M.H. |
| Scale | Date | Rev. No. |
| 1:150@A1 | 09.06.2017 | R1 |
| Drawing No. | | ORIENTATION: |
| PL-03 | | N |




| PLUMBING LEGEND | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H. TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 300 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 11a | 110 OD uPVC RAIN WATER PIPE |
| 12 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 13 | DOMESTIC WATER SUPPLY RISER PIPE TO CHT |
| 14 | FLUSHING WATER SUPPLY RISER PIPE TO CHT |
| 15 | SOFT WATER SUPPLY RISER PIPE TO CHT |
| 16 | 150Ø FIRE HYDRANT RISER PIPE |
| 17 | 150Ø SPRINKLER RISER PIPE |
| 18 | 80Ø SPRINKLER DRAIN PIPE |
| 19 | 150Ø SPRINKLER MAKE UP PIPE |
| 20 | 110(OD) BASEMENT DRAINAGE PIPE |
| FHC | FIRE HOSE CABINET |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| SR. | DATE | DETAILS |
|---|---|---|
| 01 | 09.08.2017 | REVISED AS PER NEW PLAN |
| 00 | 28.07.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

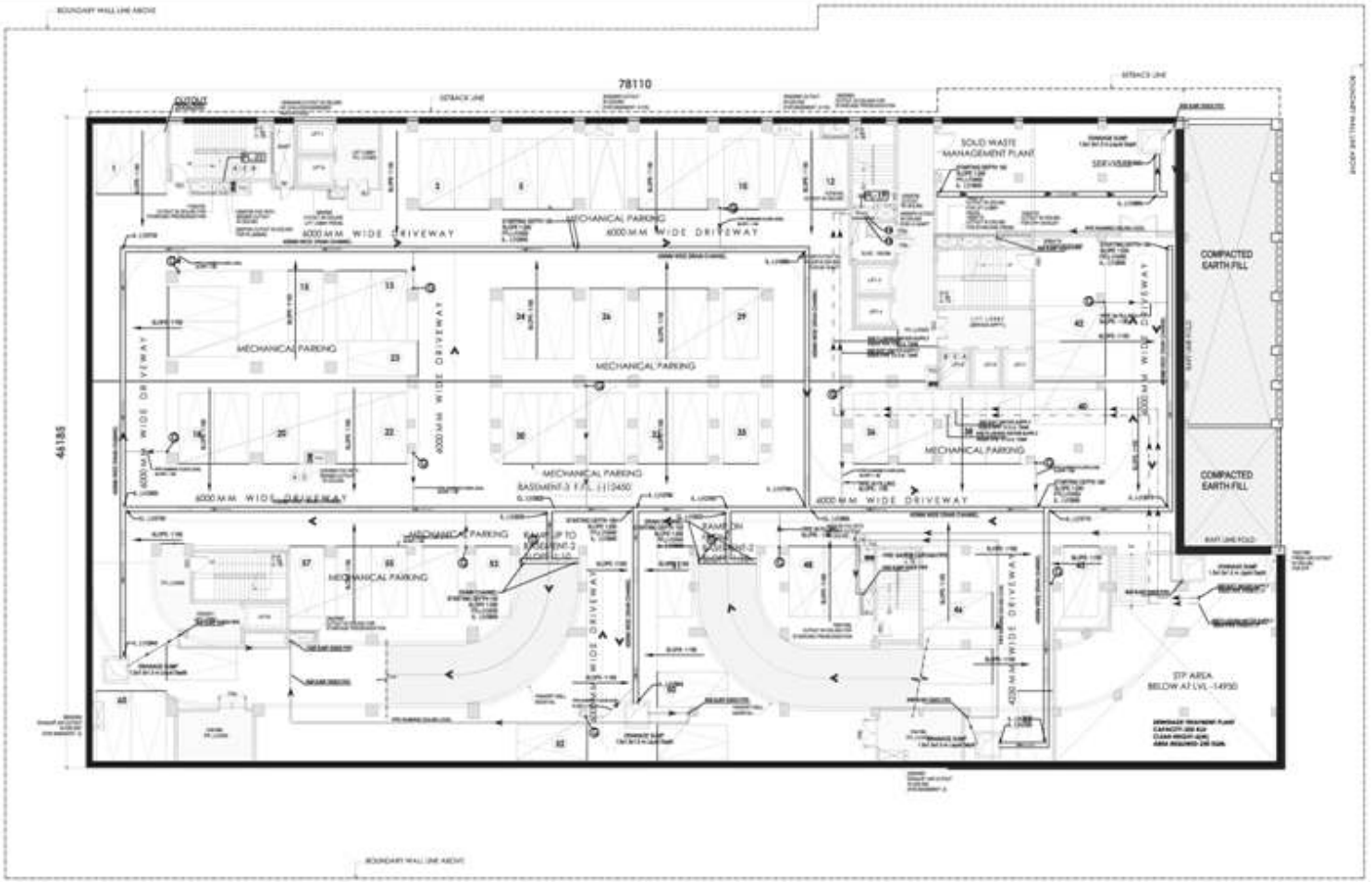
STAGE:

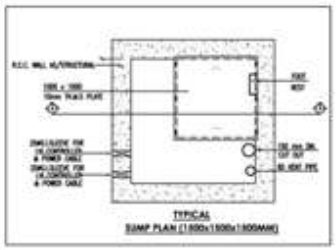
MUNICIPAL SUBMISSION

DRAWING TITLE:

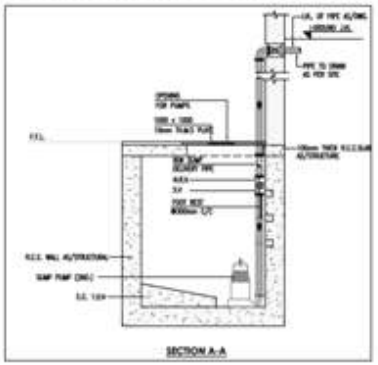
BASEMENT-2
(PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| JOPPA | JAMAN | M.U. |
| Scale | Date | Rev. No. |
| 1 : 150(MM) | 09.08.2017 | R1 |
| Drawing No. | | ORIENTATION |
| PL-02 | | N |

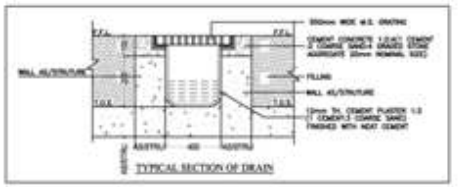


TYPICAL
SUMP PLAN (1800x1500x1000MM)



SECTION A-A



TYPICAL SECTION OF DRAIN

| PLUMBING LEGEND | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPNUMETIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM D.W.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM D.W. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 (OD) uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 110 (OD) uPVC RAIN WATER PIPE |
| 13 | 110 (OD) uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO GHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO GHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO GHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAIN LIP PIPE |
| 21 | 110(OD) BASEMENT DRAINAGE PIPE |
| FHC | FIRE HOSE CABINET |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| S.N. | DATE | DETAILS |
|---|---|---|
| 01 | 05.06.2017 | ISSUE FOR REVIEW |
| 02 | 05.06.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE:

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C T I-C Services Consultants Pvt. Ltd.

STAGE:

MUNICIPAL SUBMISSION

DRAWING TITLE:

BASEMENT-3
(PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| UPPM | HRRM | M.U. |
| Scale | Date | Rev. No. |
| 1:150(MM) | 05.06.2017 | 01 |
| Drawing No. | | ORIENTATION |
| PL-03 | | N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |


## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPNUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 (OD) uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 2 (I.D) uPVC RAIN WATER PIPE |
| 13 | 110 (OD) uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 100Ø FIRE HYDRANT RISER PIPE |
| 18 | 100Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 100Ø SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 1 (300×300mm) uPVC 300Ø 'P' TRAP WITH S.S GRATING |
| FD | FLOOR DRAIN 1 (100Ø×4mm) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 50X50MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| NO | DATE | DETAILS |
|---|---|---|
| R1 | 09.06.2017 | REVISE AS PER NEW MECH |
| R0 | 05.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

CTC Services Consultants Pvt. Ltd

STAGE

MUNICIPAL SUBMISSION

Drawing Title:

GROUND FLOOR PLAN (PLUMBING LAYOUT)

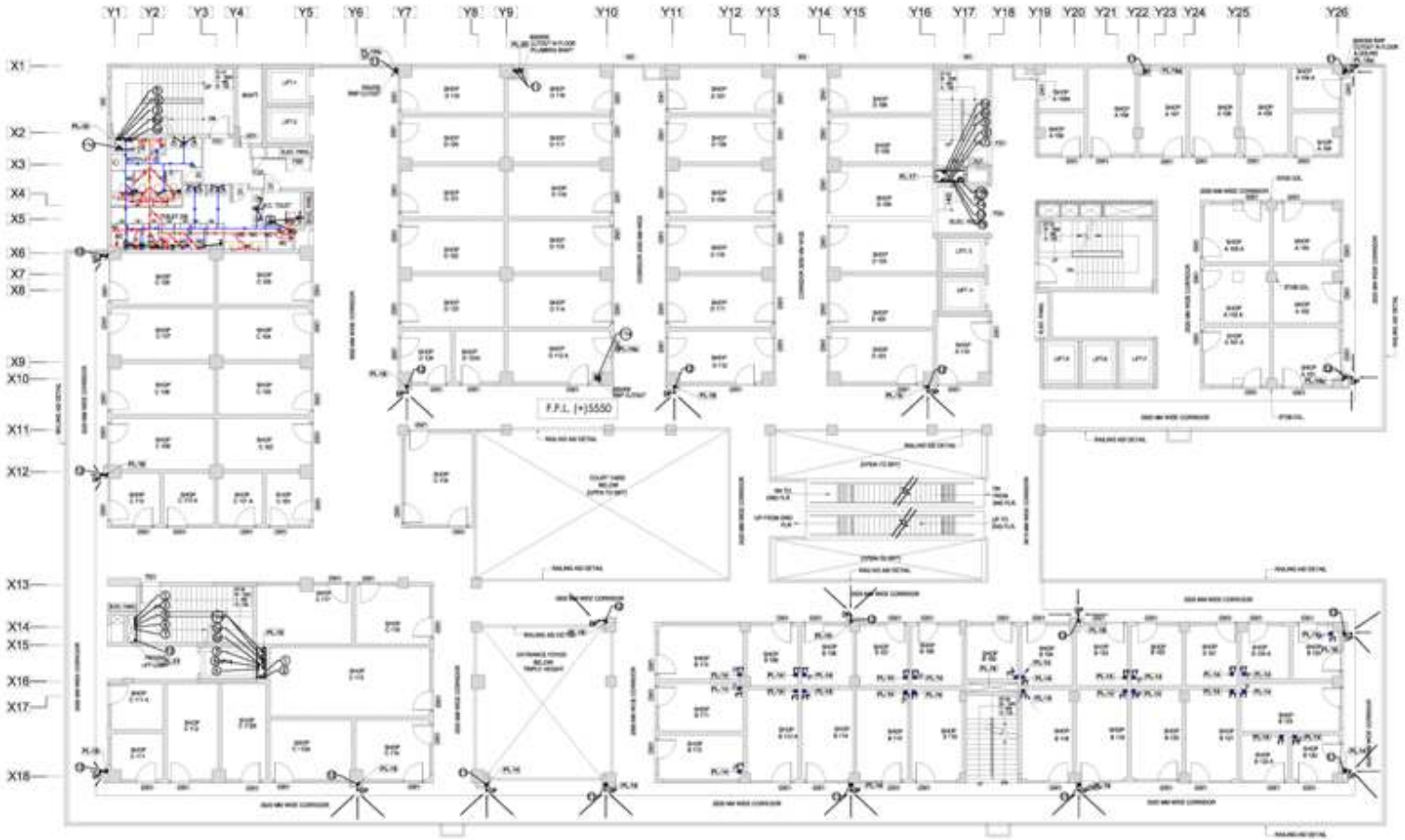
| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | ARMN | R.G. |

| Scale | Date | Rev. No. |
|---|---|---|
| 1:125(BA) | 09.06.2017 | R1 |

| Drawing No. | Orientation |
|---|---|
| PL-04 | N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H. TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 (OD) uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 2 X 75 (OD) uPVC RAIN WATER PIPE |
| 13 | 110 (OD) uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 100Ø FIRE HYDRANT RISER PIPE |
| 18 | 100Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 100Ø SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 1 (300 (Max) uPVC BARE 'P' TRAP) WITH S.S GRATING |
| FD | FLOOR DRAIN 1 (100(Min) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 50X50MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| | | |
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| | | |

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

CTC Services Consultants Pvt. Ltd.

STAGE

**MUNICIPAL SUBMISSION**

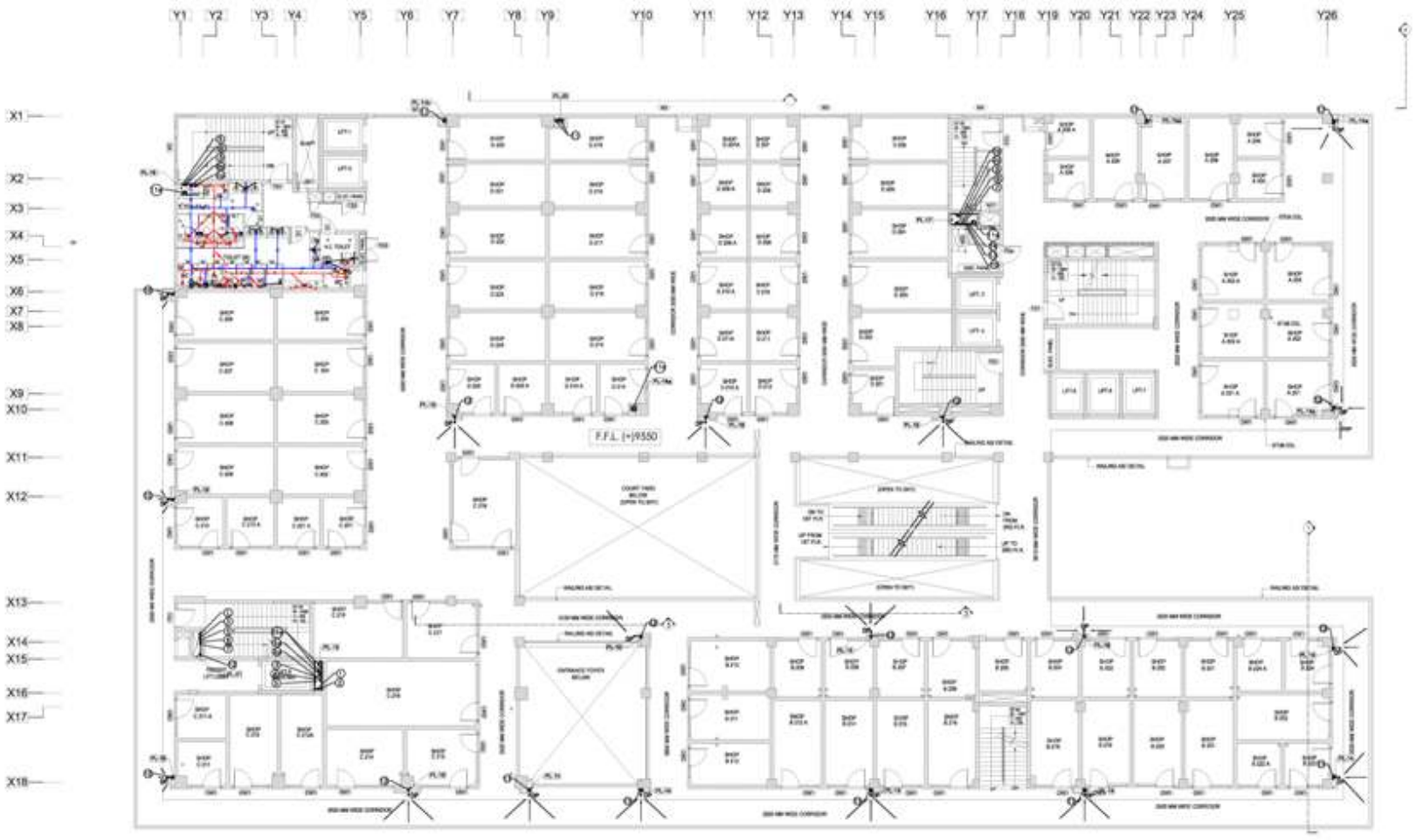
DRAWING TITLE

**FIRST FLOOR PLAN (PLUMBING LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| UPTN | ARMN | M.G. |
| Scale | Date | Rev. No. |
| 1:125@A1 | 26.09.2017 | R0 |
| Drawing No. | | ORIENTATION |
| PL-05 | | N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H. TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 (OD) uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 2 (I.D) uPVC RAIN WATER PIPE |
| 13 | 110 (OD) uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150NB FIRE HYDRANT RISER PIPE |
| 18 | 150NB SPRINKLER RISER PIPE |
| 19 | 80NB SPRINKLER DRAIN PIPE |
| 20 | 150NB SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 110(150mm) uPVC BIRD N TRAP( WITH S.S GRATING) |
| FD | FLOOR DRAIN 110(150mm) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 50X50MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| S.N | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECT:

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

STAGE

**MUNICIPAL SUBMISSION**

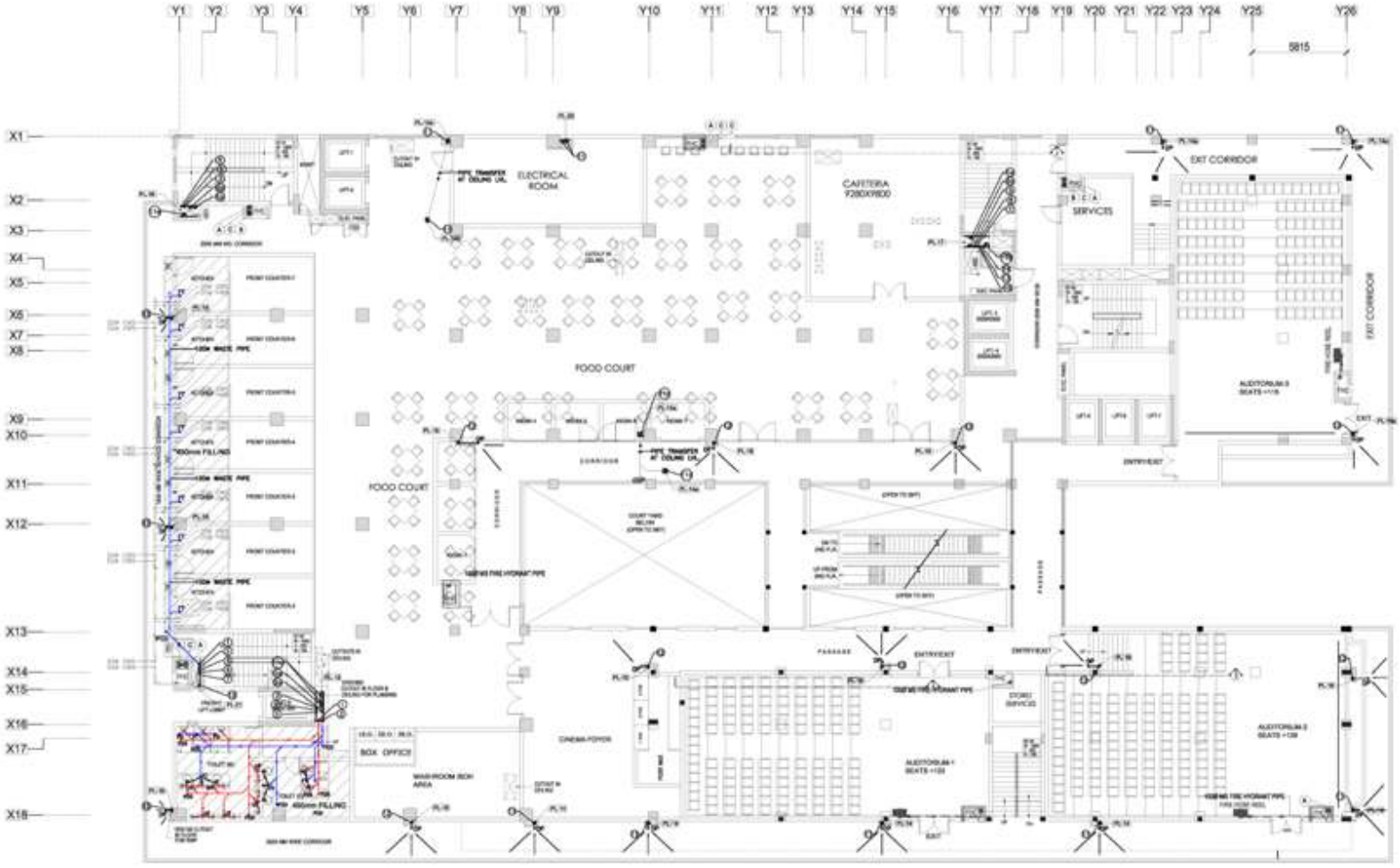
Drawing Title

**SECOND FLOOR PLAN (PLUMBING LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | ARMN | R.G |
| Scale | Date | Rev. No. |
| 1:125@A1 | 26.09.2017 | R0 |
| Drawing No. | | |
| PL-06 | | |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPNEMETIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 9a | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 210 OD uPVC RAIN WATER PIPE |
| 13 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 15 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 16 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 17 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| A | 150Ø FIRE HYDRANT RISER PIPE |
| B | 150Ø SPRINKLER RISER PIPE |
| C | 80Ø SPRINKLER DRAIN PIPE |
| D | 150Ø SPRINKLER WAVE UP PIPE |
| ○ FT | FLOOR TRAP 110x110mm SIZE WITH UP TRAPT WITH S.S GRATING |
| ● FD | FLOOR DRAIN 75 DIA(mm) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT&WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 50X50MM CUTOUT FOR WB PIPE |

| NO OF PRINTS | ISSUED TO | DATE |
|---|---|---|
| | | |

| R.N | DATE | DETAILS |
|---|---|---|
| | | |

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Llp

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

STAGE:

MUNICIPAL SUBMISSION

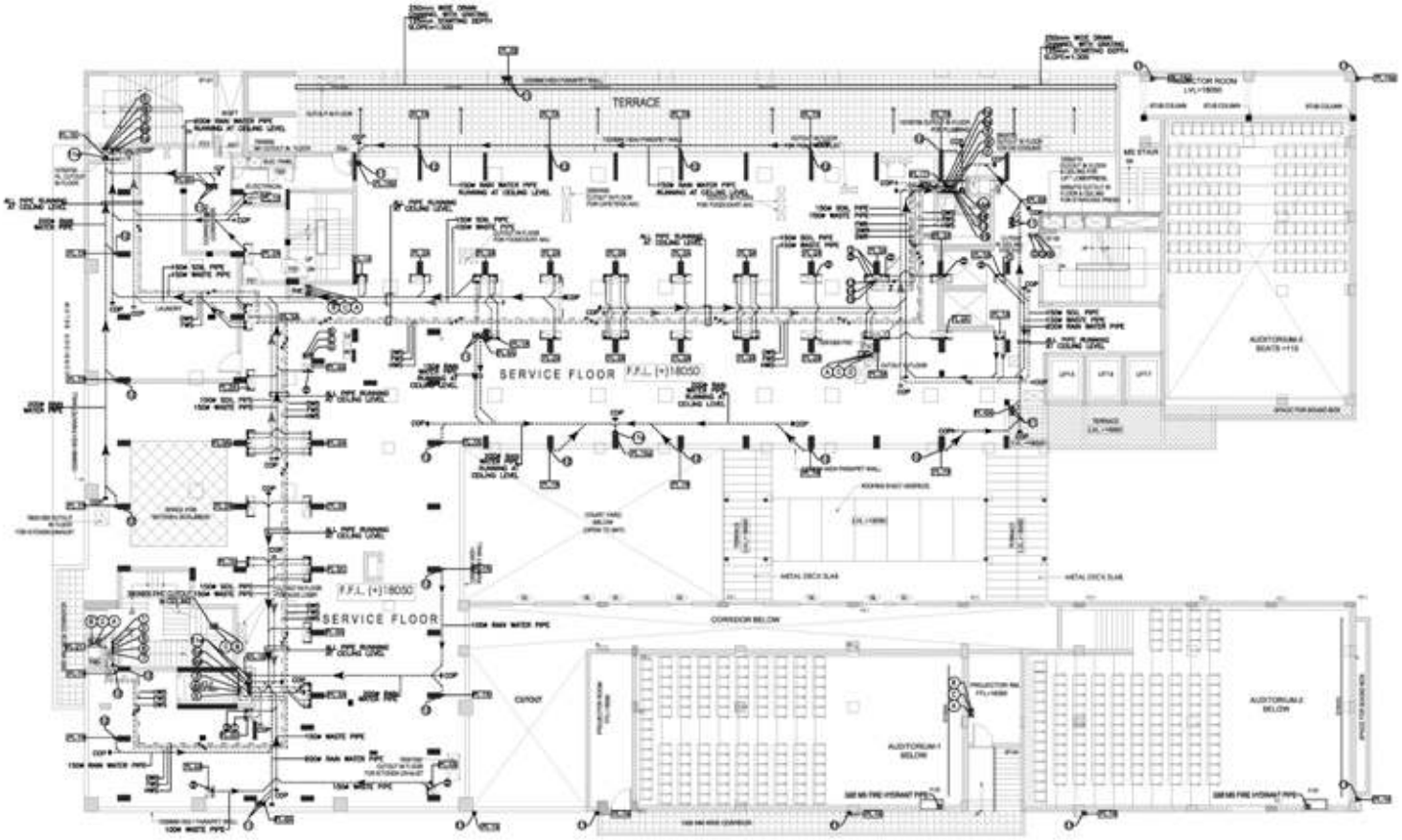
Drawing Title:

THIRD FLOOR PLAN (PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | ARMN | R.G |
| Scale | Date | Rev. No. |
| 1:120@A1 | 26.09.2017 | R0 |
| Drawing No. | | |
| PL-07 | | |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |
| FHR | FIRE HOSE REEL |




# FOURTH FLOOR PLAN

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | 20(LB) HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 250 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 DO uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 110 DO uPVC RAIN WATER PIPE |
| 13 | 110 DO uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| A | 100Ø FIRE HYDRANT RISER PIPE |
| B | 100Ø SPRINKLER RISER PIPE |
| C | 80Ø SPRINKLER DRAIN PIPE |
| D | 100Ø SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 110(W)X80(L) uPVC BARE W TRAPS WITH S.S GRATING |
| FD | FLOOR DRAIN 110(W)X80(L) uPVC BARE W TRAPS WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 50 (OD) uPVC PIPE |
| FT TO U.STACK | 110 (OD) uPVC PIPE |
| WC TO U.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 150X150MM CUTOUT FOR FD PIPE |
| | 100X100MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| | | |

| | | |
|---|---|---|
| R1 | 09.06.2017 | REVISE AS PER NEW MECH |
| R0 | 05.04.2017 | ISSUE FOR MUNICIPAL SUBMISSION |
| S.N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.I-C Services Consultants Pvt. Ltd

STAGE:

MUNICIPAL SUBMISSION

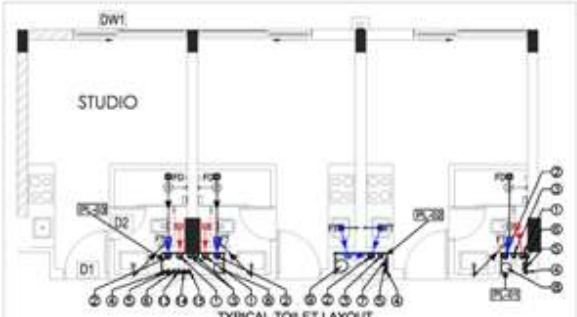
Drawing Title:

SERVICE / FOURTH FLOOR PLAN (PLUMBING LAYOUT)

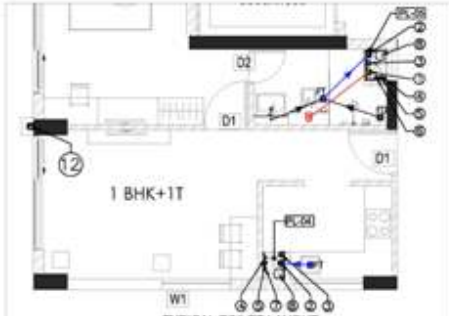
| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | ARMN | R.G |
| Scale | Date | Rev. No. |
| 1:125@A1 | 09.06.2017 | R1 |

Drawing No. PL-08

Orientation: N



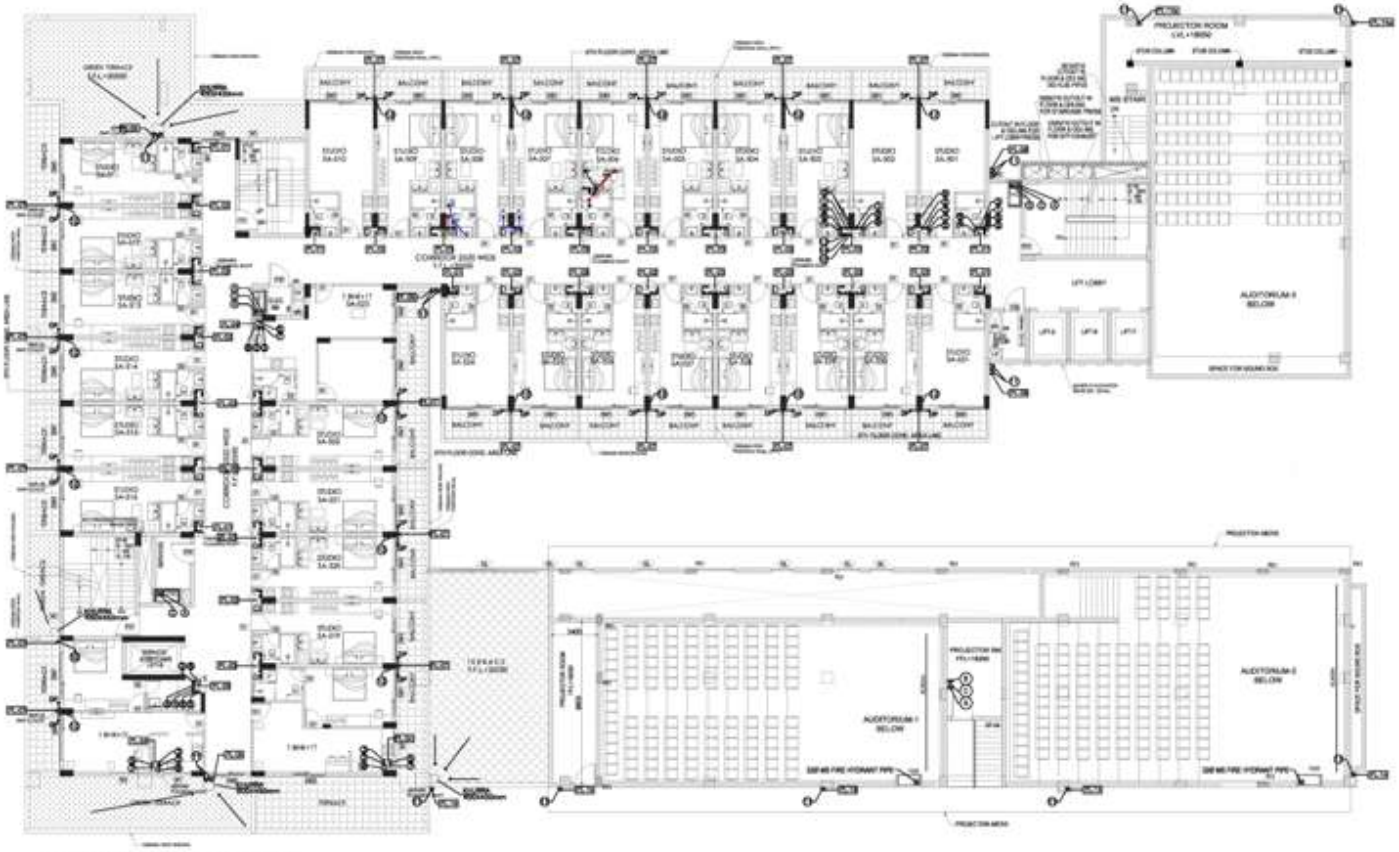

TYPICAL TOILET LAYOUT
SCALE=1:50




TYPICAL TOILET LAYOUT
SCALE=1:50

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |
| FHR | FIRE HOSE REEL |




FIFTH FLOOR PLAN (LVL.+20550)

PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI STYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 110 OD uPVC RAIN WATER PIPE |
| 13 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAIN LIP PIPE |
| FT | FLOOR TRAP (150 X 150mm) UPVC MAIN P TRAPS WITH S.S GRATING |
| FD | FLOOR DRAIN (150X150mm) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 40 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 100X100MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 80X80MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
|---|---|---|
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| | | |
|---|---|---|
| R1 | 09.06.2017 | REVISE AS PER NEW MEP |
| R0 | 05.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

| S.N. | DATE | DETAILS |
|---|---|---|

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C T O C Services Consultants Pvt. Ltd

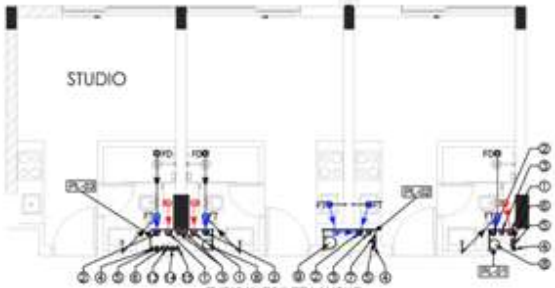
STAGE

MUNICIPAL SUBMISSION

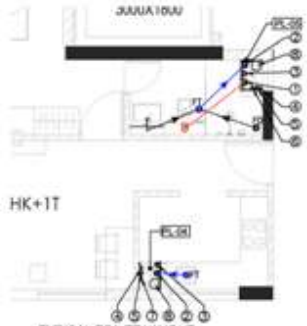
Drawing Title:

FIFTH FLOOR PLAN
(PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| UPPN | ARMN | R.G. |
| Scale | Date | Rev. No. |
| 1:125(BA) | 09.06.2017 | R1 |
| Drawing No. | | Orientation |
| PL-09 | | N |



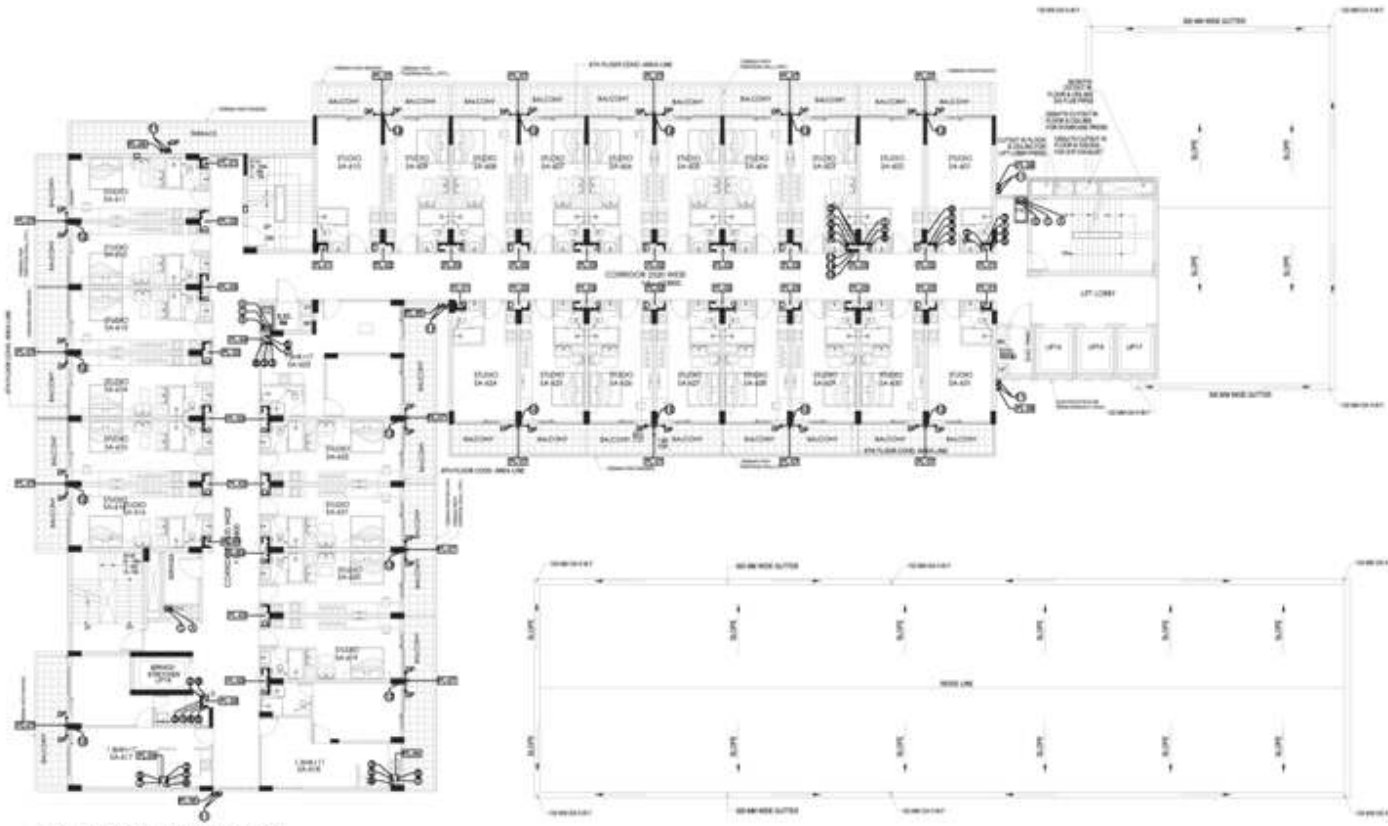

TYPICAL TOILET LAYOUT
SCALE=1:50




TYPICAL TOILET LAYOUT
SCALE=1:50

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |



SIXTH FLOOR PLAN (LVL.+23800)

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 300 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 210 OD uPVC RAIN WATER PIPE |
| 13 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 150X75mm (UPVC BASE TO TRAP) WITH S & GRATING |
| FD | FLOOR DRAIN (2 SIDEBAND INTO 2 DIRECTION) |
| MB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 63 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150Ø/50MM CUTOUT FOR FT & MC PIPE |
| | 150Ø/50MM CUTOUT FOR FD PIPE |
| | 80X50MM CUTOUT FOR MB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
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|---|---|---|
| R1 | 24.08.2016 | REVISE AS PER NEW AREA |
| R2 | 01.02.2017 | ISSUE FOR MUNICIPAL SUBMISSION |
| S.N. | DATE | DETAILS |

REVISIONS

PROJECT TITLE:

[illegible]

ARCHITECTS:

ACPL

ACPL Design LLP

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd.

STAGE:

MUNICIPAL SUBMISSION

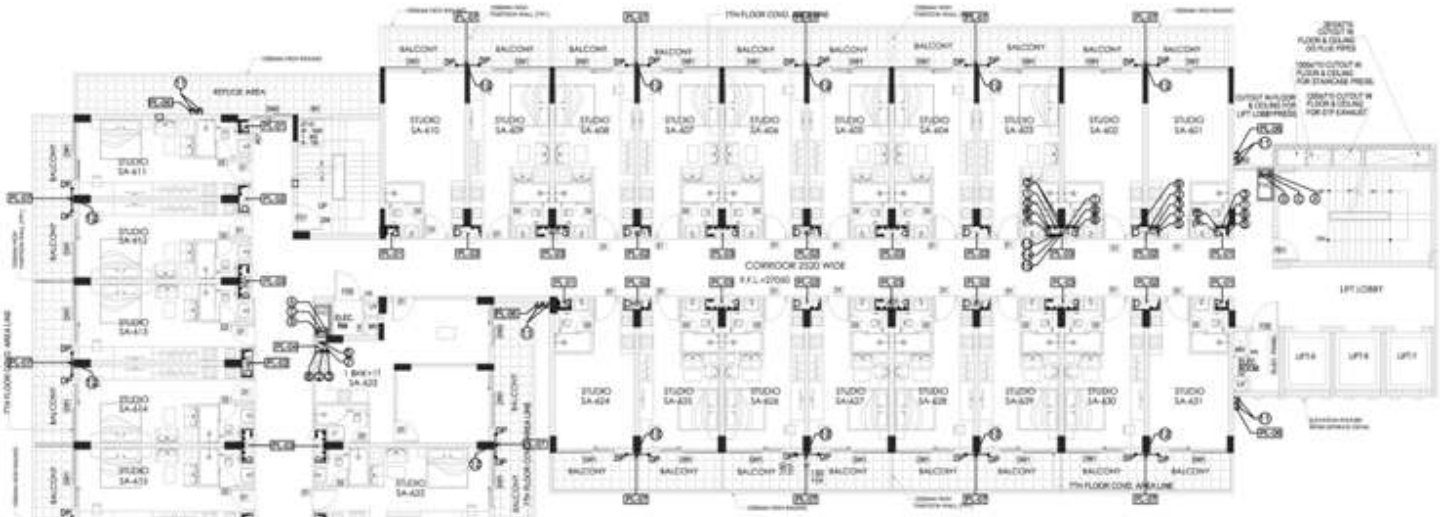
DRAWING TITLE:

SIXTH FLOOR PLAN
(PLUMBING LAYOUT)

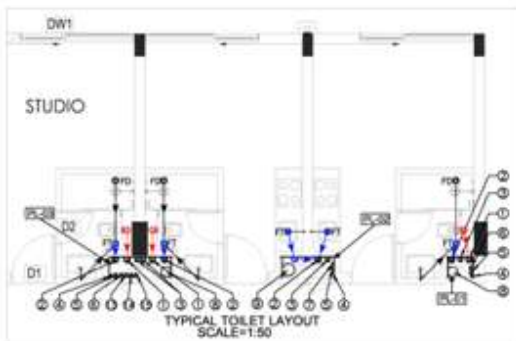
| Drawn | Checked | Approved |
|---|---|---|
| UTPA | AMAR | [illegible] |
| Scale | Date | Rev. No. |
| 1:1(Plan) | 05.08.2017 | R2 |
| Drawing No. | | DRAWING NO. |
| PL-10 | | —N |

## PLUMBING LEGEND

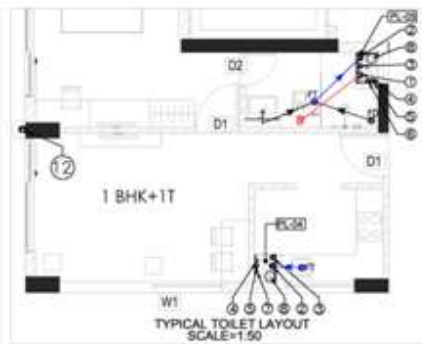
| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




SEVENTH FLOOR PLAN (LVL.+27050)




TYPICAL TOILET LAYOUT
SCALE=1:50




TYPICAL TOILET LAYOUT
SCALE=1:50

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & HOAT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & HOAT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & HOAT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & HOAT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 (OD) uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 210 (OD) uPVC RAIN WATER PIPE |
| 13 | 110 (OD) uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 100Ø FIRE HYDRANT RISER PIPE |
| 18 | 100Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 100Ø SPRINKLER DRAIN UP PIPE |
| FT | FLOOR TRAP 100X100mm (uPVC 50Ø 'P' TRAP) WITH S.S GRATING |
| FD | FLOOR DRAIN (TERRACE) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 50 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| WB TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 150X150MM CUTOUT FOR FD PIPE |
| | 300X300MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
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| NO | DATE | DETAILS |
|---|---|---|
| R1 | 04.06.2018 | REVISED AS PER NEW ARCH |
| R2 | 29.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design LLP

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd.

STAGE

MUNICIPAL SUBMISSION

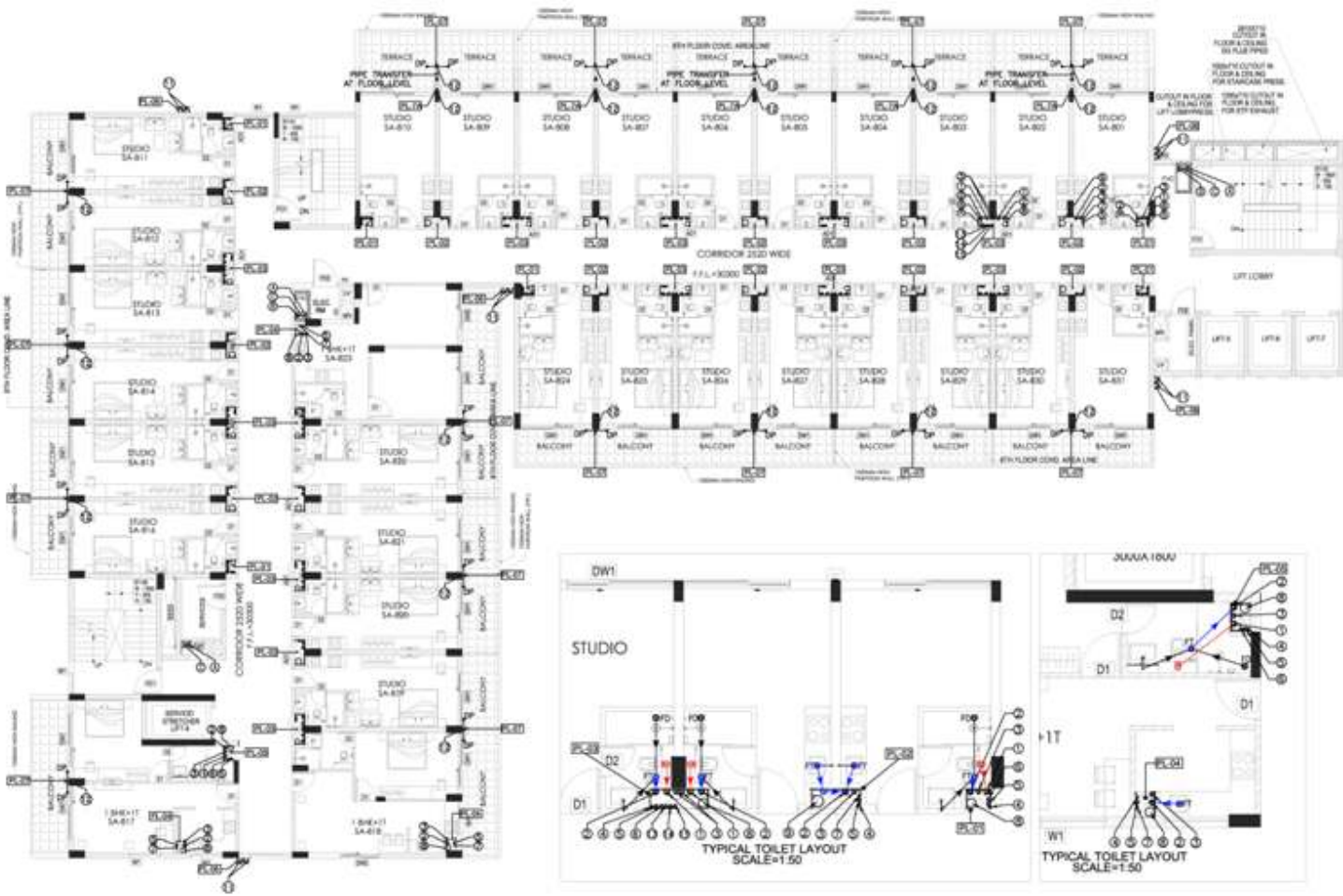
DRAWING TITLE

SEVENTH FLOOR PLAN (PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| UTPA | AMAR | [illegible] |
| Scale | Date | Rev. No. |
| 1:100(Min) | 05.06.2017 | R1 |
| Drawing No. | | ORIENTATION |
| PL-11 | | N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




EIGHTH FLOOR PLAN

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI ERYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPLANETAL SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 160 DIA |
| 11 | 160 (OD) uPVC MAIN WATER PIPE FROM TERRACE |
| 12 | 200 (OD) uPVC MAIN WATER PIPE |
| 13 | 110 (OD) uPVC MAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 65Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAKE UP PIPE |
| FT | FLOOR TRAP 150X150mm uPVC BARE 'P' TRAPS WITH S.S GRATING |
| FD | FLOOR DRAIN 115(Ø)mm WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FS TO FT | 50 (OD) uPVC PIPE |
| FT TO S.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & WC PIPE |
| | 150X150MM CUTOUT FOR FS PIPE |
| | 300X300MM CUTOUT FOR WB PIPE |

| NO. OF PRINTS | ISSUED TO | DATE |
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|---|---|---|
| R1 | 04.08.2016 | REVISED AS PER NEW AREA |
| R2 | 29.03.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

ARCHITECTS

ACPL

ACPL Design LLP

MEP CONSULTANTS

C T O C Services Consultants Pvt. Ltd.

STAGE

MUNICIPAL SUBMISSION

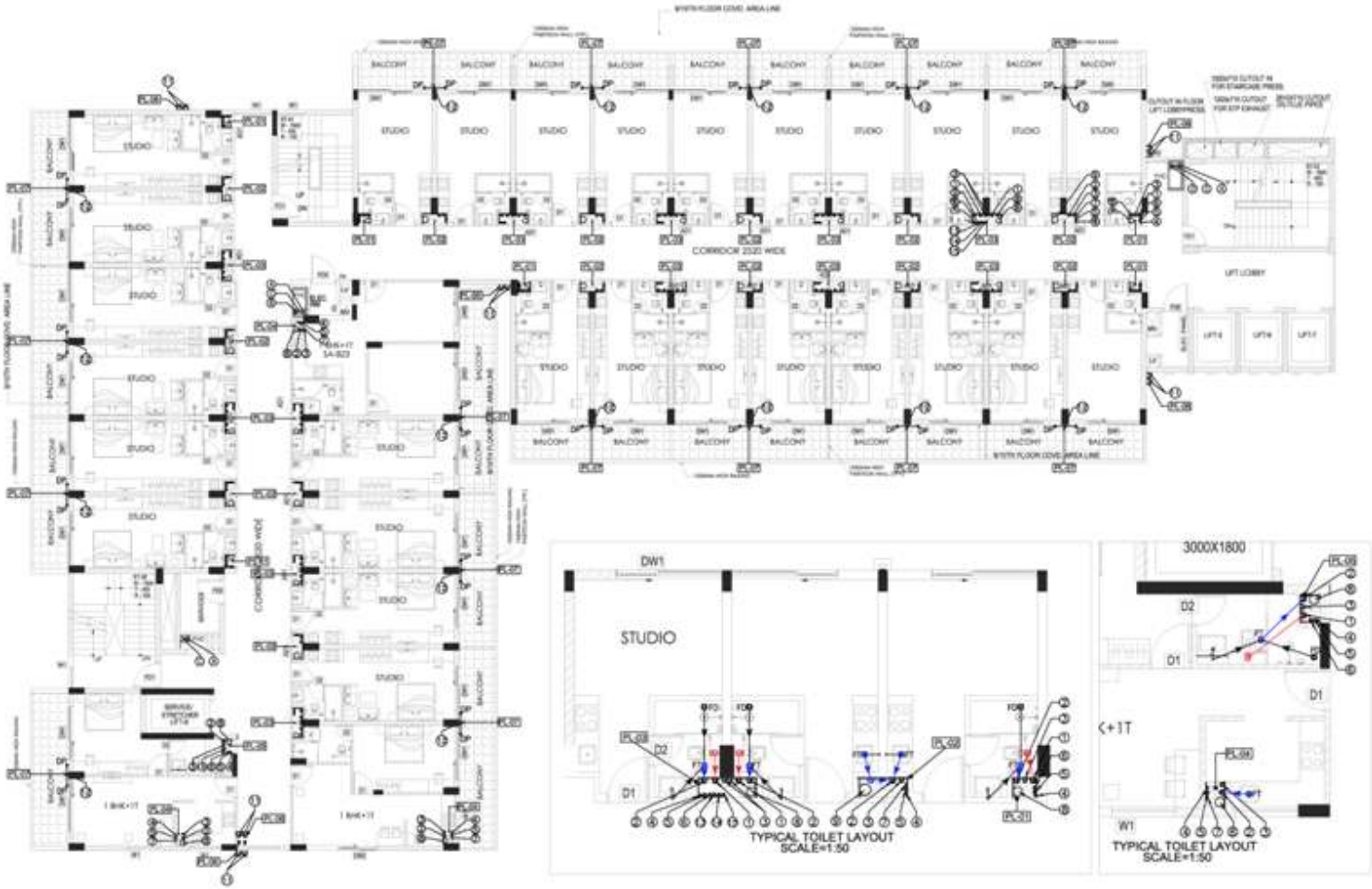
DRAWING TITLE

EIGHTH FLOOR PLAN (PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| UTPA | JAMAN | [illegible] |
| Scale | Date | Rev. No. |
| 1:100(Min) | 05.08.2017 | R2 |
| Drawing No. | | DIMENSIONS |
| PL-12 | | MM |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




NINTH & TENTH FLOOR PLAN

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI STIFFNESS PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM D.H.T.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM D.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 110 OD uPVC RAIN WATER PIPE |
| 13 | 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150MM FIRE HYDRANT RISER PIPE |
| 18 | 150MM SPRINKLER RISER PIPE |
| 19 | 50MM SPRINKLER DRAIN PIPE |
| 20 | 150MM SPRINKLER WAKE UP PIPE |
| F1 | FLOOR TRAP (150X150mm GRATE MADE OF TRAPS WITH S.S GRATING) |
| F2 | FLOOR TRAP (150X150mm GRATE MADE OF TRAPS WITH S.S GRATING) |
| ME TO FT | 40 (OD) uPVC PIPE |
| FC TO FT | 50 (OD) uPVC PIPE |
| FT TO V.STACK | 110 (OD) uPVC PIPE |
| ME TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR FT & ME PIPE |
| | 150X150MM CUTOUT FOR FC PIPE |
| | 150X150MM CUTOUT FOR ME PIPE |

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| R1 | 04.08.2017 | REVISED AS PER NEW AREA |
| R2 | 29.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

| S.N. | DATE | DETAILS |
|---|---|---|
| REVISIONS | | |

PROJECT TITLE

[illegible]

ARCHITECTS

ACPL

ACPL Design LLP

MEP CONSULTANTS

C TO C Services Consultants Pvt. Ltd.

STAGE

**MUNICIPAL SUBMISSION**

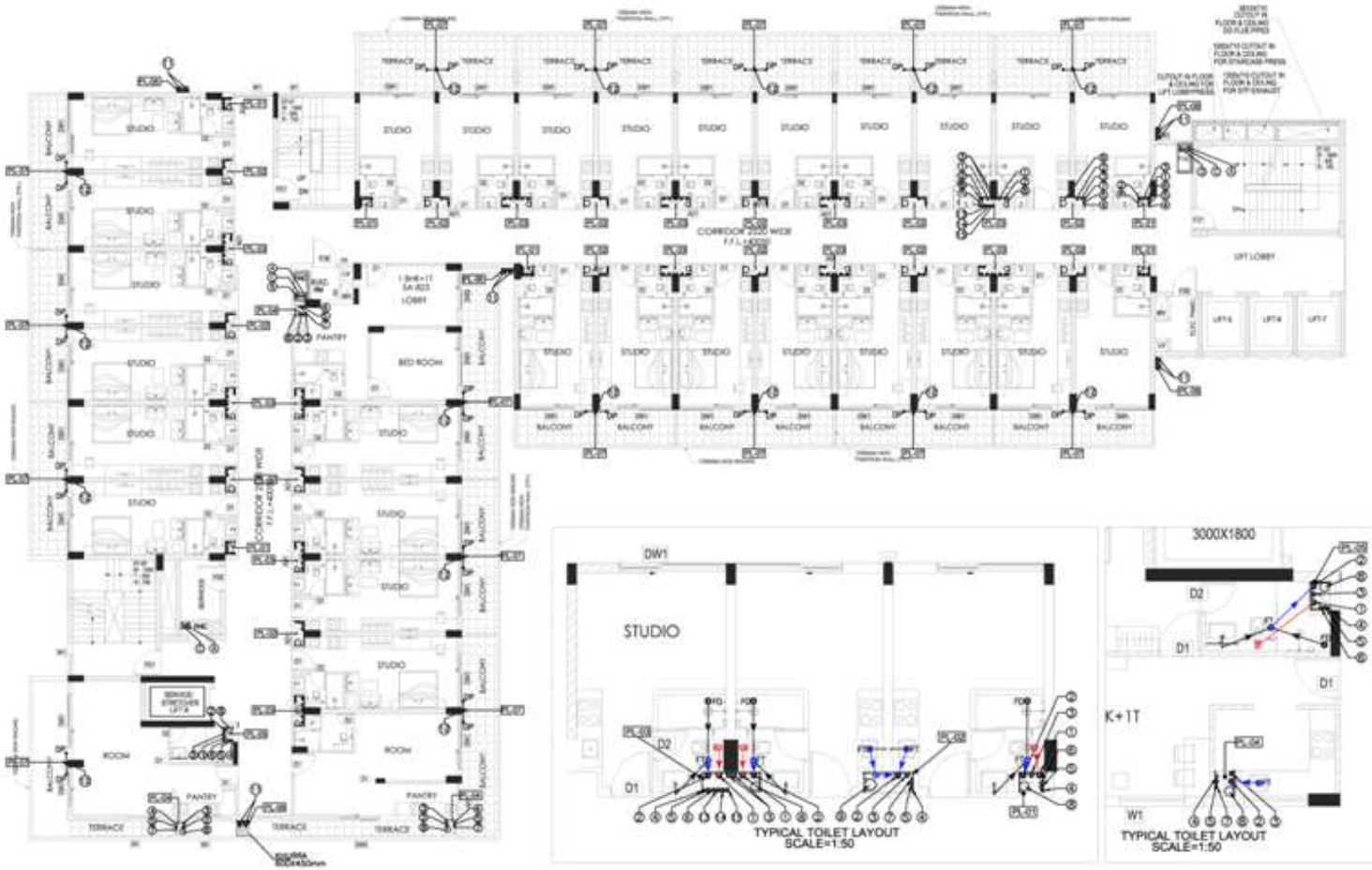
DRAWING TITLE

**NINTH & TENTH FLOOR PLAN (PLUMBING LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| UTPA | AMAR | [illegible] |
| Scale | Date | Rev. No. |
| 1:100(Min) | 05.08.2017 | R1 |
| Drawing No. | | ORIENTATION |
| PL-13 | | N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE /PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




ELEVENTH FLOOR PLAN

PLUMBING LEGEND

| | |
|---|---|
| 110 (OD) uPVC SOIL VERTICAL & VENT PIPE | |
| 160 (OD) uPVC SOIL VERTICAL & VENT PIPE | |
| 110 (OD) uPVC WASTE VERTICAL & VENT PIPE | |
| 160 (OD) uPVC WASTE VERTICAL & VENT PIPE | |
| 75 (OD) uPVC ANTI GYPROMAGIC PIPE | |
| COLD WATER SUPPLY PIPE FROM HYDROPNUMETIC SYSTEM | |
| COLD WATER SUPPLY PIPE FROM O.H TANK | |
| FLUSHING WATER SUPPLY PIPE FROM O.H. TANK | |
| SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN | |
| TOILET EXHAUST DUCT SIZE = 200 DIA | |
| KITCHEN EXHAUST DUCT SIZE = 250 DIA | |
| TOILET EXHAUST DUCT SIZE = 150 DIA | |
| 160 OD uPVC RAIN WATER PIPE FROM TERRACE | |
| 110 OD uPVC RAIN WATER PIPE | |
| 110 OD uPVC RAIN WATER PIPE FROM BALCONY / TERRACE | |
| DOMESTIC WATER SUPPLY RISER PIPE TO OHT | |
| FLUSHING WATER SUPPLY RISER PIPE TO OHT | |
| SOFT WATER SUPPLY RISER PIPE TO OHT | |
| 100Ø FIRE HYDRANT RISER PIPE | |
| 100Ø SPRINKLER RISER PIPE | |
| 80Ø SPRINKLER DRAIN PIPE | |
| 100Ø SPRINKLER MAKE UP PIPE | |
| FT | FLOOR TRAP 1100X150mm (LPCC SIZE 9" TRAP) WITH S.S GRATING |
| FD | FLOOR DRAIN (110MMØ) WITH S.S GRATING |
| WB TO FT | 40 (OD) uPVC PIPE |
| FD TO FT | 50 (OD) uPVC PIPE |
| FT TO U.STACK | 110 (OD) uPVC PIPE |
| WB TO U.STACK | 110 (OD) uPVC PIPE |
| | 100X100MM CUTOUT FOR FT & WC PIPE |
| | 100X100MM CUTOUT FOR FD PIPE |
| | 150X50MM CUTOUT FOR WB PIPE |

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| R1 | 04.08.2016 | REVISED AS PER NEW ARCH |
| R2 | 29.03.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE:

[illegible]

ARCHITECTS:

ACPL

ACPL Design LLP

MEP CONSULTANTS:

C T O C Services Consultants Pvt. Ltd.

STAGE:

MUNICIPAL SUBMISSION

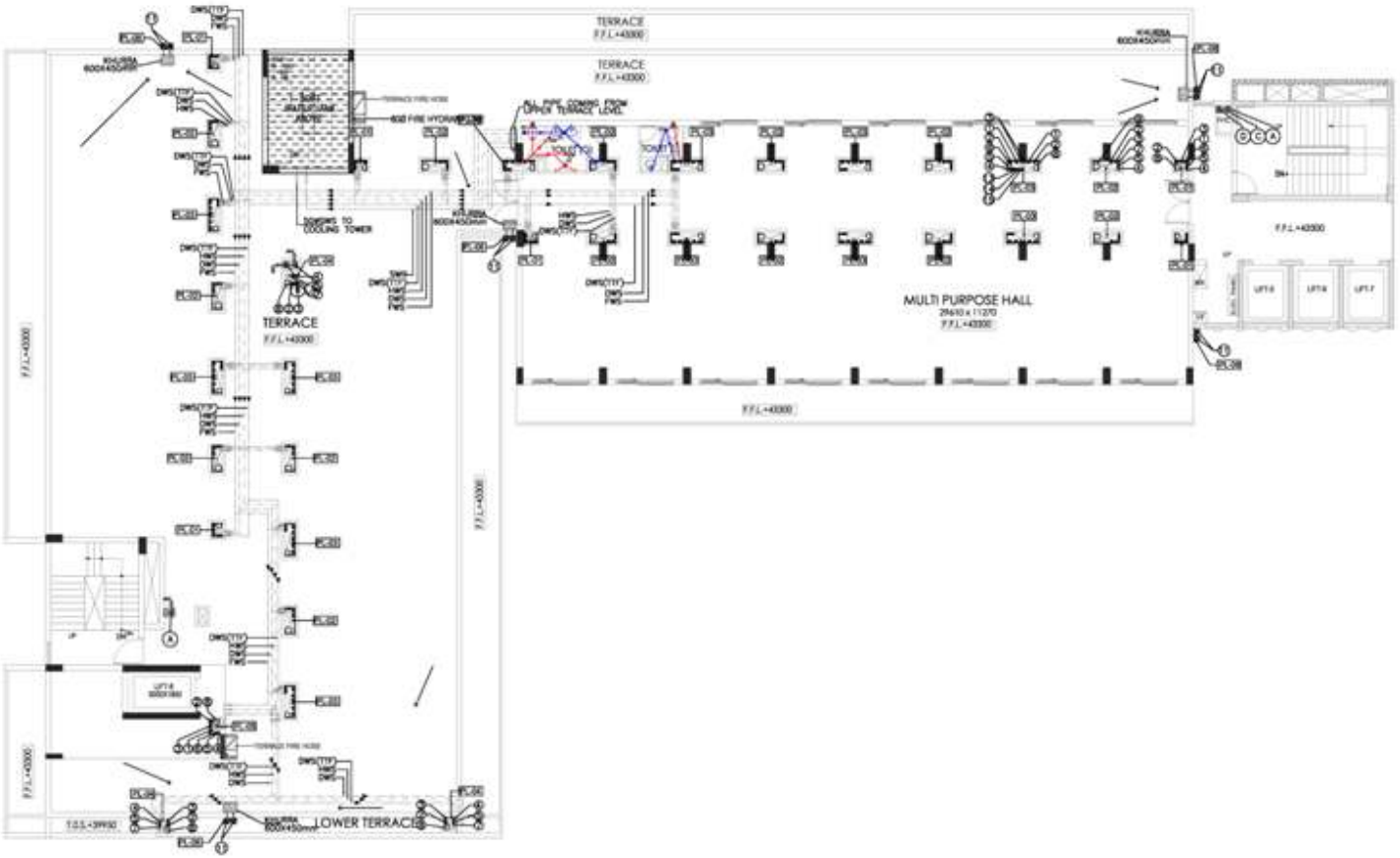
DRAWING TITLE:

ELEVENTH FLOOR PLAN (PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| VIPIN | ANAS | [illegible] |
| Scale 1:100(Min) | Date 05.08.2017 | Rev. No. R2 |
| Drawing No. PL-14 | | DIMENSIONS IN — M |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




TWELFTH FLOOR PLAN
FFL+43400

PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 1A | 160 (OD) uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 2A | 160 (OD) uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 (OD) uPVC ANTI SYPHONAGE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPNEMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 DN uPVC RAIN WATER PIPE FROM TERRACE |
| 12 | 110 DN uPVC RAIN WATER PIPE |
| 13 | 110 DN uPVC RAIN WATER PIPE FROM BALCONY / TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAKE UP PIPE |
| F1 | FLOOR TRAP 110(OD)mm LATCH, BARE 'P' TRAPS WITH S.S GRATING |
| F2 | FLOOR DRAIN 110(OD)mm WITH S.S GRATING |
| WC TO F1 | 40 (OD) uPVC PIPE |
| F2 TO F1 | 50 (OD) uPVC PIPE |
| F1 TO V.STACK | 110 (OD) uPVC PIPE |
| WC TO V.STACK | 110 (OD) uPVC PIPE |
| | 150X150MM CUTOUT FOR F1 & WC PIPE |
| | 150X150MM CUTOUT FOR F2 PIPE |
| | 300X300MM CUTOUT FOR WB PIPE |

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| 01 | 06.06.2017 | REVISE AS PER NEW MEP |
| 00 | 05.05.2017 | ISSUE FOR MUNICIPAL SUBMISSION |

REVISIONS

PROJECT TITLE

ARCHITECT:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C.T.O.C Services Consultants Pvt. Ltd

STAGE:

MUNICIPAL SUBMISSION

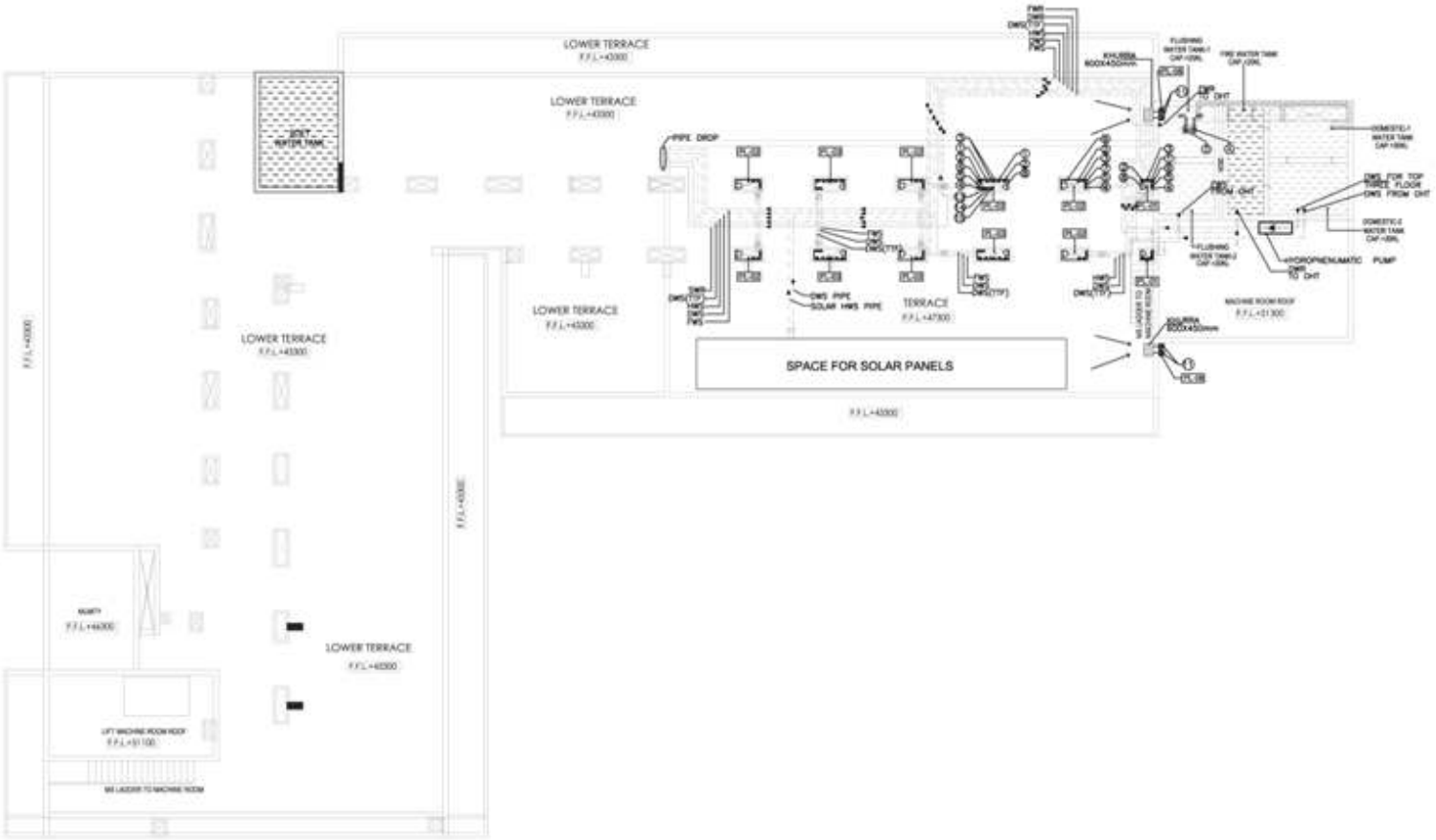
Drawing Title:

TWELFTH FLOOR PLAN
(PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| UPTN | ARMN | R.G. |
| Scale | Date | Rev. No. |
| 1:100@A1 | 06.06.2017 | R1 |
| Drawing No. | | DESIGNATION |
| PL-15 | | —N |

## PLUMBING LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| DWS | DOMESTIC WATER SUPPLY PIPE |
| DWS(TTF) | DOMESTIC WATER SUPPLY PIPE FOR TOP THREE FLOOR |
| DWR | DOMESTIC WATER RISER PIPE PIPE TO OHT |
| FWS | FLUSHING WATER SUPPLY PIPE |
| FWR | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| HWS | HOT WATER SUPPLY PIPE |
| SWS | SOFT WATER SUPPLY PIPE |
| SWR | SOFT WATER SUPPLY RISER PIPE TO OHT |
| FHC | FIRE HOSE CABINET |




# TERRACE PLAN

## PLUMBING LEGEND

| | |
|---|---|
| 1 | 110 OD uPVC SOIL VERTICAL & VENT PIPE |
| 1a | 160 OD uPVC SOIL VERTICAL & VENT PIPE |
| 2 | 110 OD uPVC WASTE VERTICAL & VENT PIPE |
| 2a | 160 OD uPVC WASTE VERTICAL & VENT PIPE |
| 3 | 75 OD uPVC ANTI STINK/SNAKE PIPE |
| 4 | COLD WATER SUPPLY PIPE FROM HYDROPNEUMATIC SYSTEM |
| 5 | COLD WATER SUPPLY PIPE FROM O.H.TANK |
| 6 | FLUSHING WATER SUPPLY PIPE FROM O.H. TANK |
| 7 | SOLAR HOT WATER SUPPLY PIPE FOR KITCHEN |
| 8 | TOILET EXHAUST DUCT SIZE = 200 DIA |
| 9 | KITCHEN EXHAUST DUCT SIZE = 200 DIA |
| 10 | TOILET EXHAUST DUCT SIZE = 150 DIA |
| 11 | 160 OD uPVC MAIN WATER PIPE FROM TERRACE |
| 12 | 210 OD uPVC MAIN WATER PIPE |
| 13 | 110 OD uPVC MAIN WATER PIPE FROM BALCONY - TERRACE |
| 14 | DOMESTIC WATER SUPPLY RISER PIPE TO OHT |
| 15 | FLUSHING WATER SUPPLY RISER PIPE TO OHT |
| 16 | SOFT WATER SUPPLY RISER PIPE TO OHT |
| 17 | 150Ø FIRE HYDRANT RISER PIPE |
| 18 | 150Ø SPRINKLER RISER PIPE |
| 19 | 80Ø SPRINKLER DRAIN PIPE |
| 20 | 150Ø SPRINKLER MAKE UP PIPE |
| P1 | FLOOR TRAP-1 (127mm LATVC BASE IP TRAP) WITH S.S GRATING |
| T1 | FLOOR DRAIN (110Ø mm) WITH S.S GRATING |
| WC TO FT | 90 OD uPVC PIPE |
| FD TO FT | 50 OD uPVC PIPE |
| FT TO V.STACK | 110 OD uPVC PIPE |
| WC TO V.STACK | 110 OD uPVC PIPE |
| | 150X150Ø CUTOUT FOR FT & WC PIPE |
| | 150X150Ø CUTOUT FOR FD PIPE |
| | 80X80Ø CUTOUT FOR DR.PIPE |

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| SN | DATE | DETAILS |
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| REVISIONS | | |

PROJECT TITLE

ARCHITECTS:

ACPL

ACPL Design Ltd

MEP CONSULTANTS:

C TO C Services Consultants Pvt. Ltd

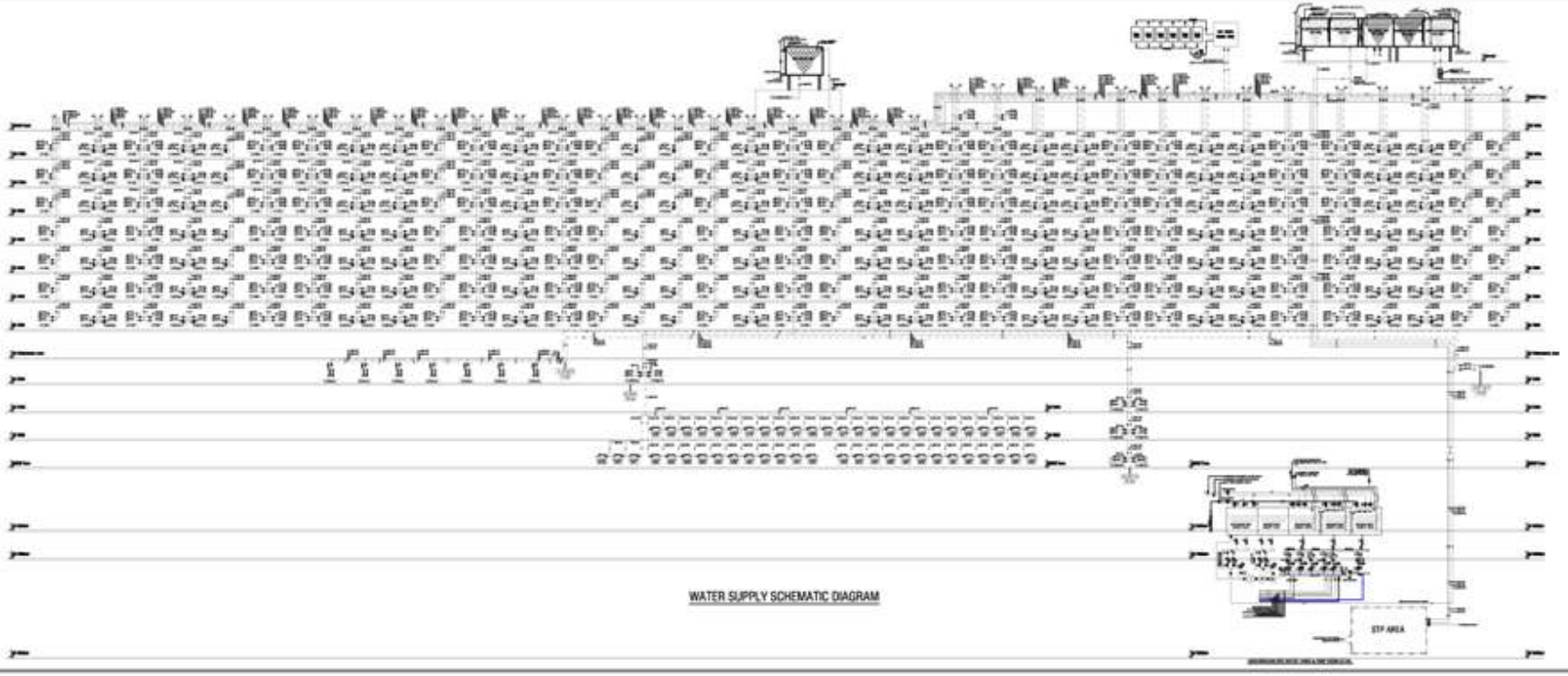
STAGE:

**MUNICIPAL SUBMISSION**

DRAWING TITLE:

**TERRACE FLOOR PLAN (PLUMBING LAYOUT)**

| Drawn | Checked | Approved |
|---|---|---|
| JOPIN | JAMAN | N.G. |
| Scale | Date | Rev. No. |
| 1:100@A1 | 09.08.2017 | R1 |
| Drawing No. | | CONSULTANTS |
| PL-16 | | —N |

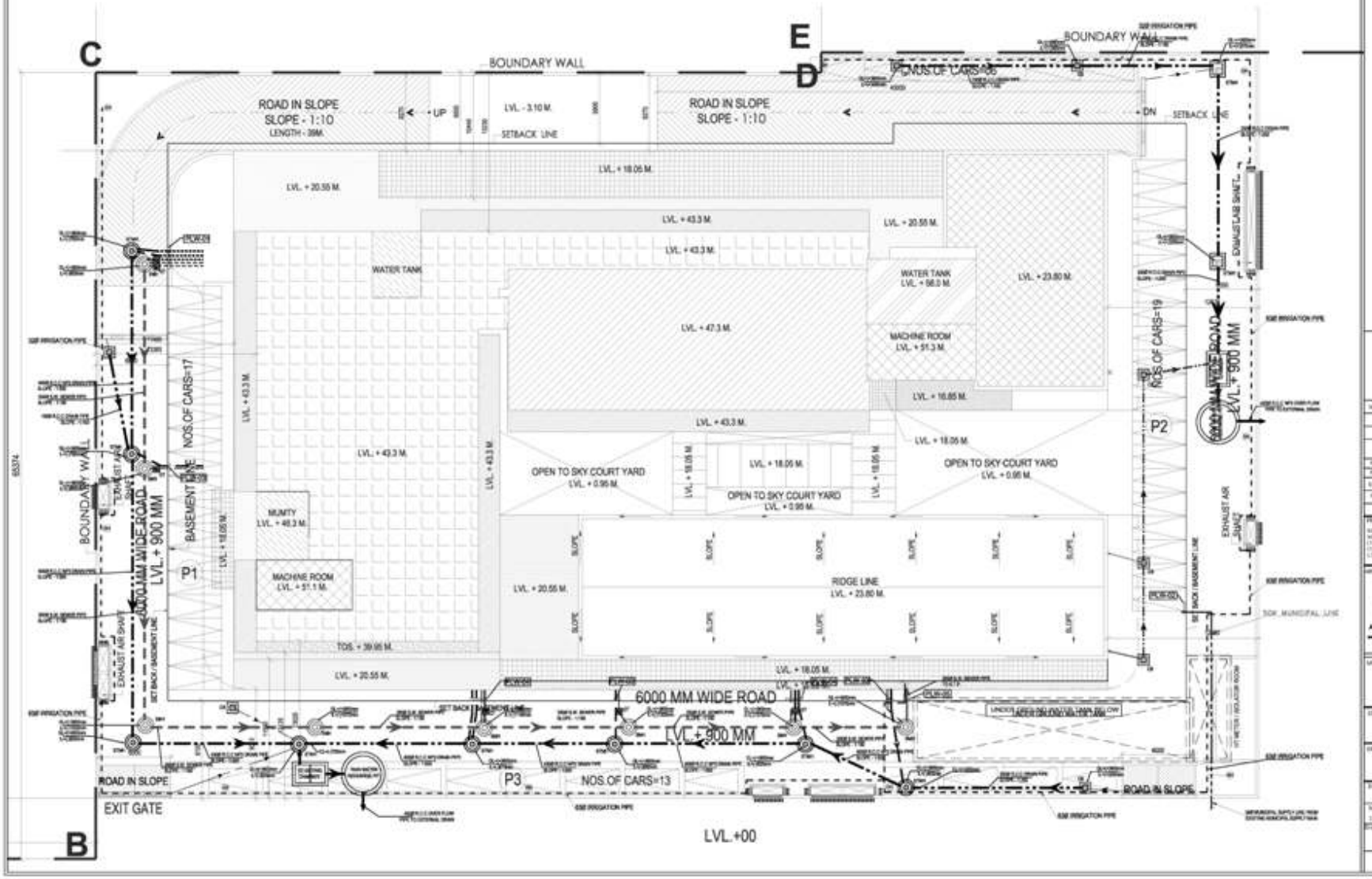



ACPL

MUNICIPAL CORPORATION

WATER SUPPLY SCHEMATIC DIAGRAM

| PLUMBING LEGEND | |
|---|---|
| SYMBOL | DESCRIPTION |
| SMH | SEWER MANHOLE |
| STMH | STORM WATER MANHOLE |
| ST | GULLY TRAP |
| CB | CATCH BASIN |
| | SEWER LINE |
| | STORM WATER LINE |
| | IRRIGATION LINE |
| | MUNICIPAL WATER SUPPLY LINE |
| GL | GROUND LEVEL |
| IL | INVERT LEVEL |
| CL | CONNECTION LEVEL |

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| R1 | 04.09.2017 | REVISE AS PER NEW MPCD |
| R2 | 05.09.2017 | ISSUE FOR MUNICIPAL SUBMISSION |
| S.N | DATE | DETAILS |

REVISIONS

PROJECT TITLE

PROPOSED BUILDING PLAN OF COMMERCIAL COLONY MELAMPADIKA CAMP AT PALAKKAD DISTRICT NO. 39 OF MELLATTUR (T) & SOUTH SECTION (T) VERNACULAR MAUZA OF PALAKKAD DISTRICT AND BY TARUN BUILDERS PVT. LTD.

ARCHITECTS

ACPL

ACPL Design Ltd

MEP CONSULTANTS

C.T.O.C Services Consultants Pvt. Ltd

STAGE

MUNICIPAL SUBMISSION

DRAWING TITLE

SITE PLAN
(PLUMBING LAYOUT)

| Drawn | Checked | Approved |
|---|---|---|
| JOPIN | ANWIN | R.G |
| Scale | Date | Rev. No. |
| 1:150(MAX) | 05.09.2017 | R1 |
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| PL-101 | | N |