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# ADDENDUM

PROJECT: Forestside Estates
Attmar & Palleschi Drive
Brampton, Ontario

PROJECT NO.: 18-017

CONTRACT: Mechanical

DATE: JAN 19, 2021 (Revised Mar 02,2021)

ADDENDUM NO. M-05

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CONTRACTORS ARE TO REVIEW ALL CHANGES, DELETIONS AND ADDITIONS TO THE WORK LISTED IN THIS DOCUMENT AND THE REVISED DRAWINGS AND INCORPORATE THESE ITEMS IN THE TENDER PRICE.

**PURPOSE:** Revise mechanical layouts to suit latest architectural Addendum.
Revised block name.

**1.0 Reference Drawing M-1 (Site Plan - Mechanical) issued**

1.1 Rename: Building name.

**2.0 Reference Drawing M-3,M-3B (Parking Level Plumbing) issued**

2.1 Revised: Block 2 plumbing layout to suit ground level change.

**3.0 Reference Drawing M-4, M-4A, M-4B, M-4C (Parking Level HVAC, GAS) issued**

3.1 Revised: Gas pipe layout.

3.2 Added/
Revised: Exhaust fan as shown

3.3 Added: Split system for communication room.

**4.0 Reference Drawing M-5 – M14 (Block 'D' Mechanical Layout) issued**

4.1 Revised: Suite number and title block name.

**5.0 Reference Drawing M-15 – M24 (Block 'C' Mechanical Layout) issued**

5.1 Revised: Suite number and title block name.

**6.0 Reference Drawing M-25 – M34 (Block 'B' Mechanical Layout) issued**

6.1 Revised: Suite number and title block name.

6.2 Revised: Suite#227, suite#238 layout.

**7.0 Reference Drawing M-35 - M-44 (Block 'A' Mechanical Layout) issued**

7.1 Revised: Suite number and title block name.

7.2 Revised: Suite#206, suite#213 layout.

**8.0 Reference Drawing M-46,M-47 (Typical Suite Mechanical Layout) issued**

8.1 Revised: Suite mechanical layout.

**9.0 Reference Drawing M-48 (Schedule and Schematic) issued**

9.1 Revised: Fan schedules.

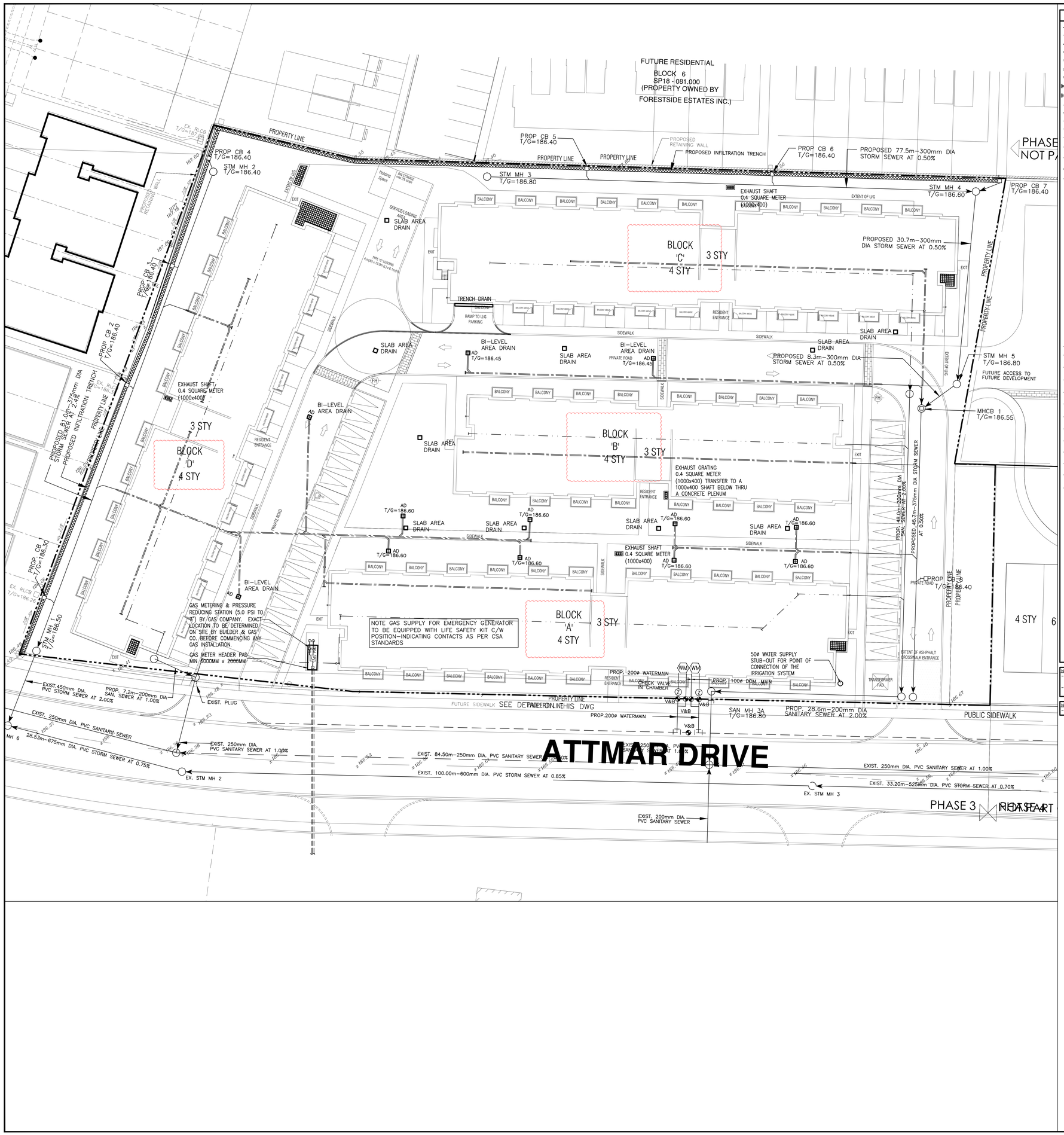
**10.0 Reference Drawing M-49 (Gas schematic) issued**

10.1 Revised: Gas schematic diagram.

PREPARED BY: _____

Leon Bai
Mechanical Department

ISSUED TO ROYAL PINE HOMES,
Cinzia Caruso, Cinzia@royalpinehomes.com;
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Peter Szlichta, Peter@royalpinehomes.com
FOR DISTRIBUTION TO ALL AFFECTED PARTIES.




## LEGEND

| | |
|---|---|
| | NEW SANITARY DRAIN BURIED |
| | EXISTING SANITARY DRAIN BURIED |
| | SANITARY DRAIN ABOVE GROUND |
| | NEW STORM DRAIN BURIED |
| | EXISTING STORM DRAIN BURIED |
| | EXISTING STORM DRAIN BURIED TO BE REMOVED |
| | STORM DRAIN ABOVE GROUND |
| | NEW CLEAN OUTS |
| | EXISTING CLEAN OUTS |
| | NEW DOMESTIC COLD WATER |
| | EXISTING DOMESTIC COLD WATER TO BE REMOVED |
| | DOMESTIC HOT WATER |
| | DOM. HOT WATER RECIRC. LINE |
| V | VENT. LINE |
| G | GAS LINE |
| F | FIRE LINE |
| | EXISTING FIRE LINE TO BE REMOVED |
| SP | NEW SPRINKLER LINE |
| F.H.C. | FIRE HOSE CABINET |
| | FIRE DEPT. SIAMESE CONNECTION |
| | FIRE EXTINGUISHER |
| | FIRE HYDRANT AND VALVE |
| F/S | SPRINKLER FLOW ALARM SWITCH |
| | DRY SPRINKLER VALVE C/W ALARM |
| N.F.H.B | SUPERVISED VALVE- SEE SCHEDULE FOR FIRE PROTECTION NOTES SEE SCHEDULE |
| H.B | NON FREEZE HOSE BIBB C/W BACKFLOW PREVENTER |
| R.D. | HOSE BIBB C/W BACKFLOW PREVENTER |
| R.W.L. | ROOF DRAIN |
| F.D. | RAINWATER LEPDER |
| H.D. | FLOOR DRAIN |
| A.D. | HUB DRAIN |
| S.A.D. | AREA DRAIN |
| C.B. | SODDED AREA DRAIN |
| M.H. | CATCH BASIN |
| | MANHOLE |
| | ANCHOR |
| UN | UNION |
| ST | STRAINER |
| G.V. | GATE VALVE |
| GLV. | GLOBE VALVE |
| C.V. | CHECK VALVE |
| P.R.V. | PRESSURE REDUCING VALVE |
| L.V. | LOCKSHIELD VALVE |
| B.V. | BALANCING VALVE |
| R.V. | PRESSURE RELIEF VALVE |
| T.R.V. | TEMP. AND PRESSURE RELIEF VALVE |
| | THERMOMETER |
| P.G. | PRESSURE GAUGE |
| P-1 | PUMP-SEE SCHEDULE |
| 2 / M-7 | DETAIL NR / DRAWING NR |
| E/B/B | ELEC. BASEBOARD HEATER |
| E/U/H | ELEC. UNIT HEATER |
| E/F/F | ELEC. FORCE FLOW HEATER |
| 00.00 | EXISTING GRADES |
| 00.00 | FINAL GRADES |
| C/W | COMPLETED WITH |
| F/D | FIRE DAMPER |
| S/A | SUPPLY AIR |
| R/A | RETURN AIR |
| T/A | TO ABOVE |
| T/B | TO BELOW |
| F/A | FROM ABOVE |
| F/B | FROM BELOW |
| ABV | ABOVE |

NOTE:
- FOR DETAILED SITE SERVICING REFER TO DRAWINGS PREPARED BY ODAN-DETECH CONSULTING ENGINEER
- FOR DETAILED GRADING REFER TO DRAWINGS PREPARED BY ODAN-DETECH CONSULTING ENGINEER

NOTE:
- MINIMUM EXPECTED WATER PRESSURE 30 PSI

## DRAWING SCHEDULE

| DWG. NO. | DESCRIPTION | SCALE |
|---|---|---|
| M-1 | SITE PLAN | 1:200 |
| M-2 | UNDERGROUND DRAINAGE LAYOUT - MECHANICAL | 1:150 |
| M-2A | UNDERGROUND DRAINAGE LAYOUT - MECHANICAL - PART 1 | 1:100 |
| M-2B | UNDERGROUND DRAINAGE LAYOUT - MECHANICAL - PART 2 | 1:100 |
| M-3 | PARKING LEVEL PLUMBING - MECHANICAL | 1:150 |
| M-3A | PARKING LEVEL PLUMBING -MECHANICAL - PART 1 | 1:100 |
| M-3B | PARKING LEVEL PLUMBING -MECHANICAL - PART 2 | 1:100 |
| M-4 | PARKING LEVEL HVAC - MECHANICAL | 1:150 |
| M-4A | PARKING LEVEL HVAC -MECHANICAL - PART 1 | 1:100 |
| M-4B | PARKING LEVEL HVAC -MECHANICAL - PART 2 | 1:100 |
| M-5 | BLOCK 1 BUILDING A GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-6 | BLOCK 1 BUILDING B GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-7 | BLOCK 1 BUILDING A 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-8 | BLOCK 1 BUILDING A 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-9 | BLOCK 1 BUILDING A 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-10 | BLOCK 1 BUILDING A 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-11 | BLOCK 1 BUILDING A 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-12 | BLOCK 1 BUILDING A 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-13 | BLOCK 1 BUILDING A ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-14 | BLOCK 1 BUILDING A ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-15 | BLOCK 2 BUILDING B GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-16 | BLOCK 2 BUILDING B GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-17 | BLOCK 2 BUILDING B 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-18 | BLOCK 2 BUILDING B 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-19 | BLOCK 2 BUILDING B 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-20 | BLOCK 2 BUILDING B 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-21 | BLOCK 2 BUILDING B 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-22 | BLOCK 2 BUILDING B 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-23 | BLOCK 2 BUILDING B ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-24 | BLOCK 2 BUILDING B ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-25 | BLOCK 3 BUILDING C GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-26 | BLOCK 3 BUILDING C GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-27 | BLOCK 3 BUILDING C 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-28 | BLOCK 3 BUILDING C 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-29 | BLOCK 3 BUILDING C 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-30 | BLOCK 3 BUILDING C 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-31 | BLOCK 3 BUILDING C 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-32 | BLOCK 3 BUILDING C 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-33 | BLOCK 3 BUILDING C ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-34 | BLOCK 3 BUILDING C ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-35 | BLOCK 4 BUILDING D GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-36 | BLOCK 4 BUILDING D GROUND FLOOR - PLUMBING SANITARY | 1:50 |
| M-37 | BLOCK 4 BUILDING D 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-38 | BLOCK 4 BUILDING D 2ND FLOOR - PLUMBING SANITARY | 1:50 |
| M-39 | BLOCK 4 BUILDING D 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-40 | BLOCK 4 BUILDING D 3RD FLOOR - PLUMBING SANITARY | 1:50 |
| M-41 | BLOCK 4 BUILDING D 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-42 | BLOCK 4 BUILDING D 4TH FLOOR - PLUMBING SANITARY | 1:50 |
| M-43 | BLOCK 4 BUILDING D ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-44 | BLOCK 4 BUILDING D ROOF PLAN - PLUMBING SANITARY | 1:50 |
| M-45 | TYPICAL SUITES UNITS LAYOUT - MECHANICAL | 1:50 |
| M-46 | TYPICAL SUITES UNITS LAYOUT - MECHANICAL | 1:50 |
| M-47 | TYPICAL SUITES UNITS LAYOUT - MECHANICAL | 1:50 |
| M-48 | SCHEDULES AND SCHEMATIC | N.T.S. |
| M-49 | GAS SCHEMATICS | N.T.S. |
| M-50 | MECHANICAL DETAILS | N.T.S. |
| M-51 | MECHANICAL DETAILS | N.T.S. |
| M-52 | MECHANICAL DETAILS | N.T.S. |

## GAS CONSUMPTION

| EQUIPMENT | LOCATION | LOAD (CFH) |
|---|---|---|
| TANKLESS COMBI BOILERS | EACH SUITE | |
| BBQ | EACH SUITE | |
| TOTAL | 144 UNITS | |
| GENERATOR | GROUND FLOOR | |
| GRAND TOTAL | | |

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 06 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 05 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 04 | LB | ADDENDUM #04 | JUN. 12, 2020 |
| 03 | LB | ADDENDUM #03 | MAR. 11, 2020 |
| 02 | RC | ADDENDUM #02 | SEP. 13, 2019 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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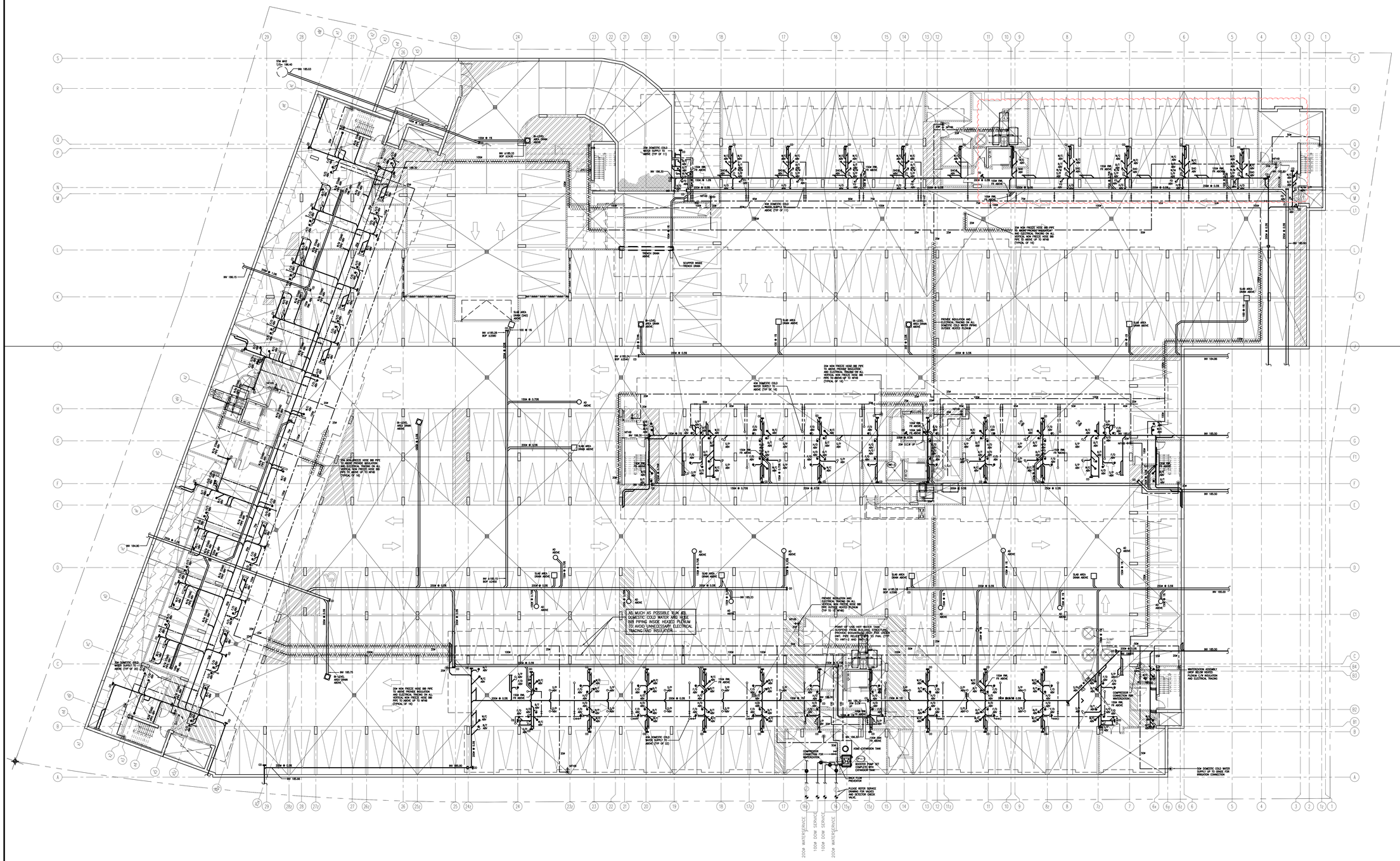
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TITLE
**SITE PLAN - MECHANICAL**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:200 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-1 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 07 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 06 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 05 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 04 | LB | ADDENDUM #03 | MAR. 11, 2020 |
| 03 | RC | ADDENDUM #02 | SEP. 13, 2019 |
| 02 | RC | ADDENDUM #01 | AUG. 13, 2019 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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TITLE
**PARKING LEVEL - PLUMBING MECHANICAL**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
## ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:150 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-3 |
| | | OF - |

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 06 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 05 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 04 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 03 | RC | ADDENDUM #02 | SEP. 13, 2019 |
| 02 | RC | ADDENDUM #01 | AUG. 13, 2019 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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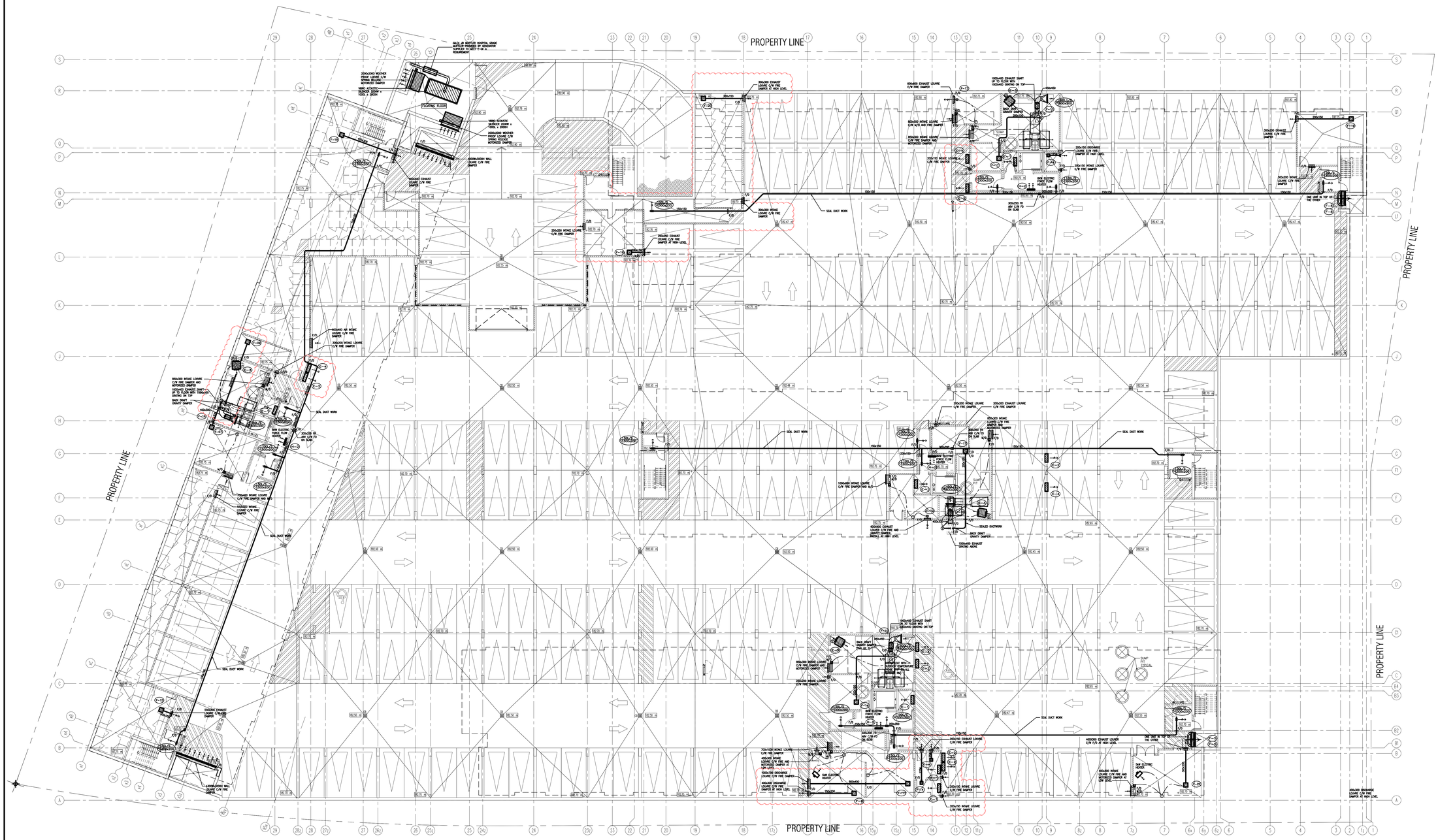
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TITLE
**PARKING LEVEL - PLUMBING MECHANICAL - PART 2**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
**ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:100 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-3B |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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TITLE
**PARKING LEVEL - HVAC MECHANICAL**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:150 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-4 |
| | | OF - |

PROPERTY LINE

PROPERTY LINE

PROPERTY LINE

SILEX JB MUFFLER HOSPITAL GRADE MUFFLER-PROVIDED BY GENERATOR SUPPLIER TO MEET 'C-OF A' REQUIREMENT

2000x2000 WEATHER PROOF LOUVRE C/W SPRING RELEASE MOTORIZED DAMPER

VIBRO ACOUSTIC SILENCER 2000W x 1000L x 2000H

FLOATING FLOOR

VIBRO ACOUSTIC SILENCER 2000W x 1000L x 2000H

2000x2000 WEATHER PROOF LOUVRE C/W SPRING RELEASE MOTORIZED DAMPER

4000Wx3000H WALL LOUVRE C/W FIRE DAMPER

600x400 EXHAUST LOUVRE C/W FIRE DAMPER

300x300 EXHAUST LOUVRE C/W FIRE DAMPER AT HIGH LEVEL

600x600 EXHAUST LOUVRE C/W FIRE DAMPER

800x500 INTAKE LOUVRE C/W M/D AND FIRE DAMPER

850x300 INTAKE LOUVRE C/W FIRE DAMPER AND MOTORIZED DAMPER

200x150 INTAKE LO C/W FIRE DAMPER

300x300 INTAKE LOUVRE C/W FIRE DAMPER

SEAL DUCT WORK

250x250 INTAKE LOUVRE C/W FIRE DAMPER

250x250 EXHAUST LOUVRE C/W FIRE DAMPER AT HIGH LEVEL

600x400 AIR INTAKE LOUVRE C/W FIRE DAMPER

300x200 INTAKE LOUVRE C/W FIRE DAMPER

850x300 INTAKE LOUVRE C/W FIRE DAMPER AND MOTORIZED DAMPER

1000x400 EXHAUST SHAFT UP TO FLOOR WITH 1000x800 GRATING ON TOP

BACK DRAFT GRAVITY DAMPER

SEAL DUCT WORK

BKW ELECTRIC FORCE FLOW HEATER

200x250 FR ABV C/W FD ON SLAB

750x400 INTAKE LOUVRE C/W FIRE DAMPER AND M/D

550x300 INTAKE LOUVRE C/W FIRE DAMPER

SEAL DUCT WORK

SEAL DUCT WORK

550x300 EXHAUST LOUVRE C/W FIRE DAMPER

4300Wx3000H WALL LOUVRE C/W FIRE DAMPER

1000x600 INTAKE LOUVRE C/W FIRE DAMPER AND M/D

600X600 EXHAUST LOUVER C/W FIRE AND GRAVITY DAMPER, INSTALL AT HIGH LEVEL

1000x400 EXHAUST SHAFT UP TO FLOOR WITH 1000x400 GRATING ON TOP

BACK DRAFT GRAVITY DAMPER (TYP. OF 3)

850x300 INTAKE LOUVRE C/W FIRE DAMPER AND MOTORIZED DAMPER

THERMOSTAT WITH OUTDOOR TEMPERATURE SENSOR (PROVIDED ALL BY OTHERS) (TYP. OF 3)

250x200 INTAKE LOUVRE C/W FIRE DAMPER

BKW ELECTRIC FORCE FLOW HEATER

400x300 FR ABV C/W FD ON SLAB

700x1000 INTAKE LOUVRE C/W FIRE DAMPER

400x300 INTAKE LOUVRE C/W FIRE AND MOTORIZED DAMPER AT HIGH LEVEL

1000x700 DISCHARGE LOUVRE C/W FIRE DAMPER

400x300 DISCHARGE LOUVRE C/W FIRE DAMPER AT HIGH LEVEL

5KW ELECTRIC HEATER

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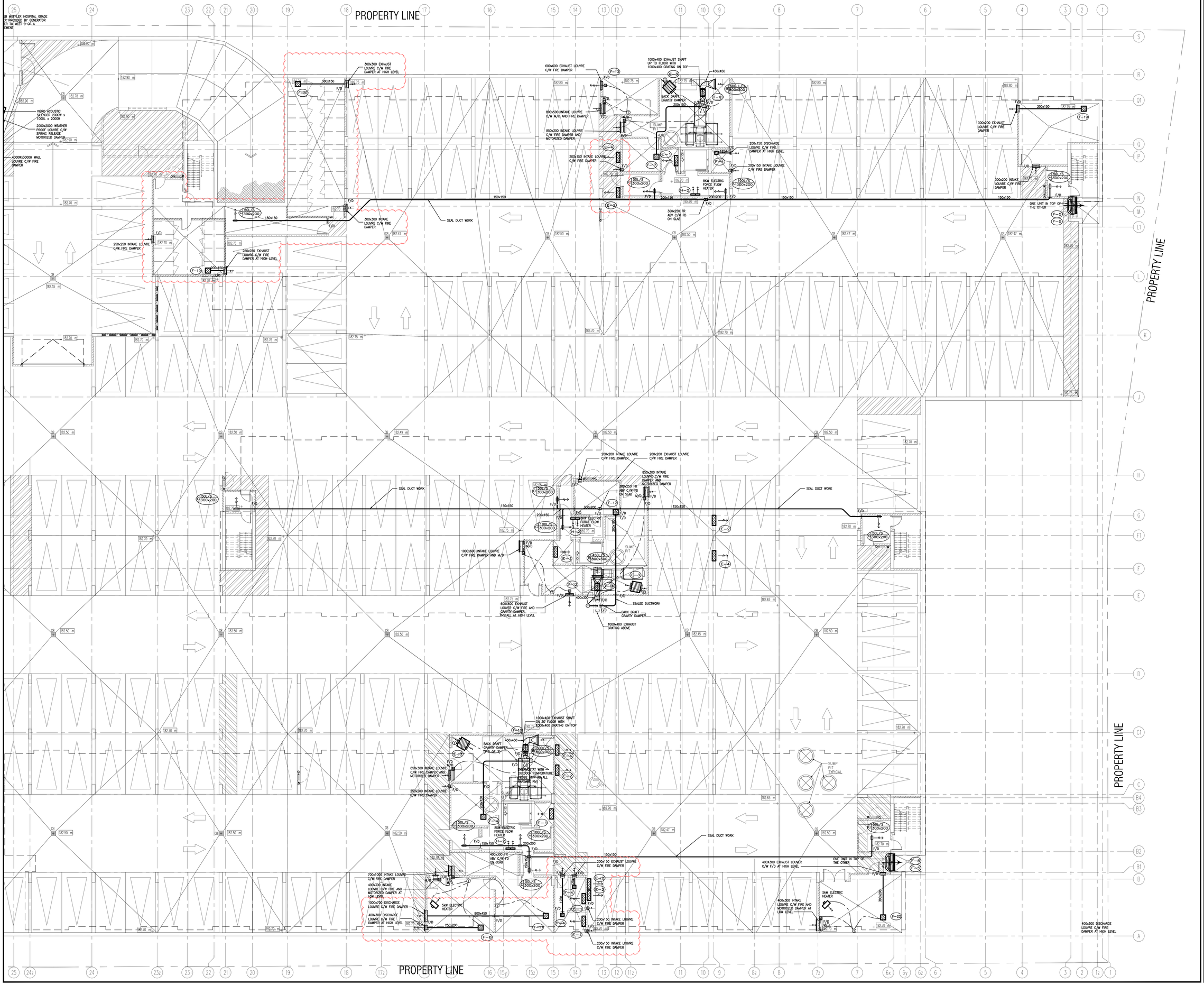
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TITLE
**PARKING LEVEL - HVAC MECHANICAL - PART 1**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
**ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:100 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-4A |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 05 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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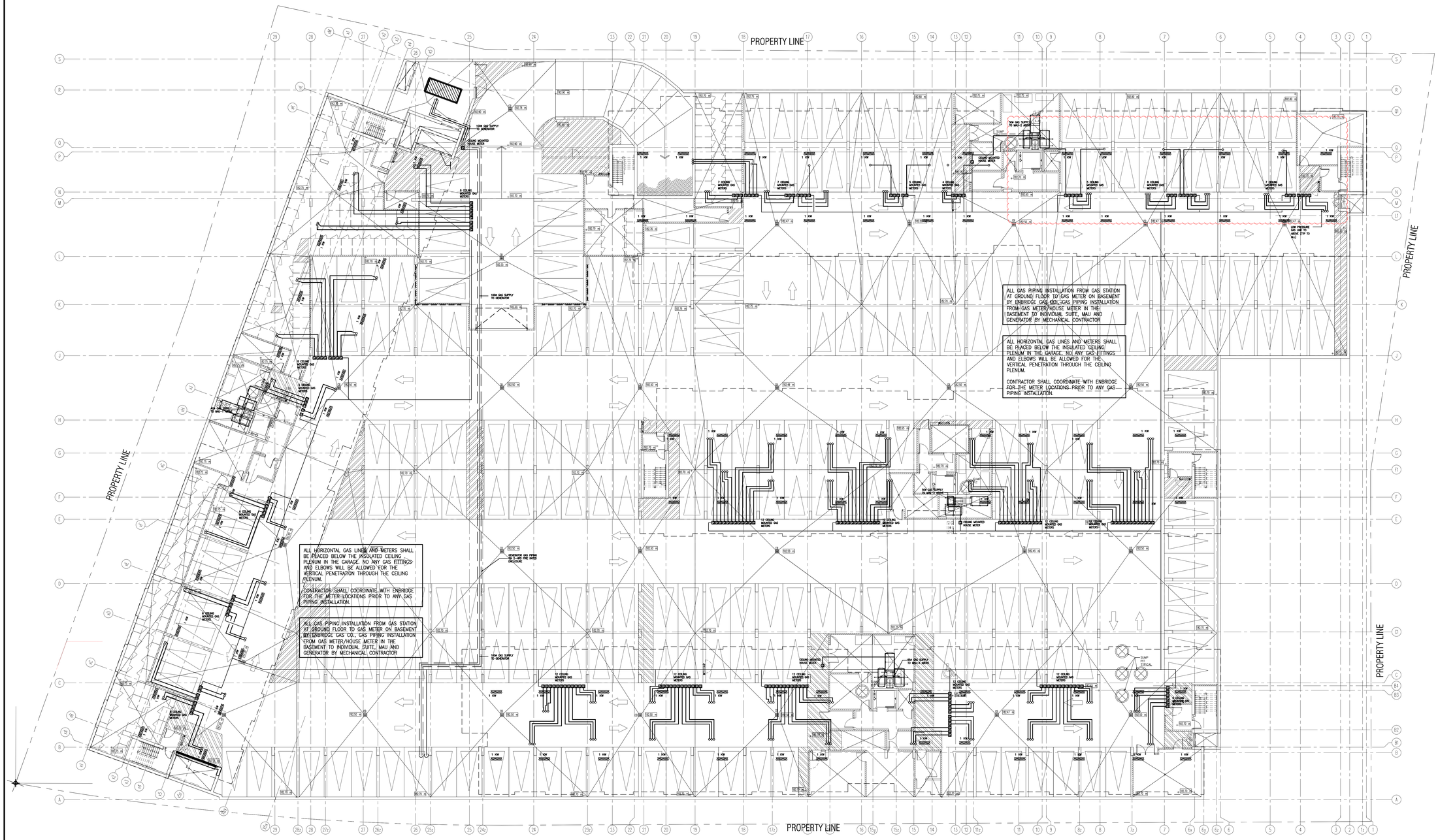
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Tel: (416) 398 1999, Fax: (416) 398 1933

TITLE
**P.ARKING LEVEL - HVAC MECHANICAL - PART 2**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
## ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:100 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-4B |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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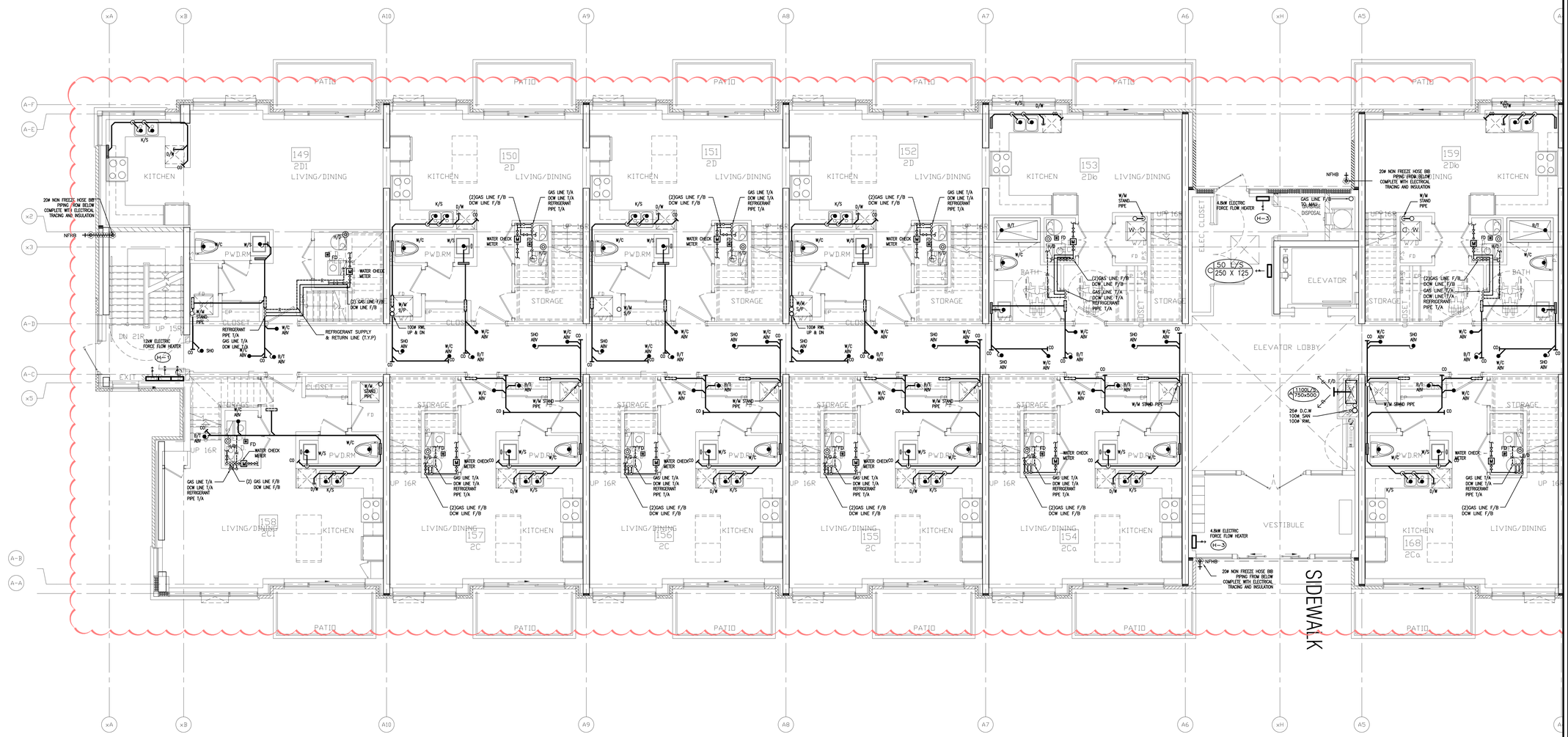
LICENSED PROFESSIONAL ENGINEER
Y. HOU
100117087
PROVINCE OF ONTARIO

**UNITED ENGINEERING INC.**
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TITLE
**PARKING LEVEL - HVAC + GAS MECHANICAL**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:150 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-4C |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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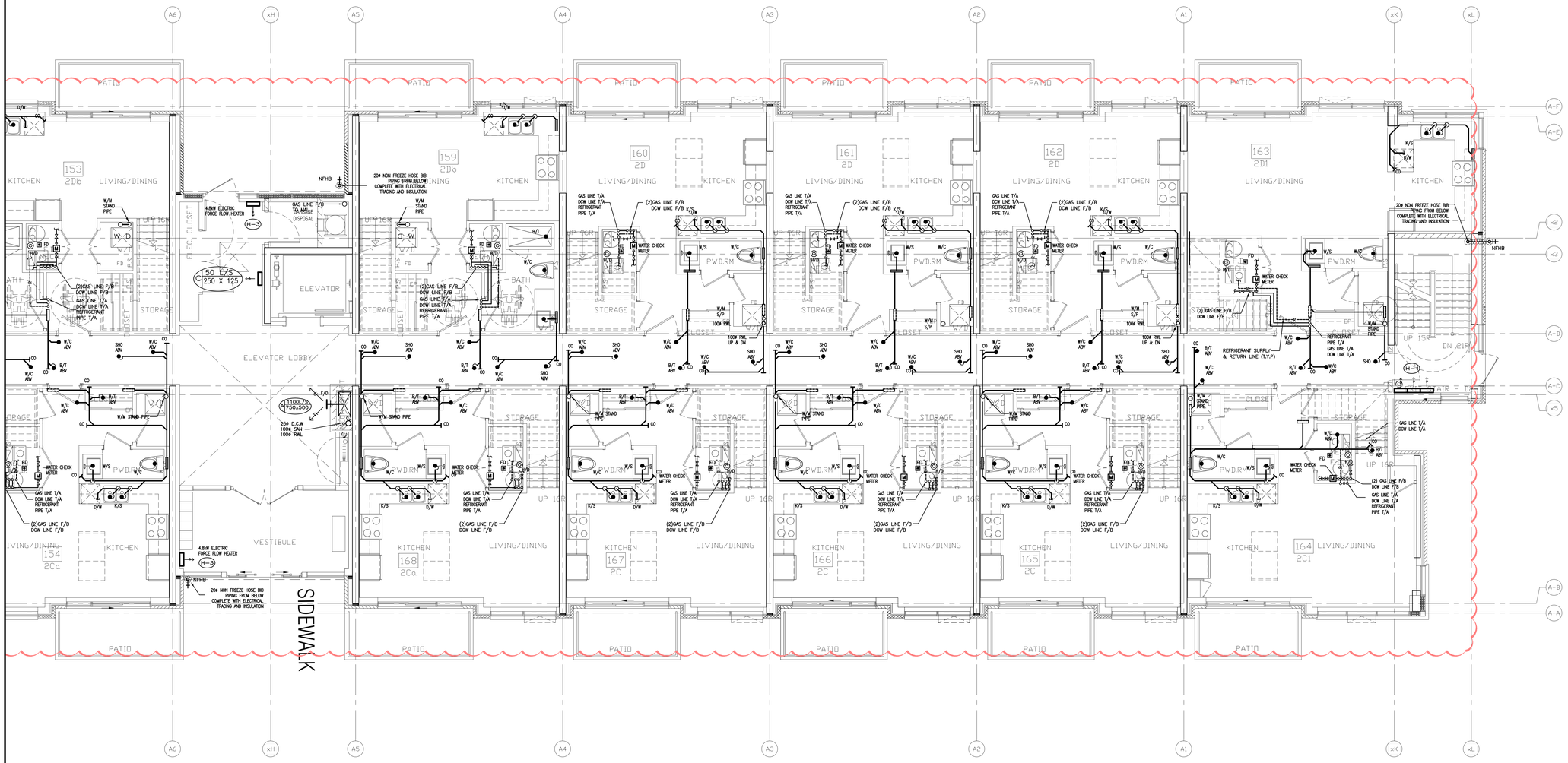
LICENCED PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'D'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-5 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
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| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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TITLE
**BLOCK 'D'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-6 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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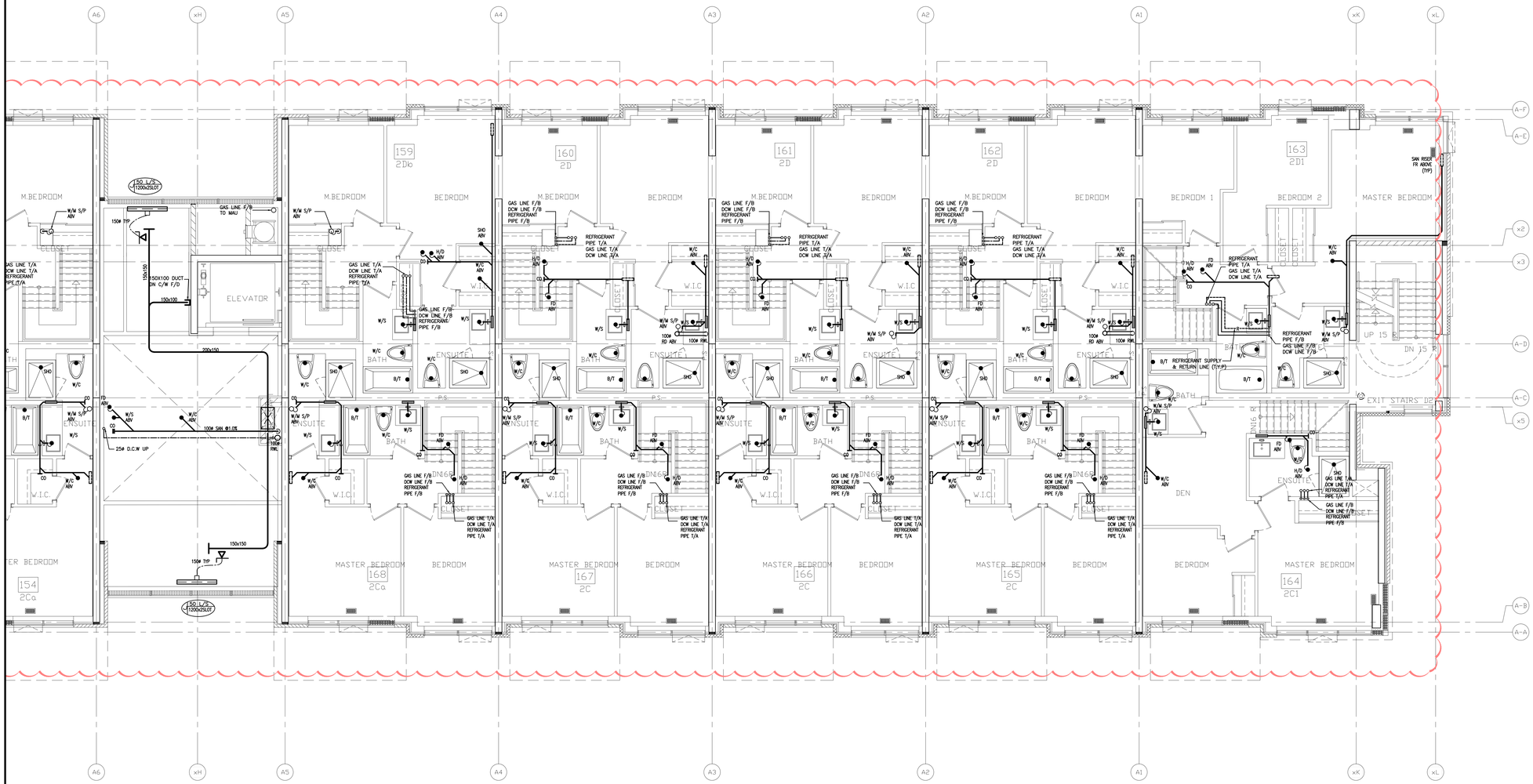
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TITLE
**BLOCK 'D'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-7 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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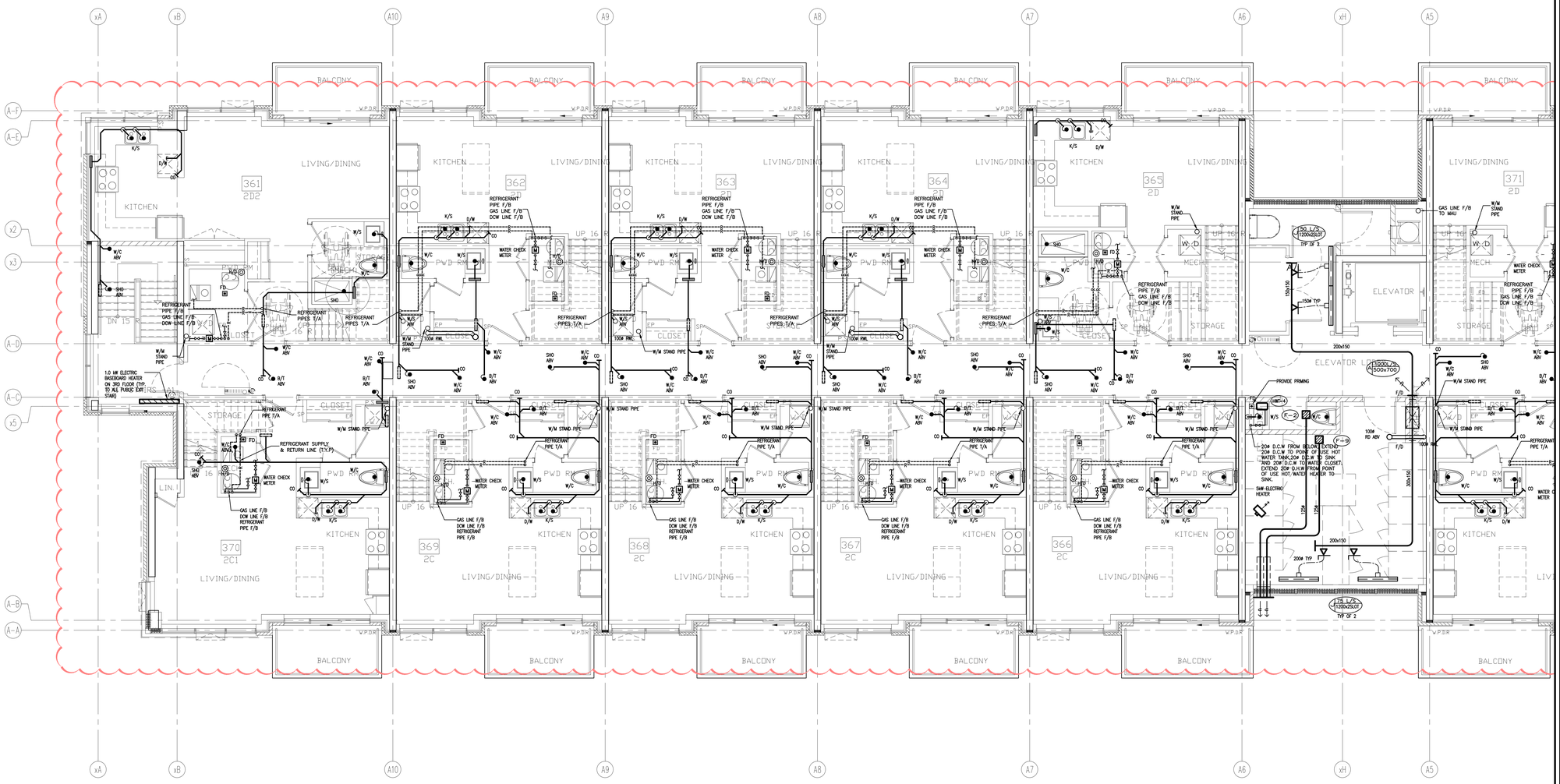
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TITLE
**BLOCK 'D'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-8 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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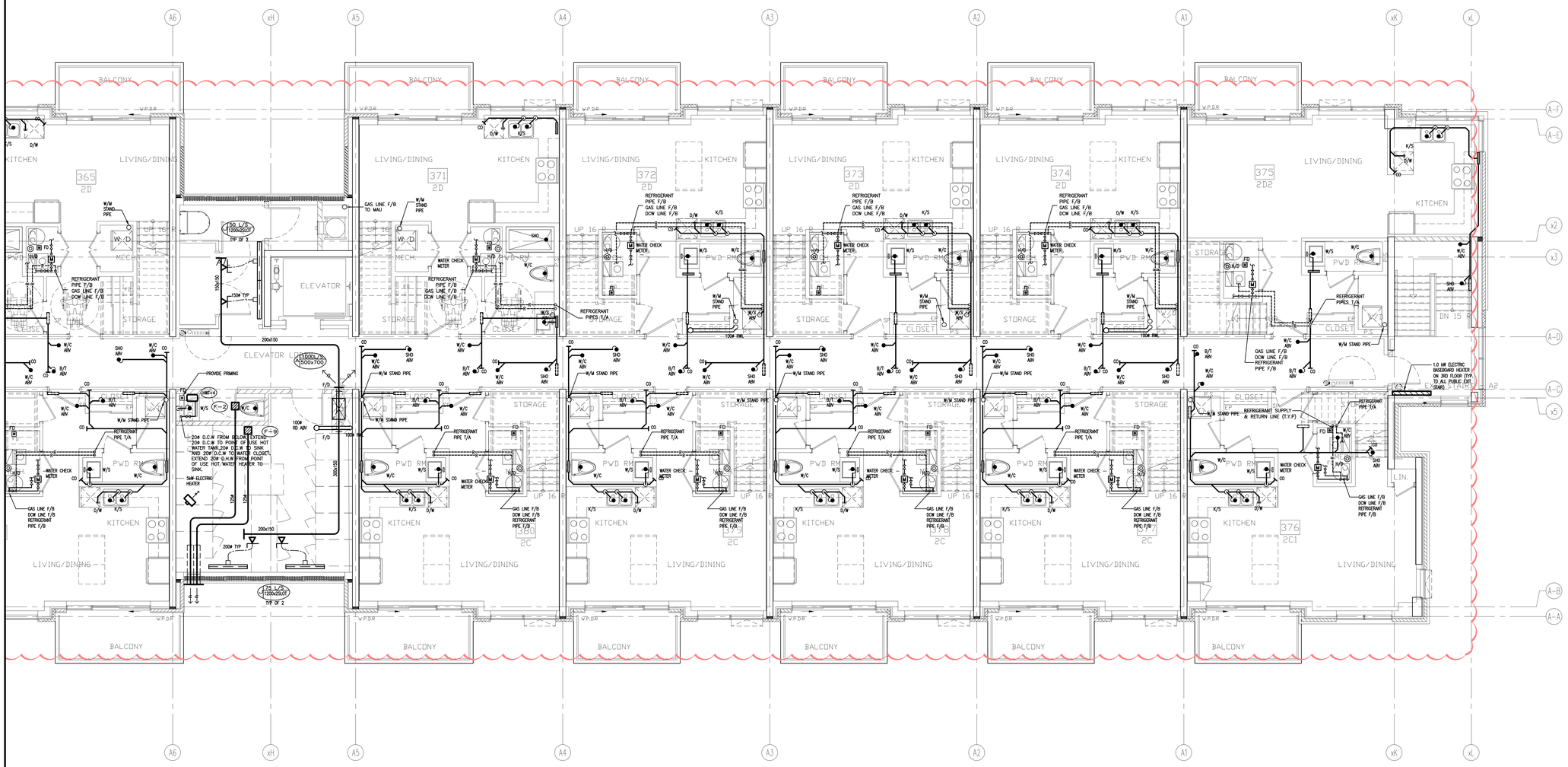
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TITLE
**BLOCK 'D'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-9 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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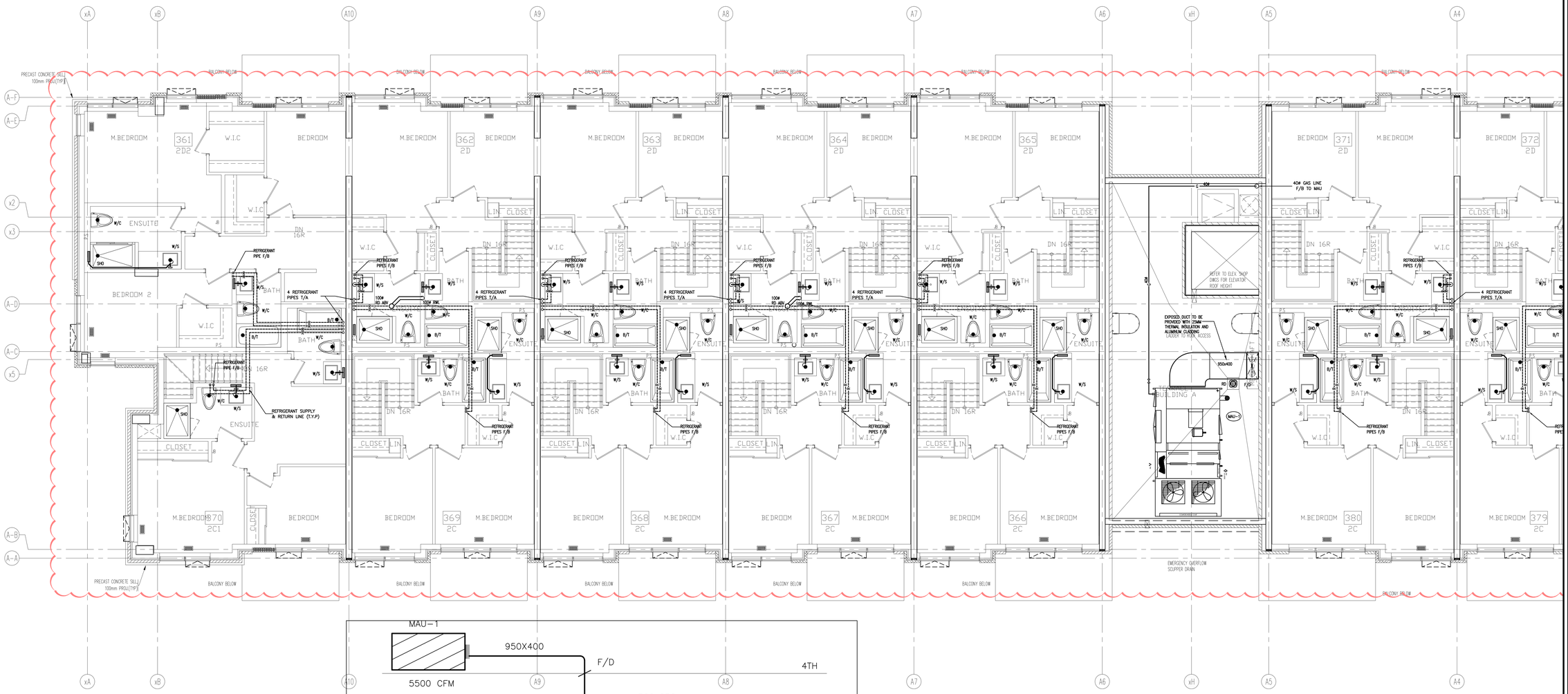
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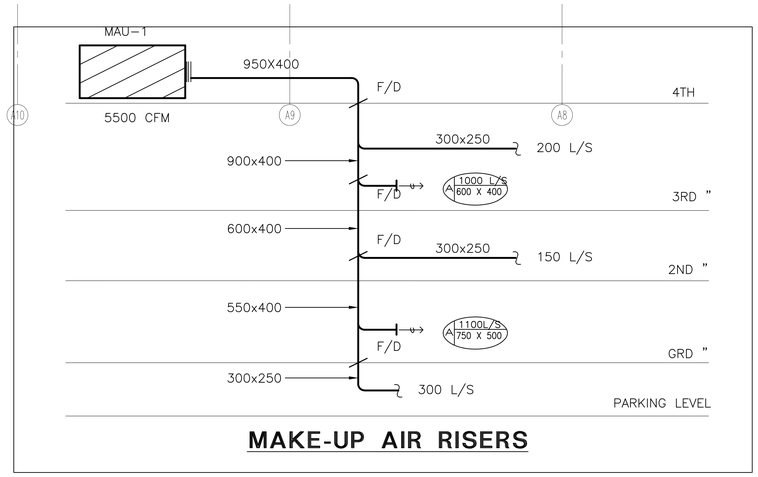
**UNITED ENGINEERING INC.**
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TITLE
**BLOCK 'D'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-10 |
| | | OF - |




## MAKE-UP AIR RISERS

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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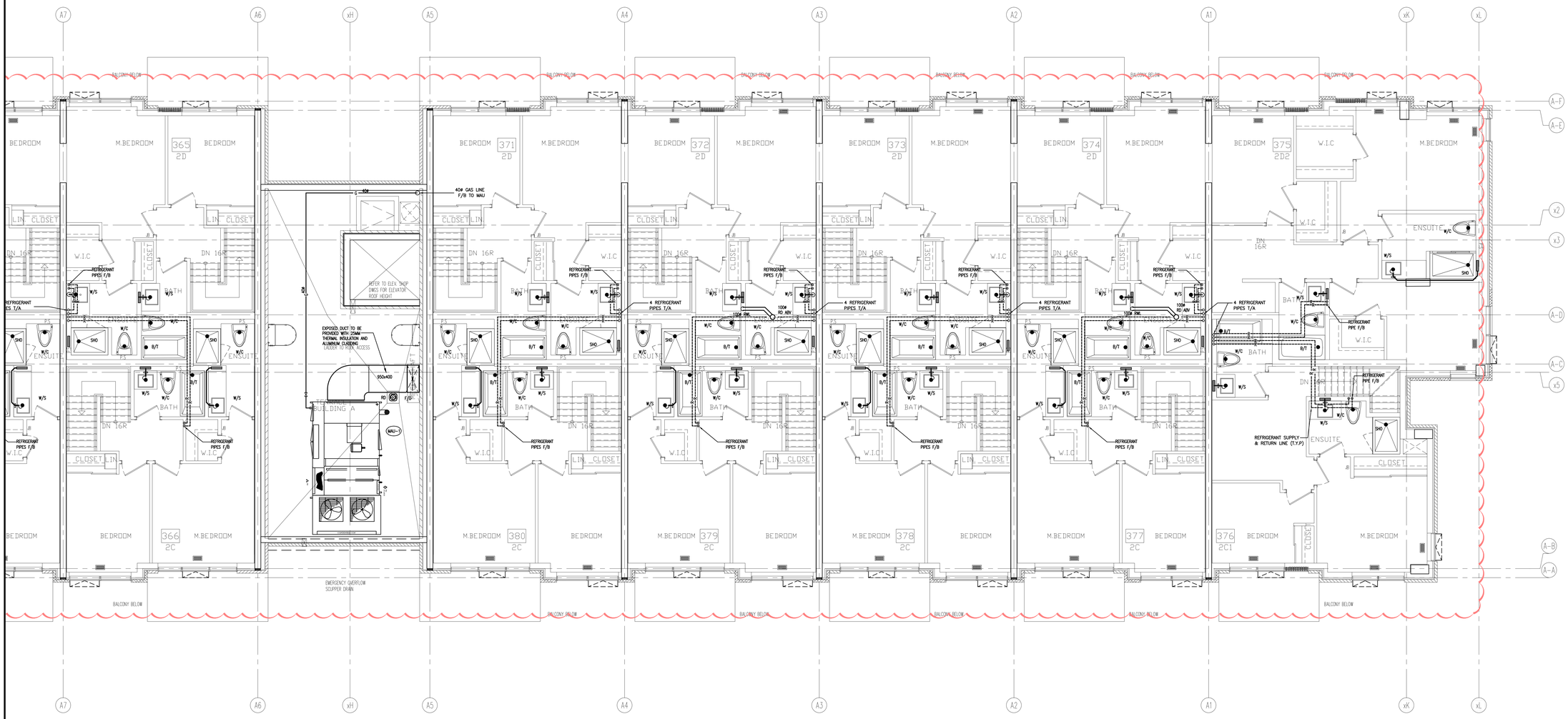
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TITLE
**BLOCK 'D'**
**4TH FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-11 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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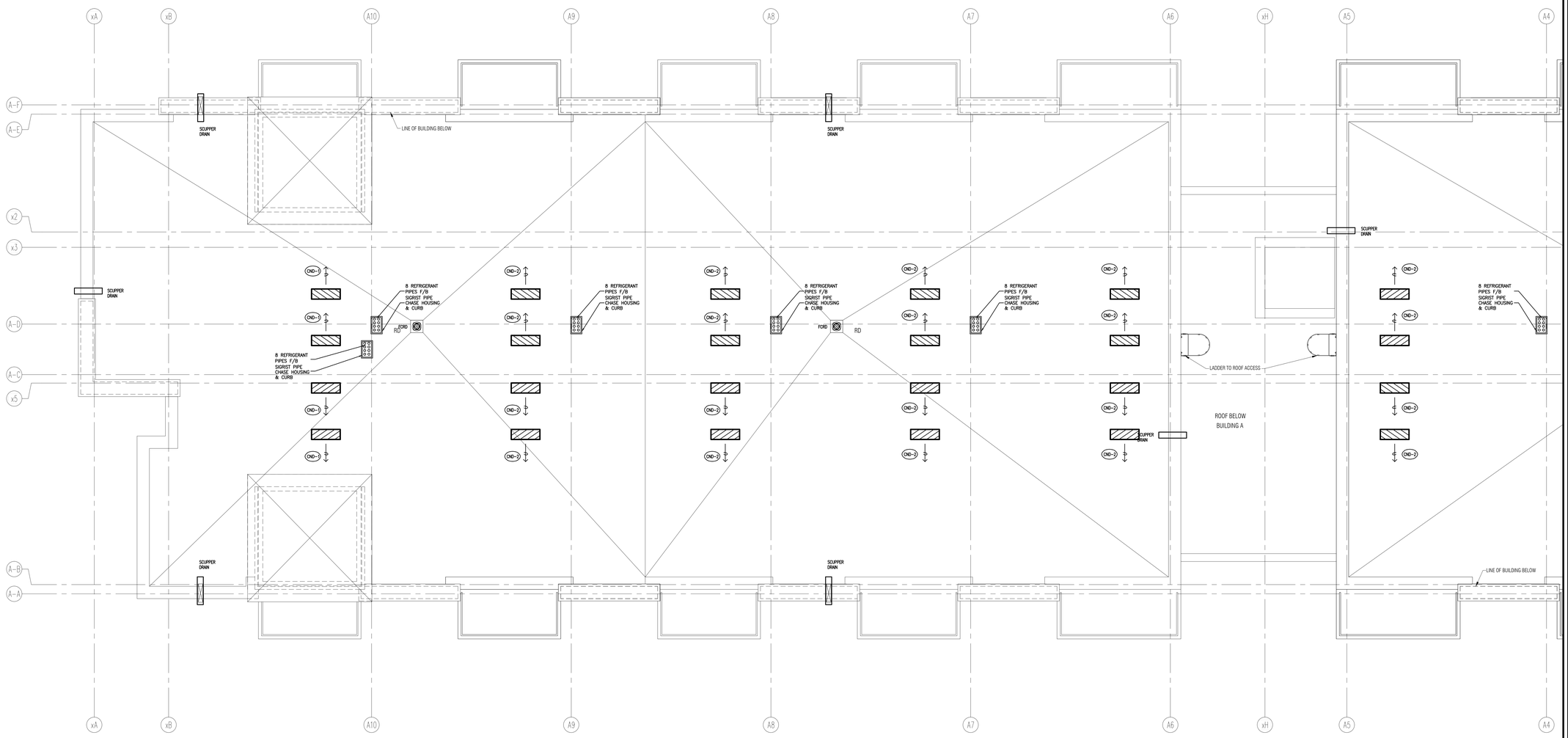
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TITLE
**BLOCK 'D'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
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| | | OF - |




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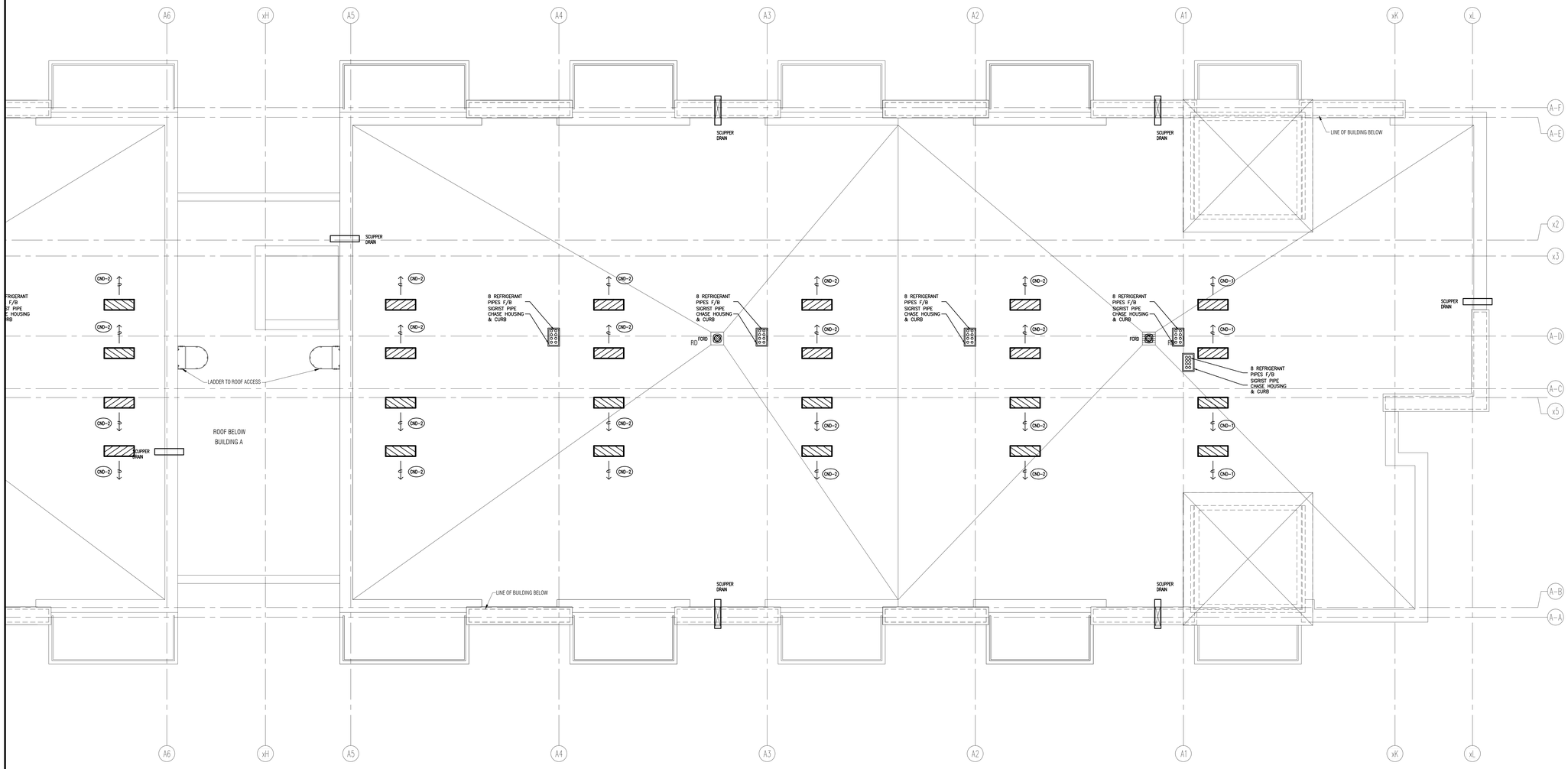
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TITLE
**BLOCK 'D'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
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| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-13 |
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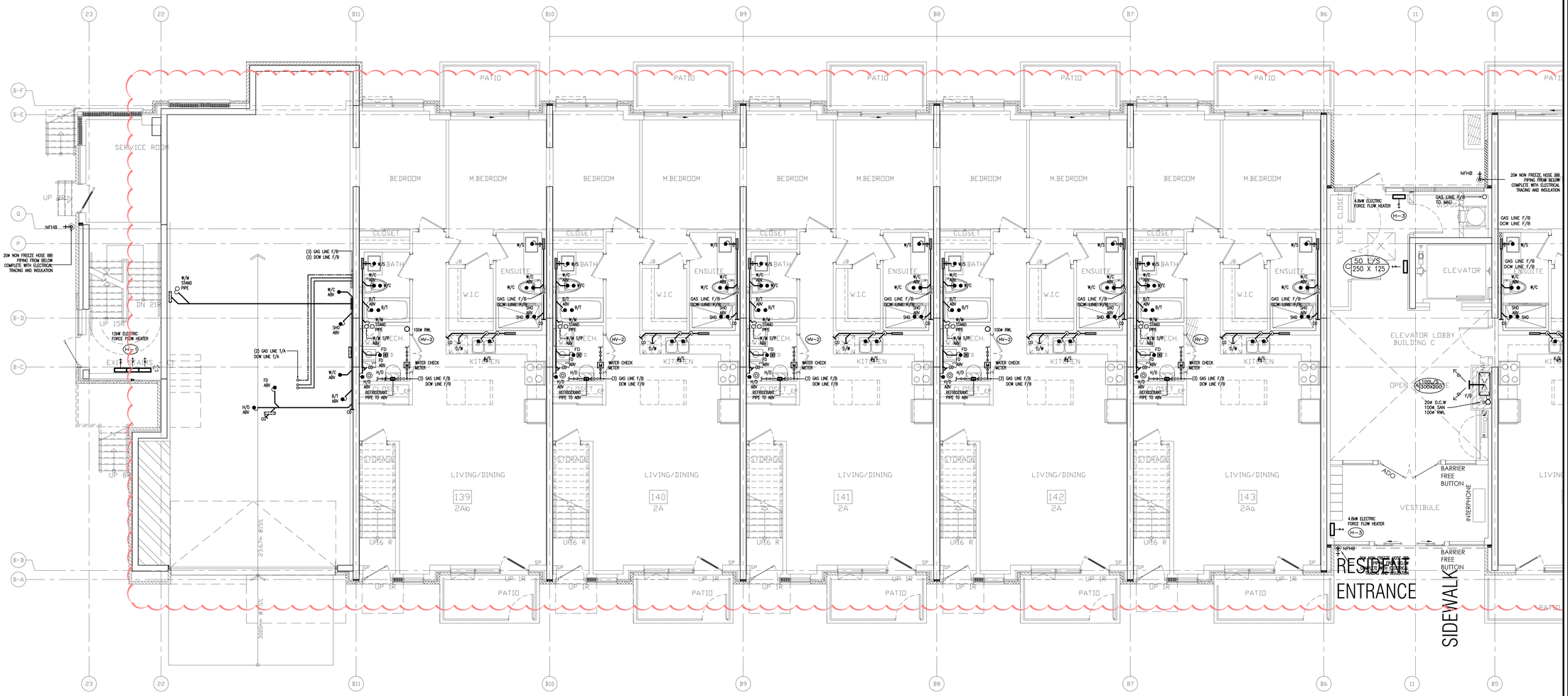
LICENCE PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'D'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
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PROVINCE OF ONTARIO

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TITLE
**BLOCK 'C'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
**ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-15 |
| | | OF - |




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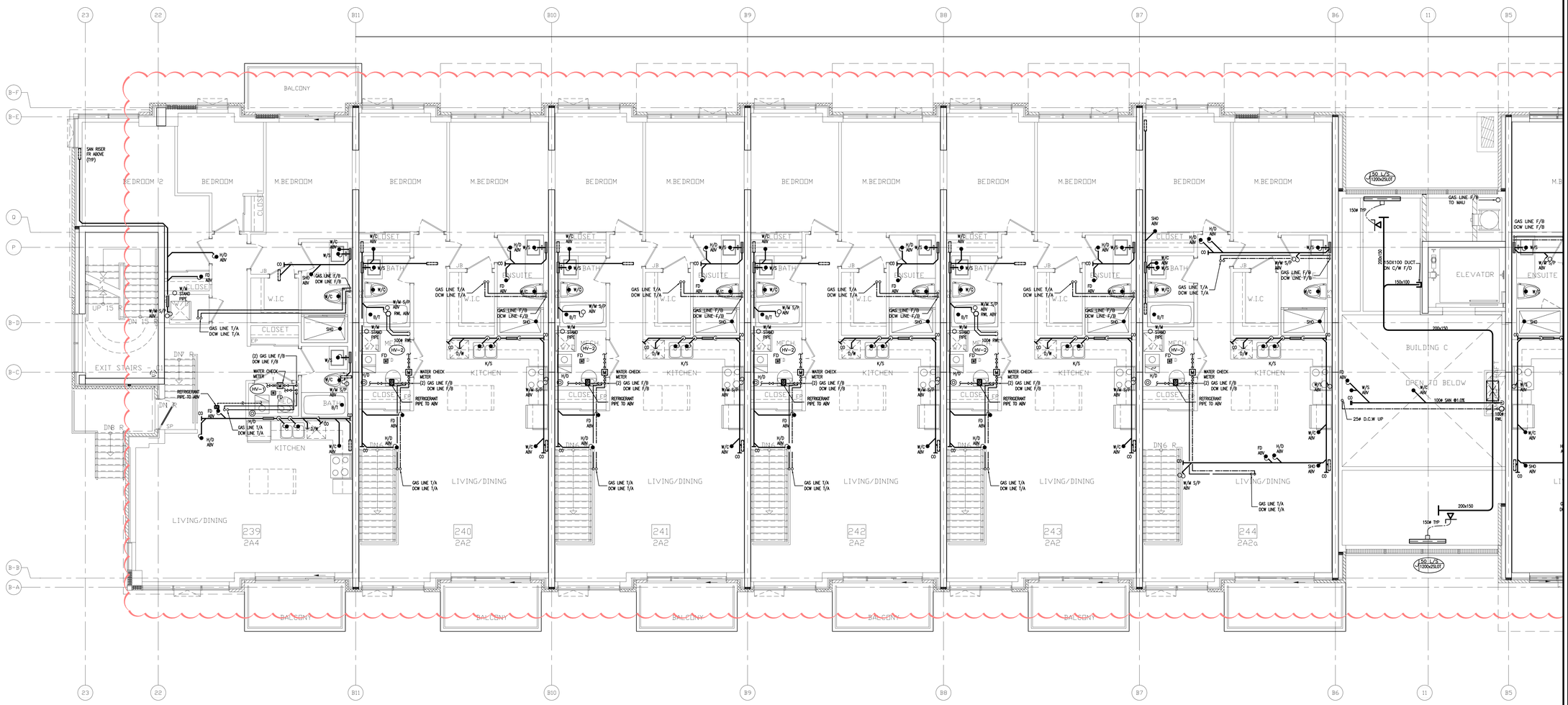
LICENCE PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'C'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
**ATTMAR + PALLESCHI DRIVE BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
|---|---|---|
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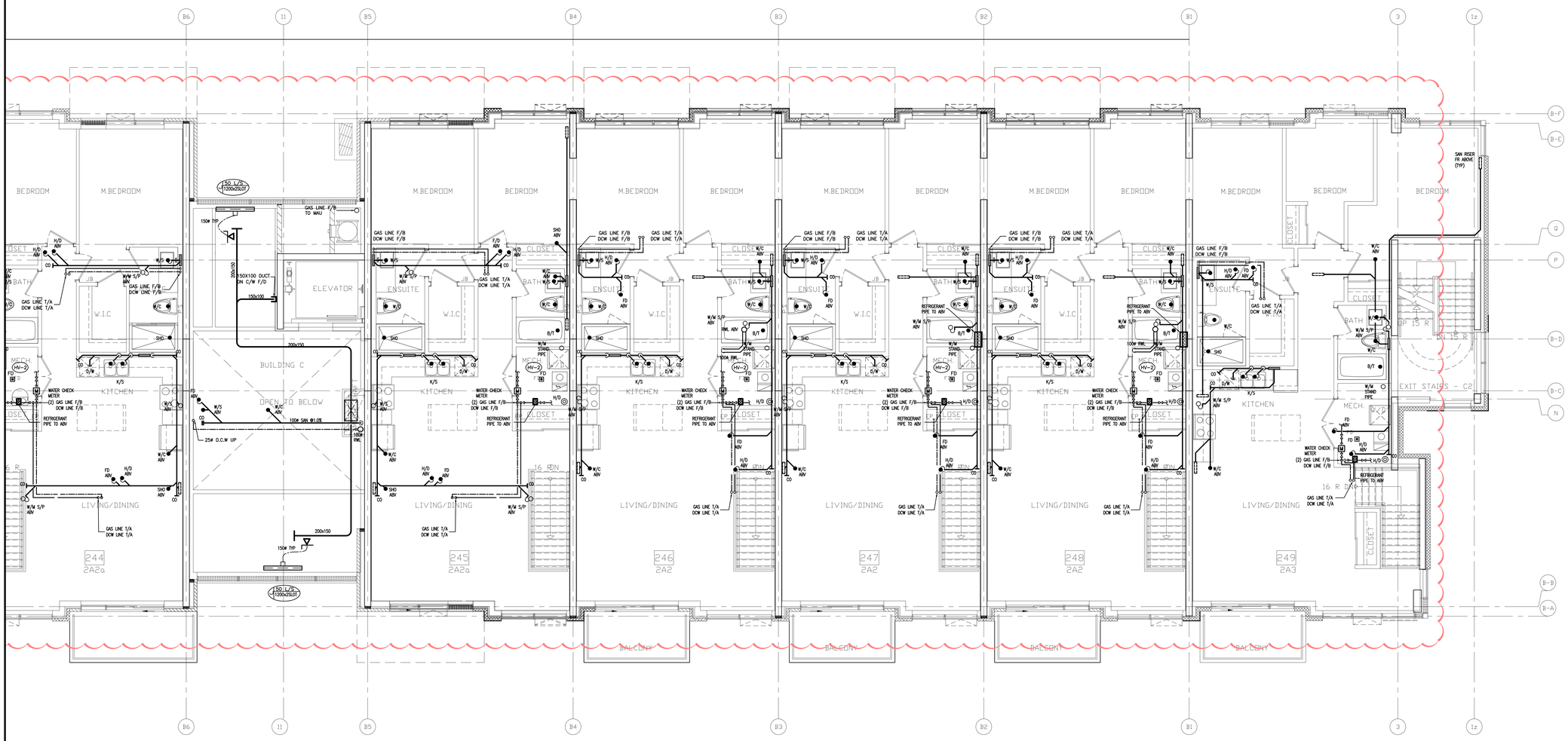
LICENCED PROFESSIONAL ENGINEER
Y. HOU
100117097
PROVINCE OF ONTARIO

**UNITED ENGINEERING INC.**
Mechanical Electrical Consulting Engineers
3645 Keele Street, Suite 105,
Toronto, Ontario, M3J 1M6
Tel: (416) 398 1999 Fax: (416) 398 1933

TITLE
**BLOCK 'C'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-17 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
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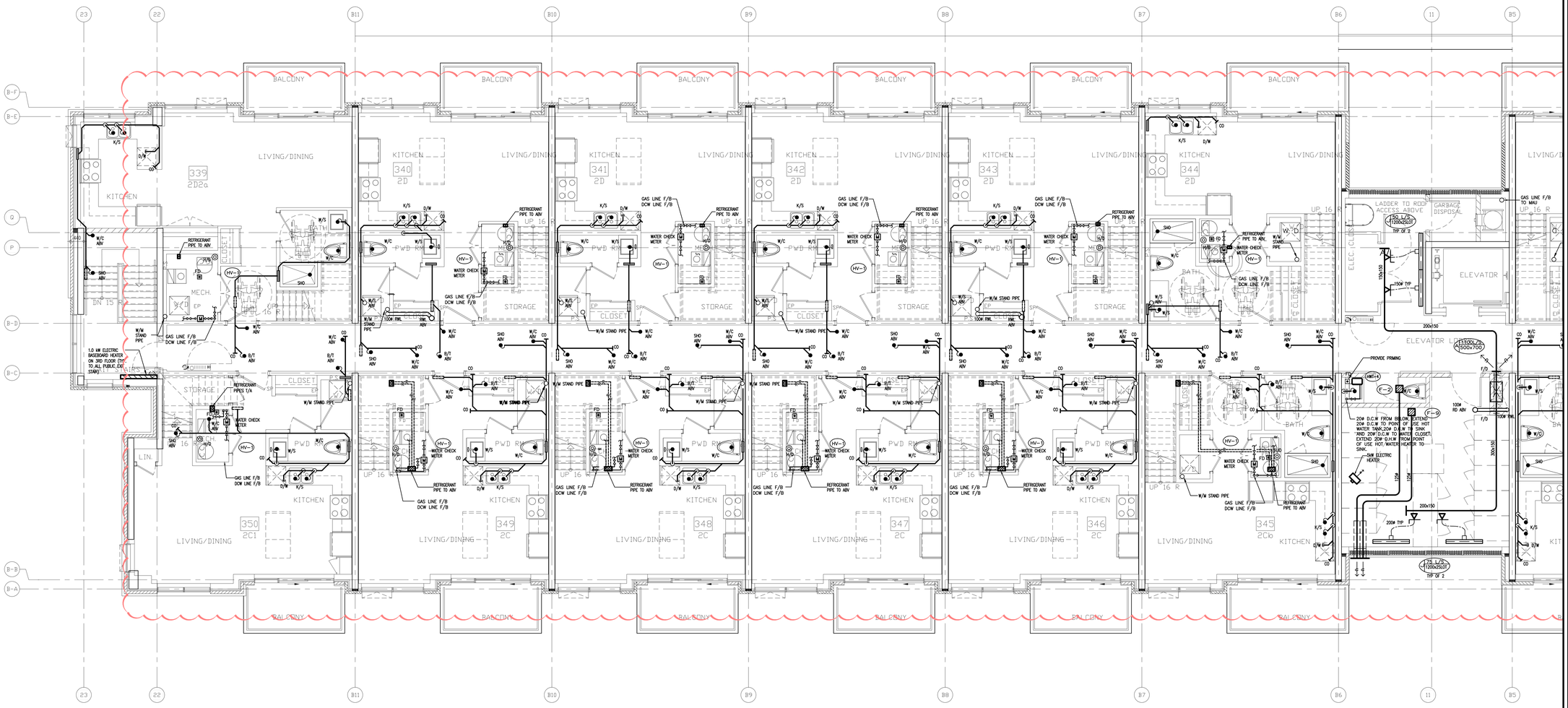
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TITLE
**BLOCK 'C'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-18 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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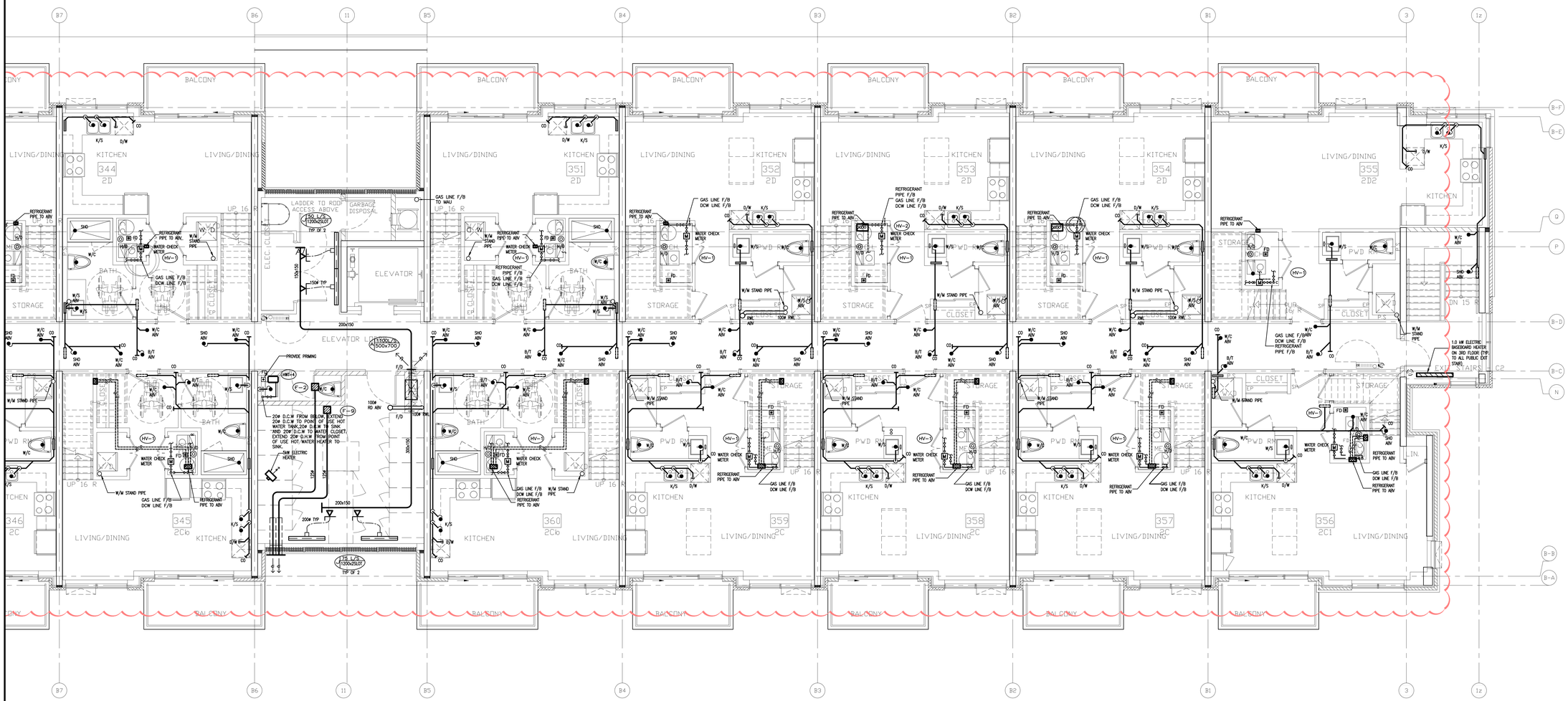
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TITLE
**BLOCK 'C'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
**ATTMAR + PALLESCHI DRIVE**
**BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-19 |
| | | OF - |




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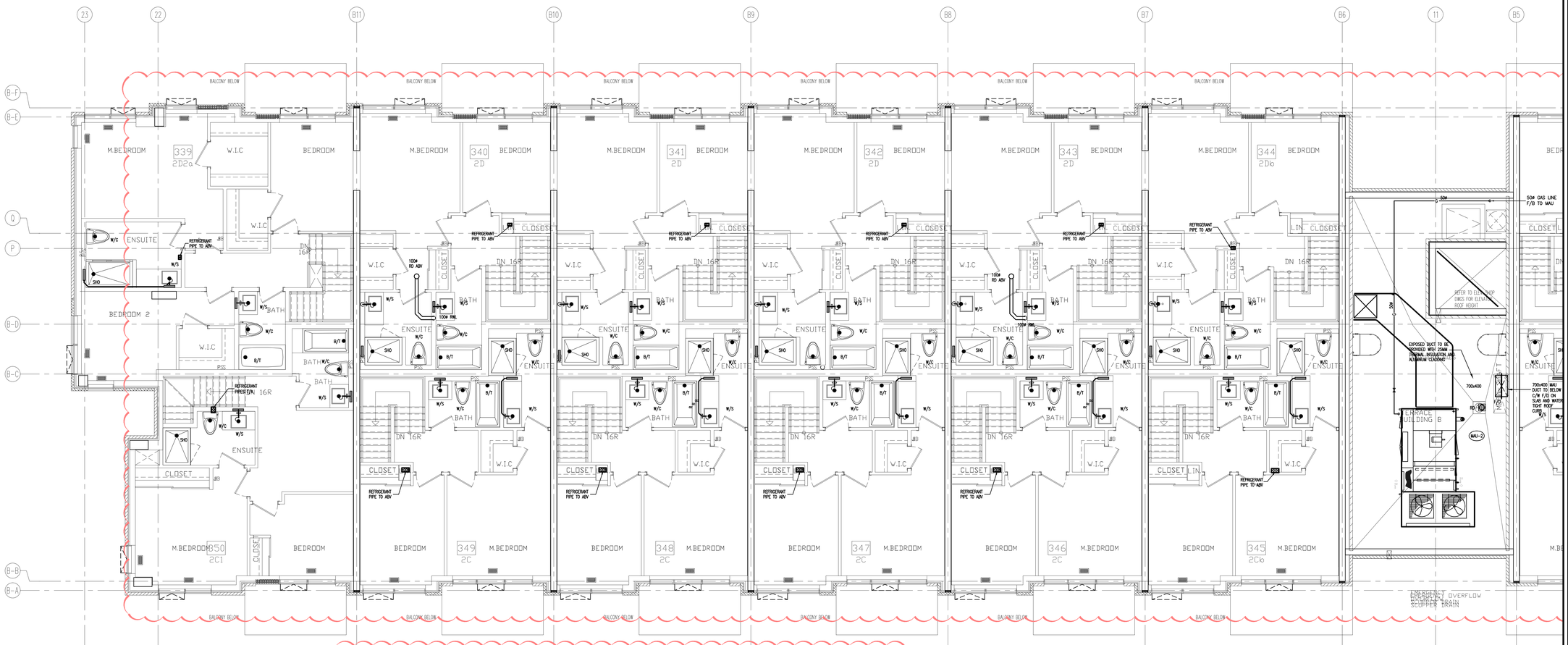
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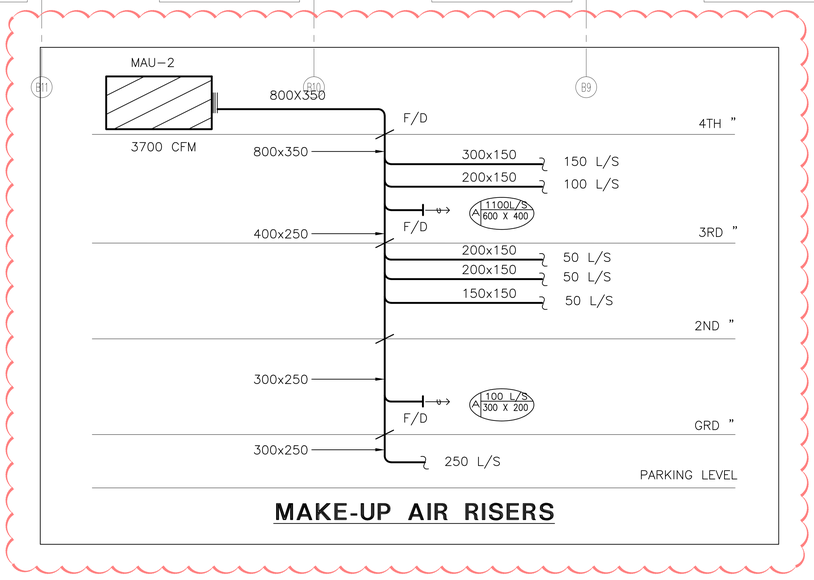
**UNITED ENGINEERING INC.**
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TITLE
**BLOCK 'C'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-20 |
| | | OF - |




## MAKE-UP AIR RISERS

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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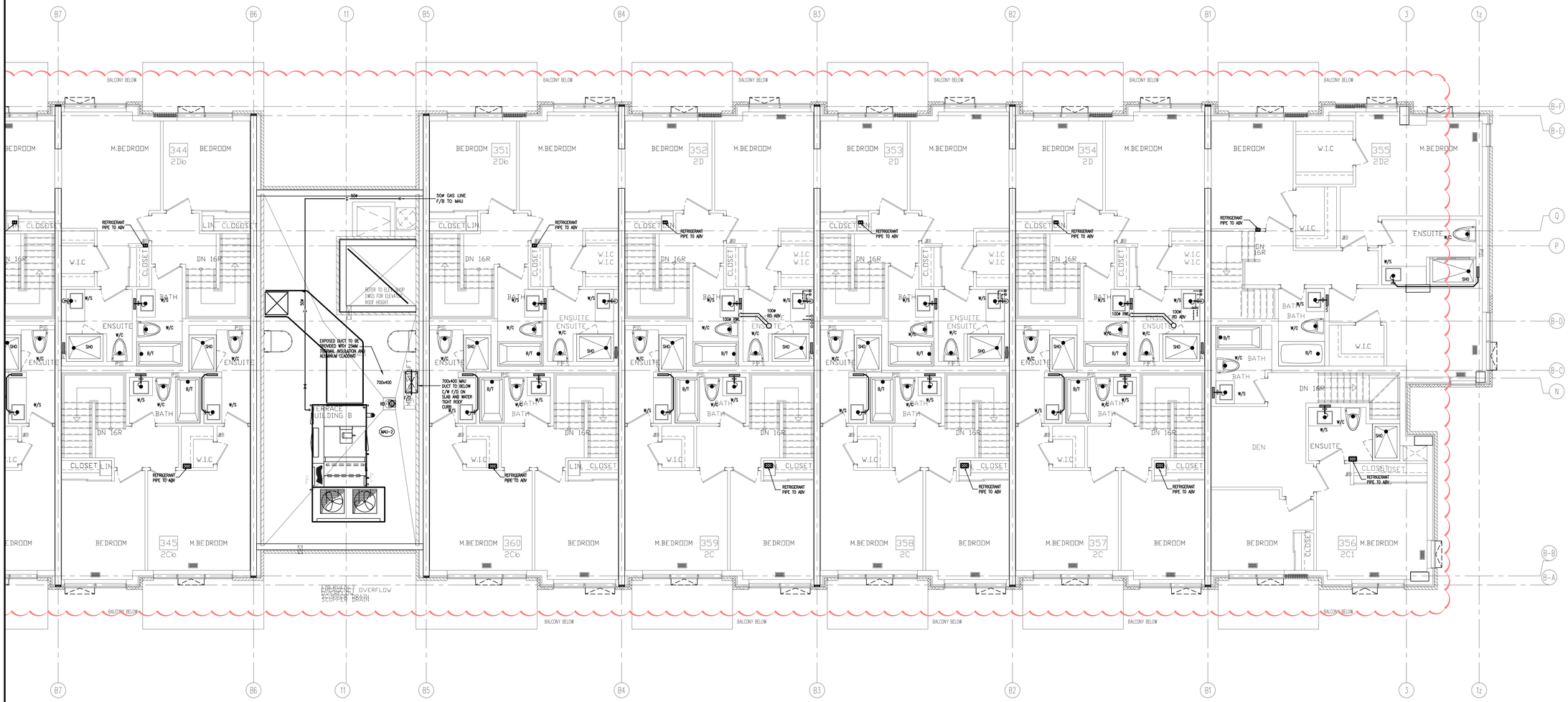
LICENCED PROFESSIONAL ENGINEER
Y. HOU
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PROVINCE OF ONTARIO

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TITLE
**BLOCK 'C'**
**4TH FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-21 |
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| NO. | BY | DESCRIPTION | DATE |
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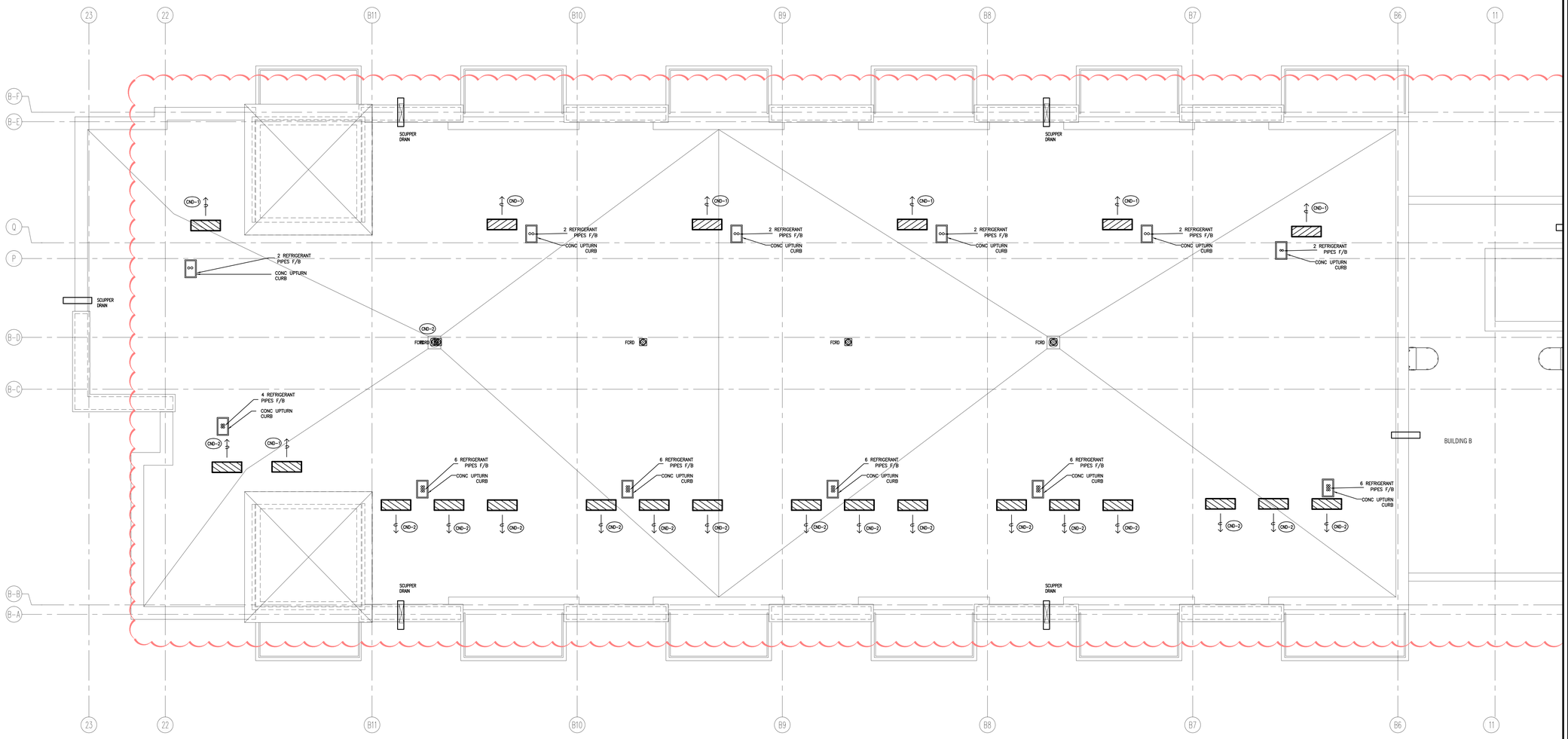
LICENCE PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'C'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-22 |
| | | OF - |




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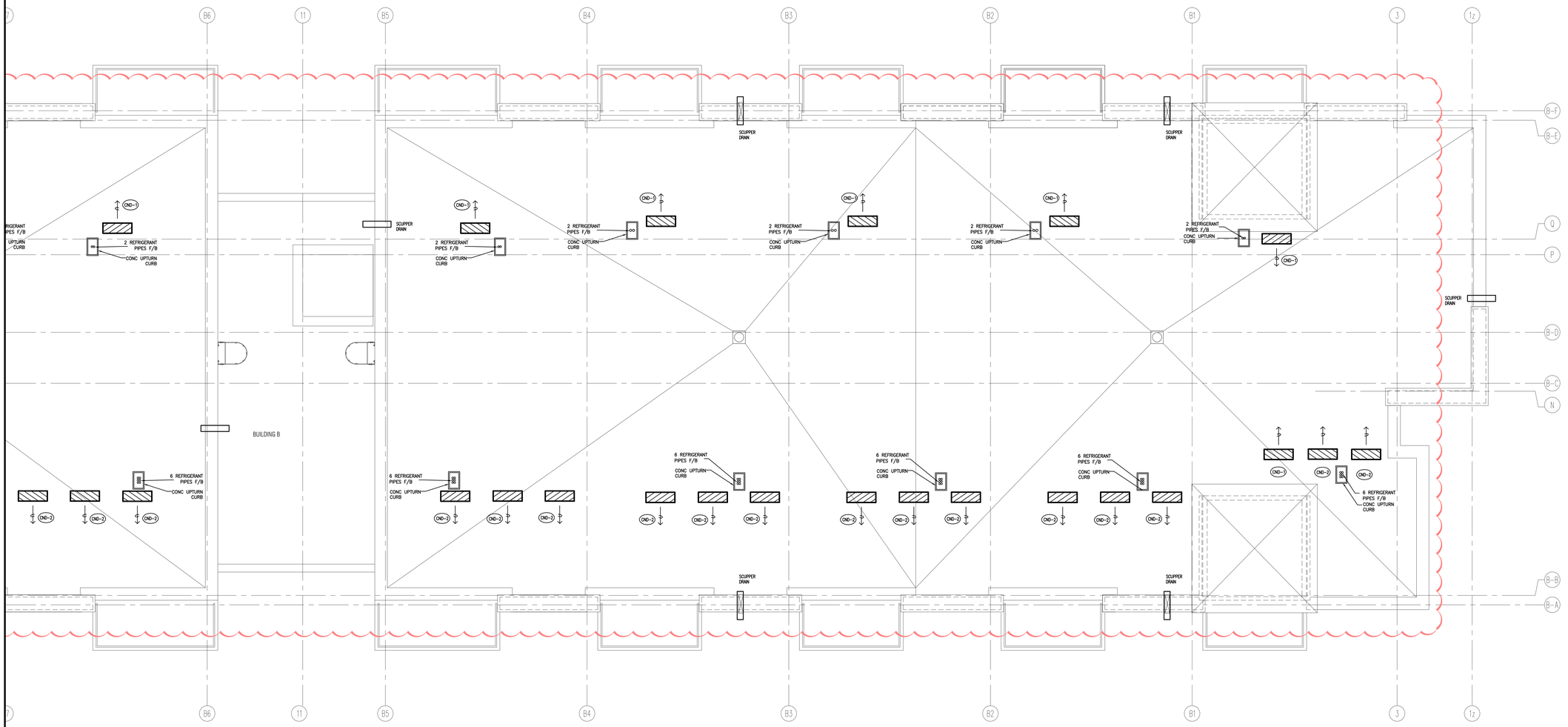
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TITLE
**BLOCK 'C'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
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| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-23 |
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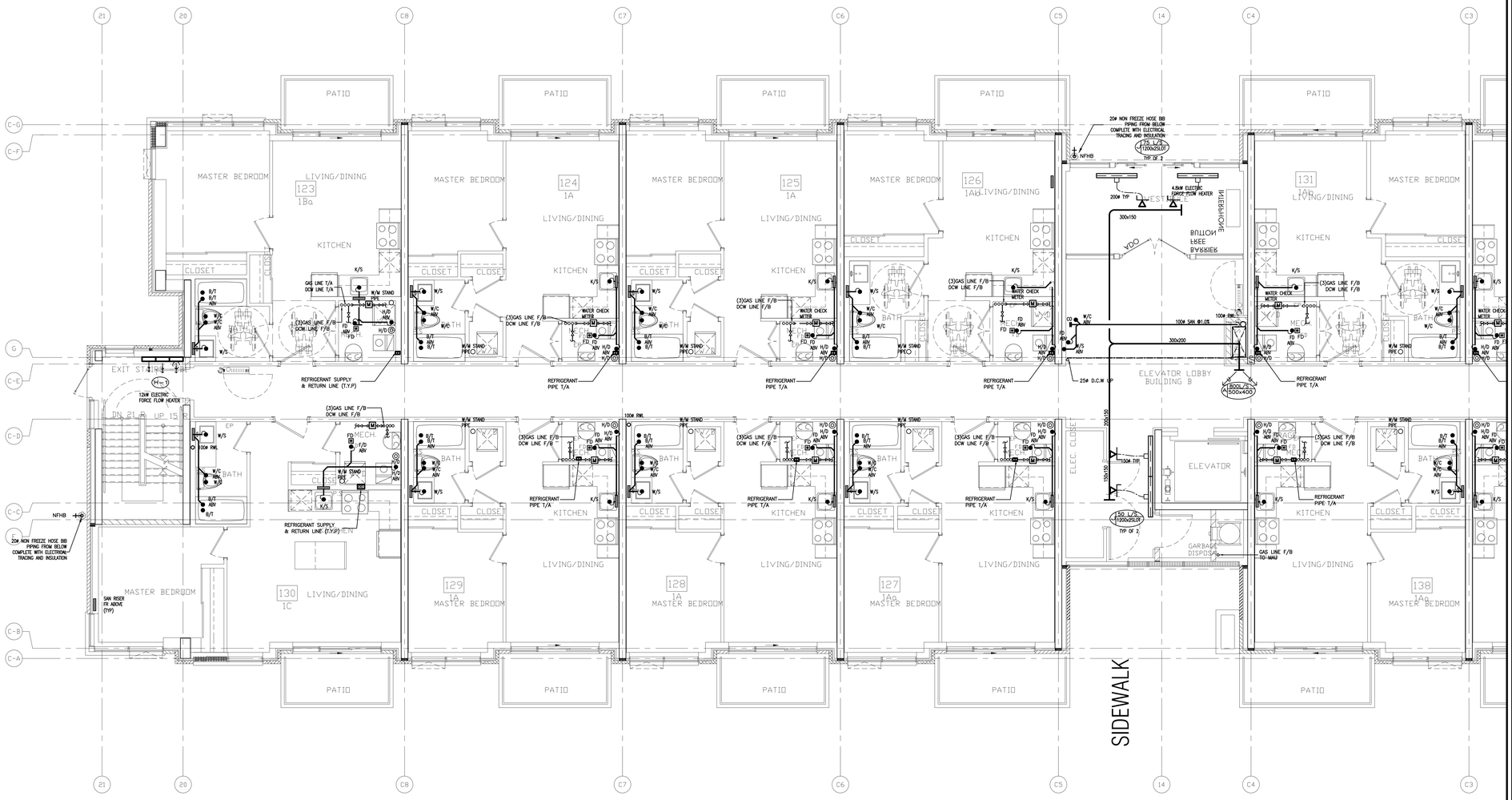
TITLE
**BLOCK 'C'**
**ROOF - PLUMBING/SANITARY**

PROJECT

# BRAMPTON STACKED FORESTSIDE ESTATES

ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
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| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-24 |
| | | OF - |




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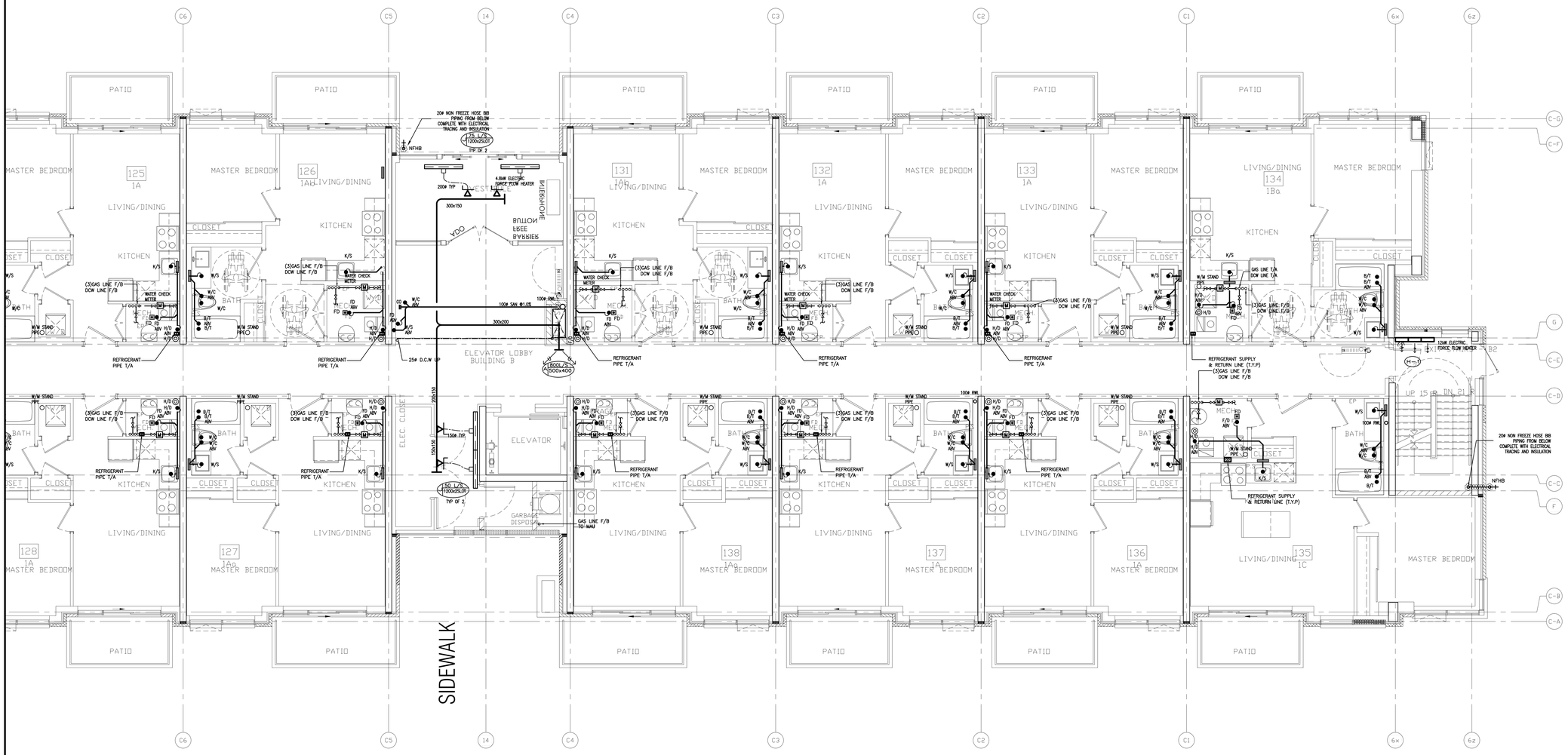
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TITLE
**BLOCK 'B'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
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| MAY, 2019 | 18-017 | M-25 |
| | | OF - |




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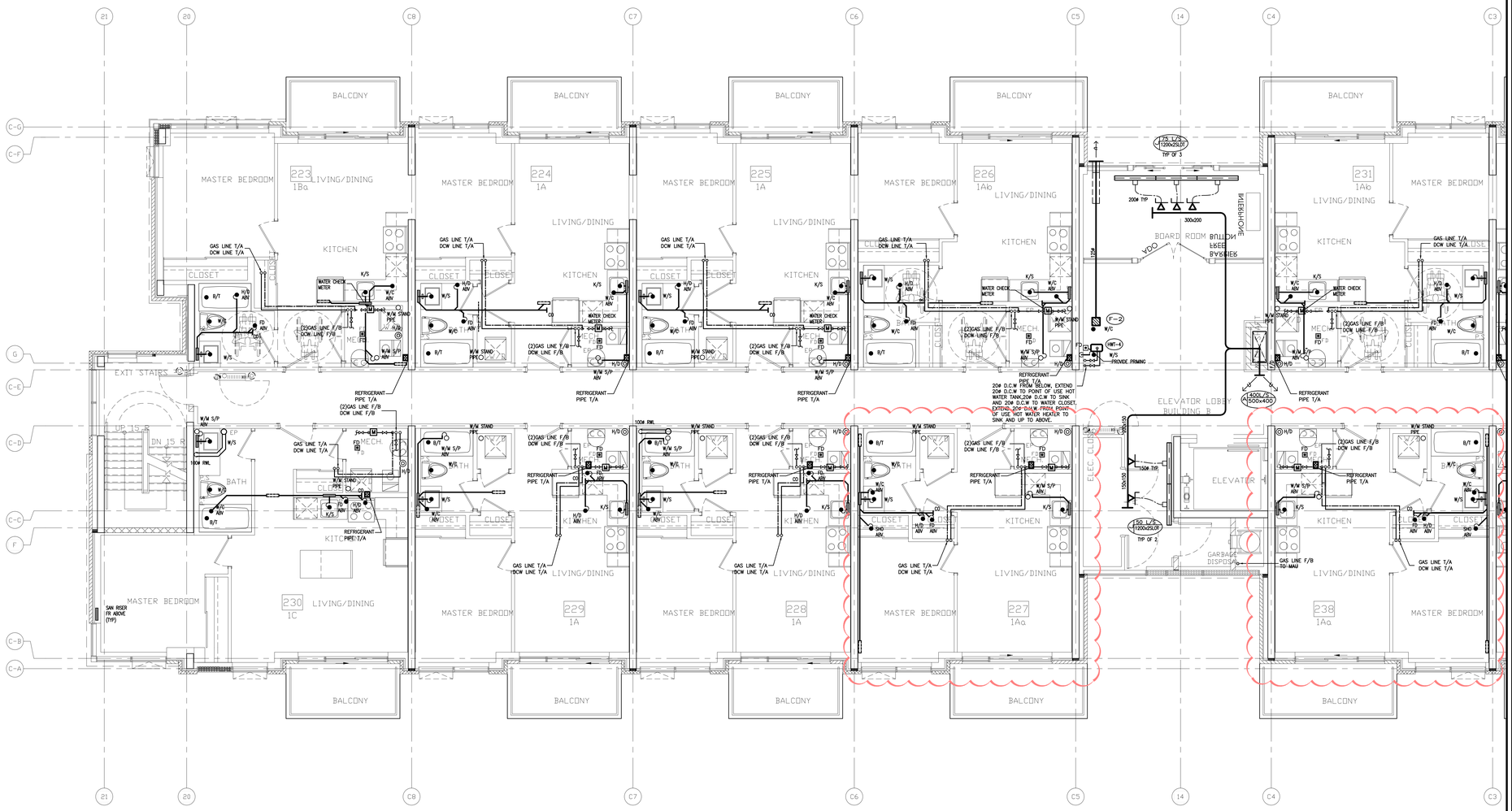
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TITLE
**BLOCK 'B'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

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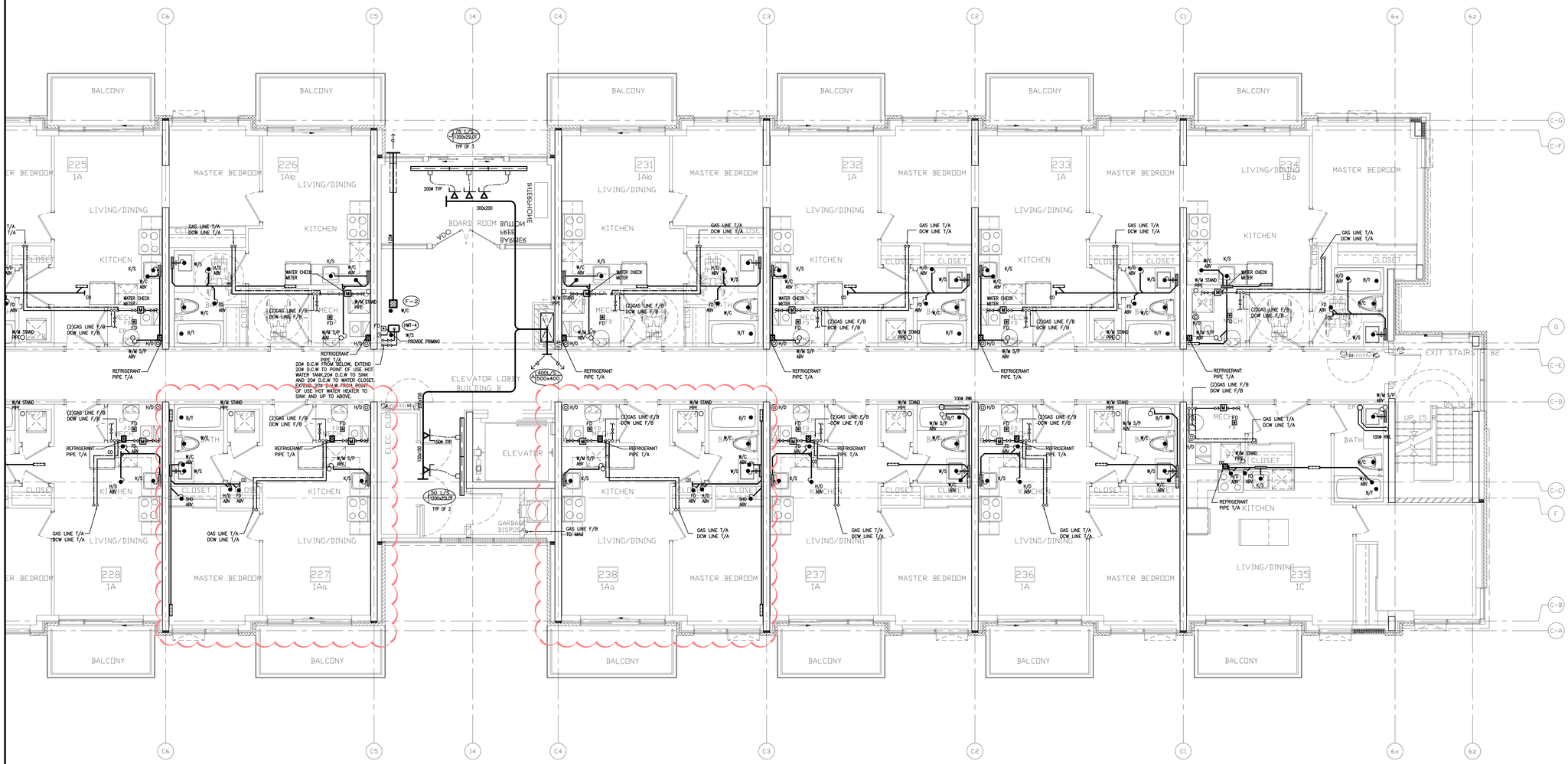
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TITLE
**BLOCK 'B'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

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TITLE
**BLOCK 'B'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

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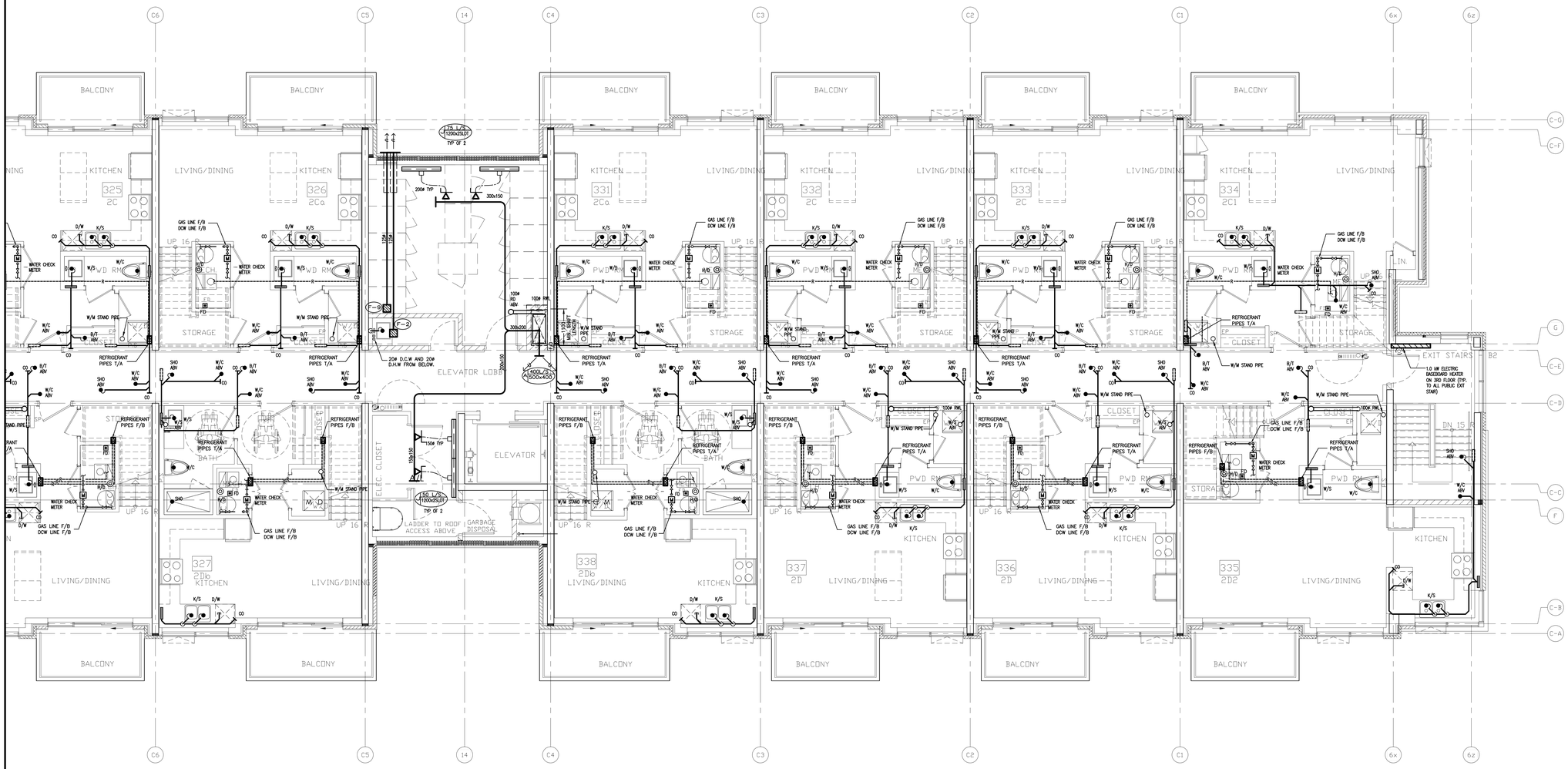
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TITLE
**BLOCK 'B'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
**ATTMAR + PALLESCHI DRIVE**
**BRAMPTON, ONTARIO**

| DRAWN | CHECKED | SCALE |
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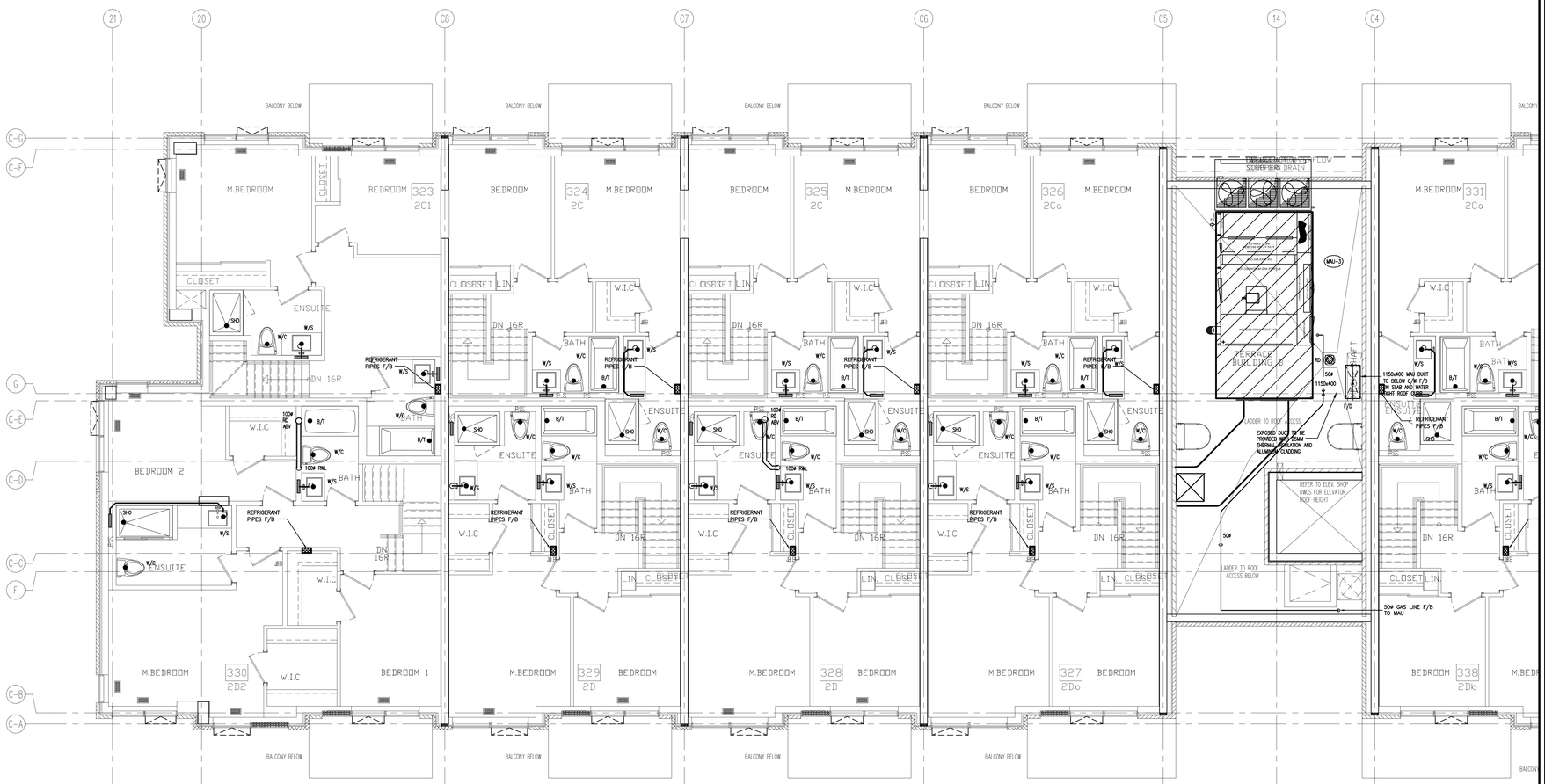
LICENCED PROFESSIONAL ENGINEER
Y. HOU
100117097
PROVINCE OF ONTARIO

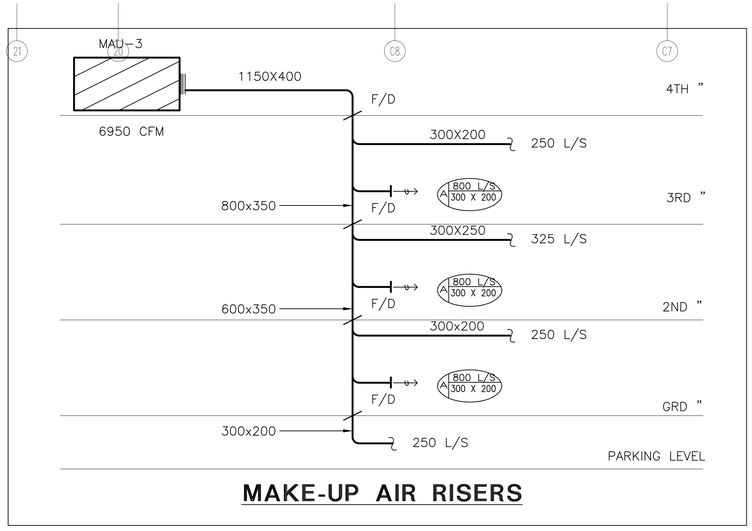
**UNITED ENGINEERING INC.**
Mechanical Electrical Consulting Engineers
3645 Keele Street, Suite 105,
Toronto, Ontario, M3J 1M6
Tel: (416) 398 1999 Fax: (416) 398 1933

TITLE
**BLOCK 'B'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-30 |
| | | OF - |




## MAKE-UP AIR RISERS

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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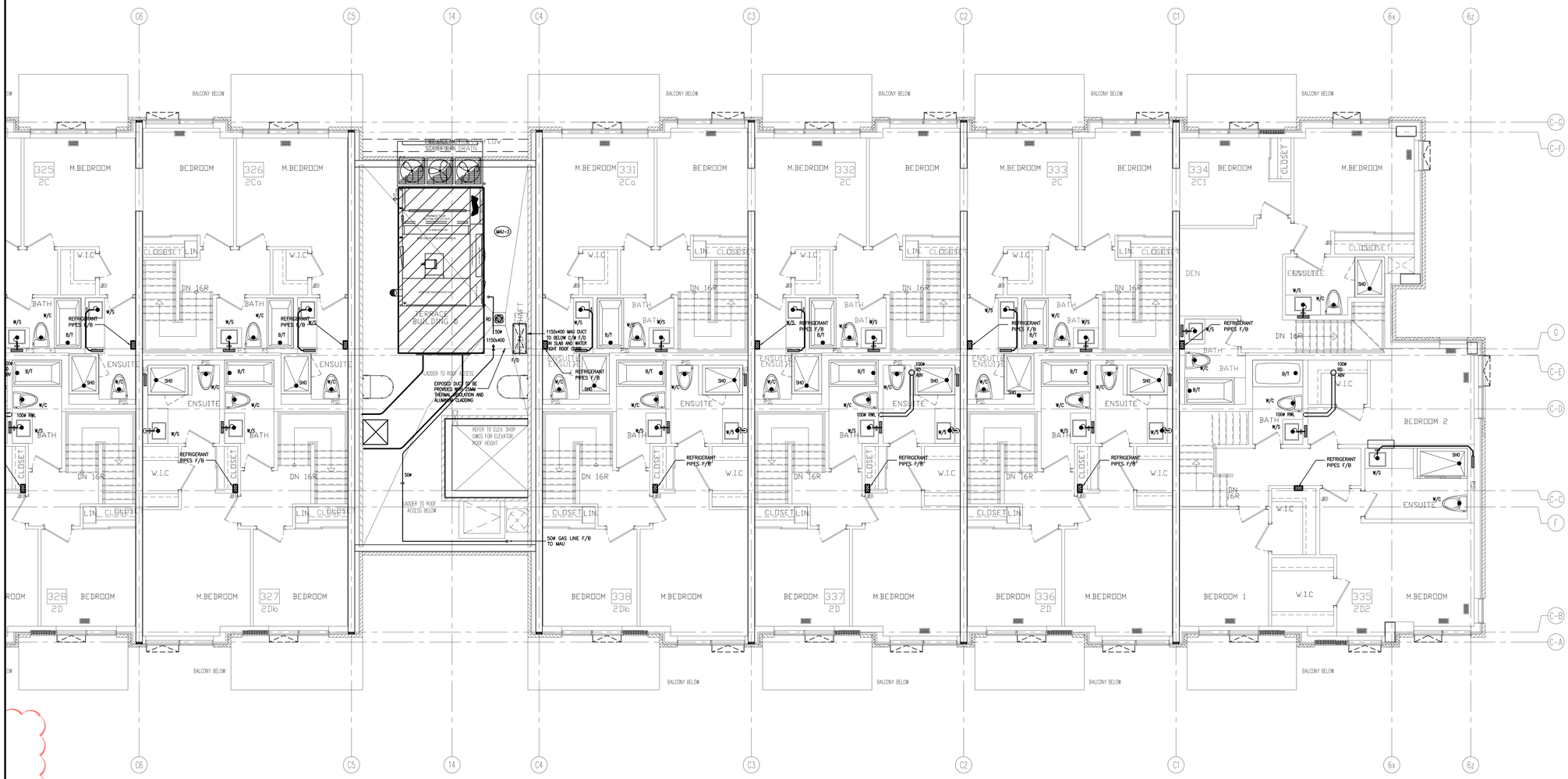
LICENCE PROFESSIONAL ENGINEER Y. HOU 100117097 PROVINCE OF ONTARIO

**UNITED ENGINEERING INC.**
Mechanical Electrical Consulting Engineers
3645 Keele Street, Suite 105,
Toronto, Ontario, M3J 1M6
Tel: (416) 398 1999 Fax: (416) 398 1933

TITLE
**BLOCK 'B'**
**4TH FLOOR - PLUMBING/SANITARY**

PROJECT
**BRAMPTON STACKED FORESTSIDE ESTATES**
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-31 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
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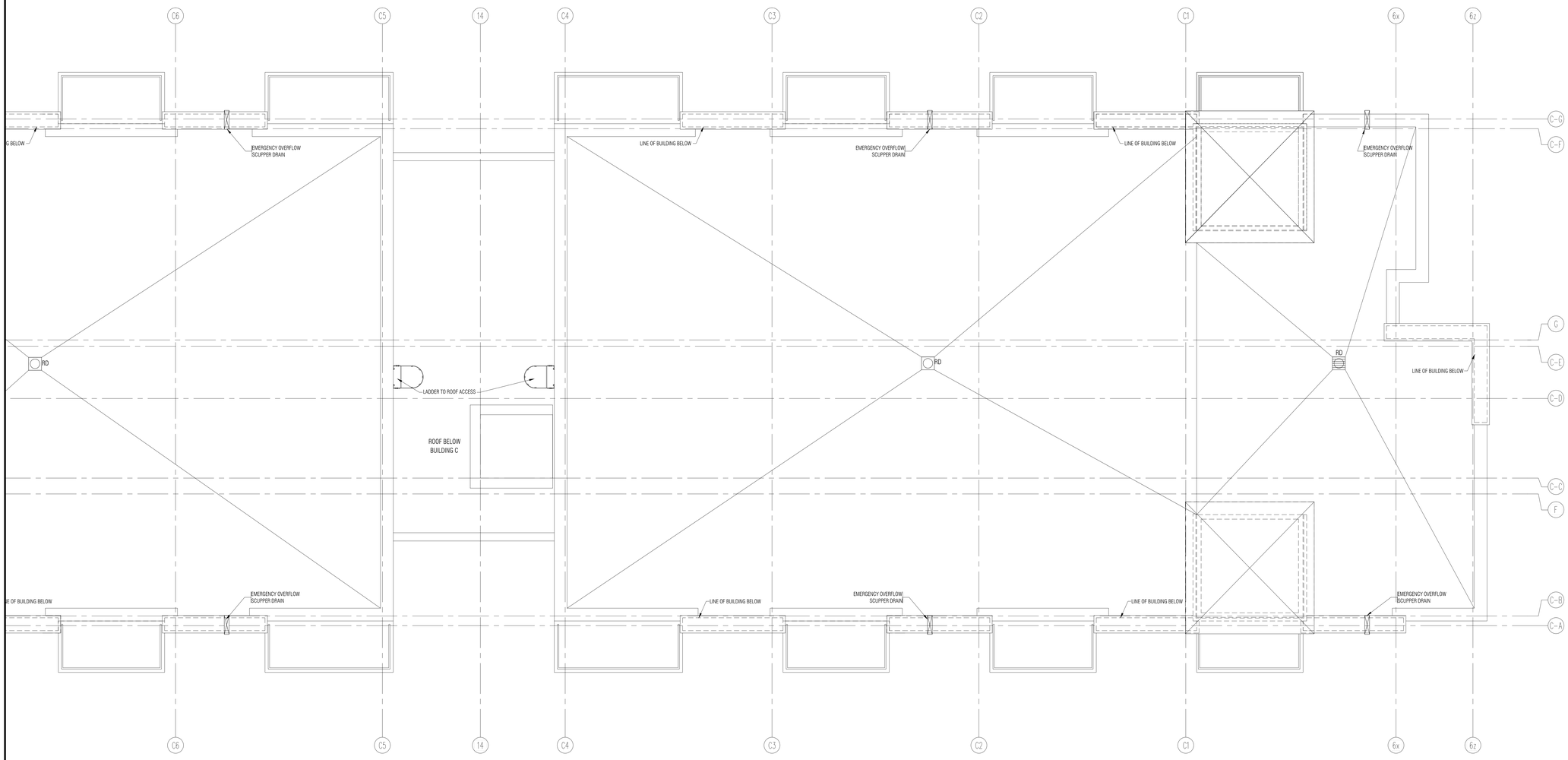
LICENCED PROFESSIONAL ENGINEER
Y. HOU
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3645 Keele Street, Suite 105,
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TITLE
**BLOCK 'B'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-32 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
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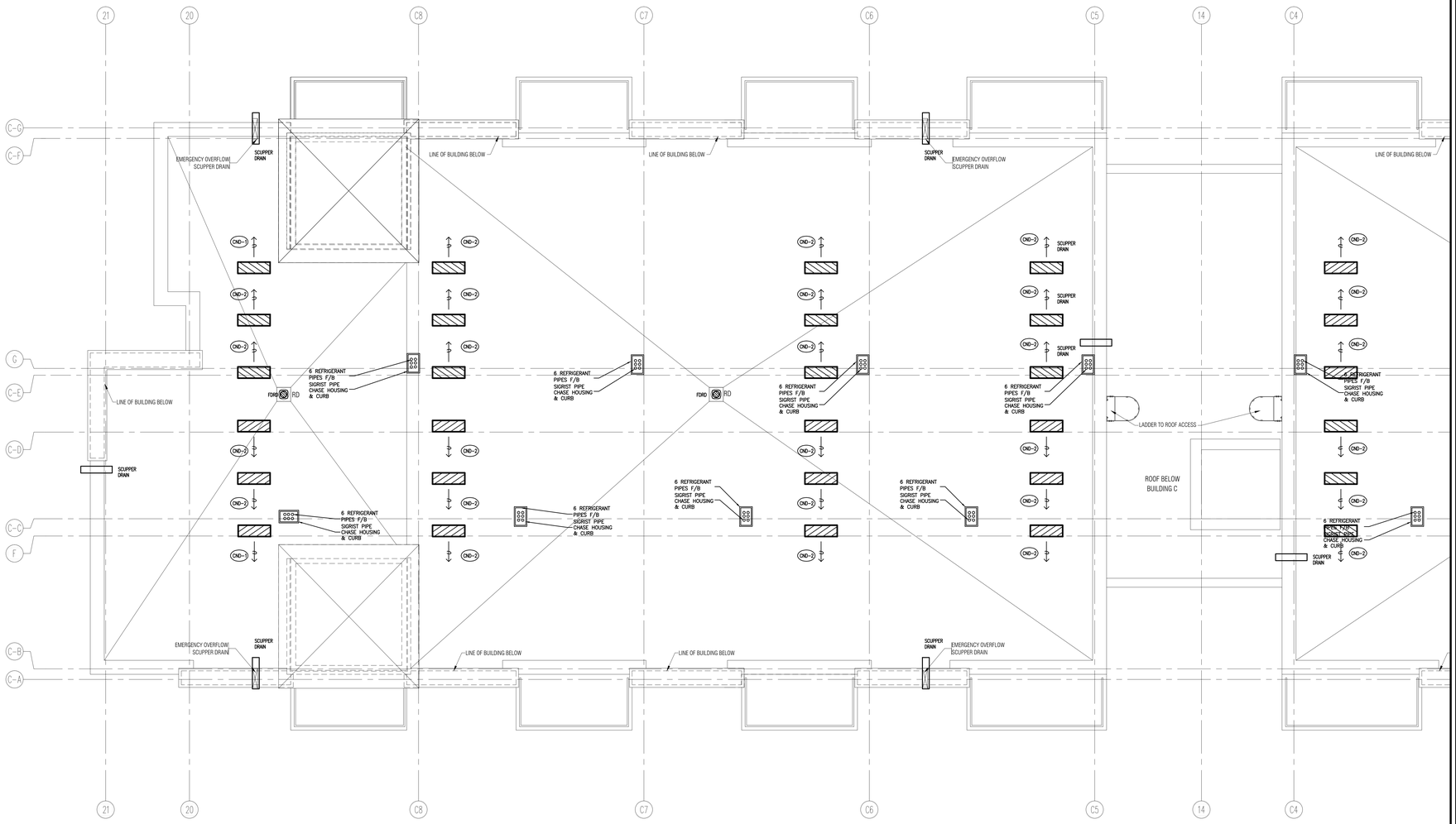
LICENCED PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'B'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-34 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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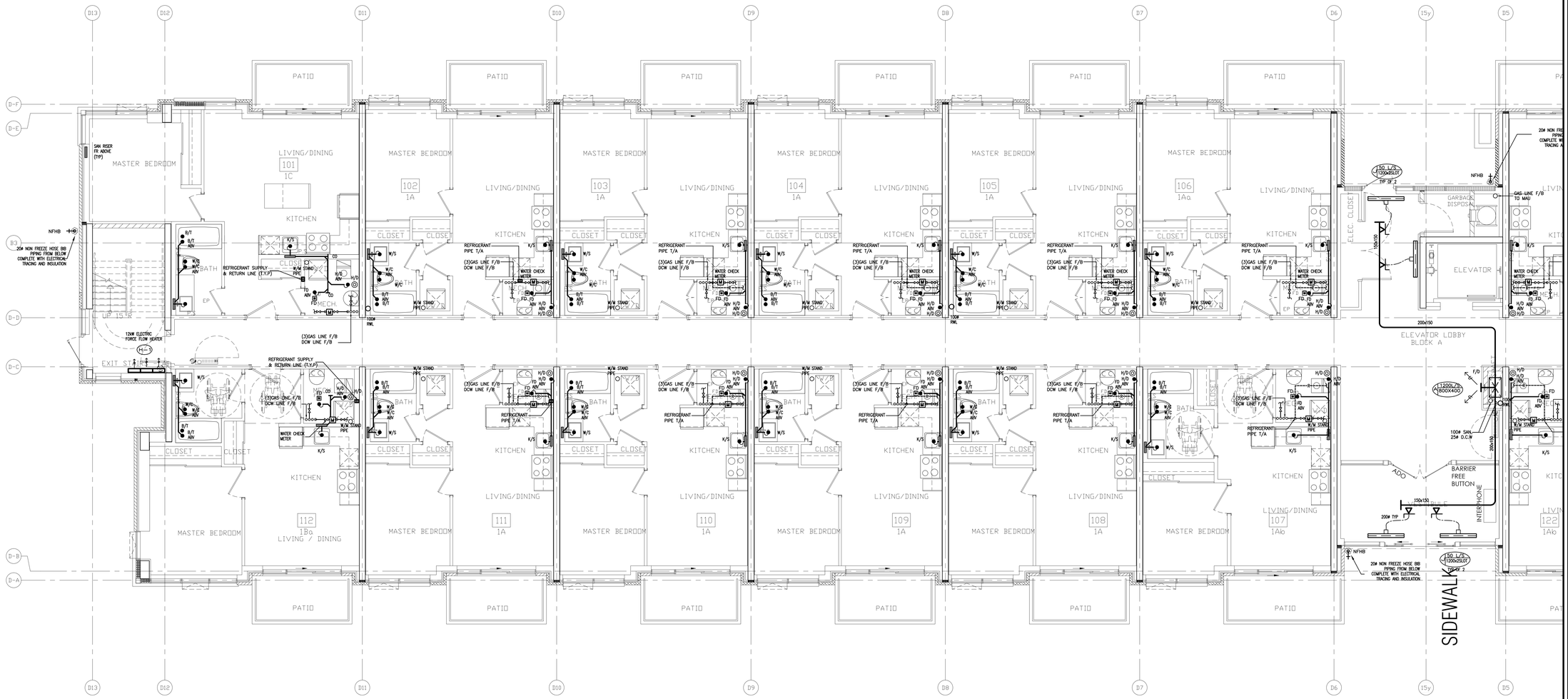
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TITLE
**BLOCK 'B'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-33 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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TITLE
**BLOCK 'A'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-35 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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TITLE
**BLOCK 'A'**
**GROUND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-36 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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TITLE
**BLOCK 'A'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-37 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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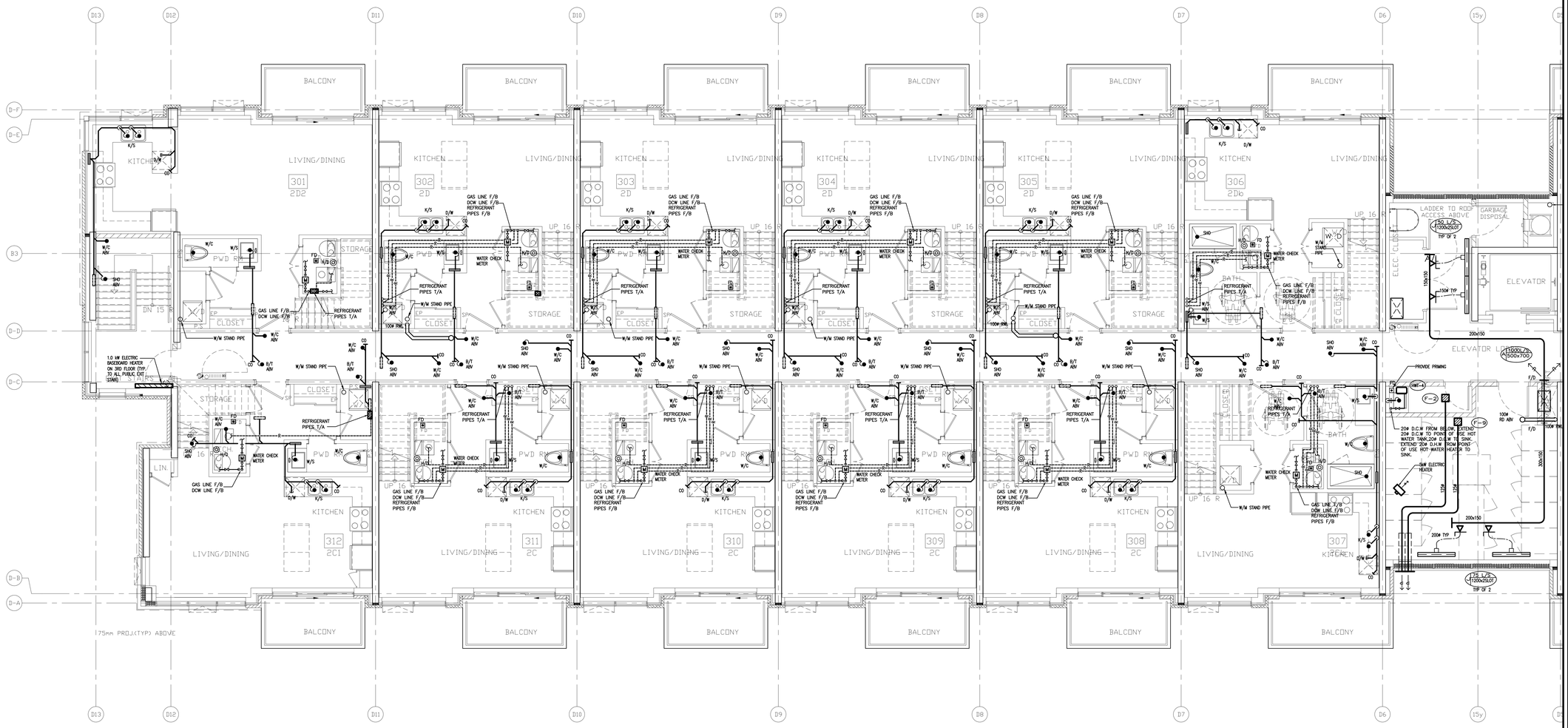
LICENCE PROFESSIONAL ENGINEER
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TITLE
**BLOCK 'A'**
**2ND FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-38 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
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| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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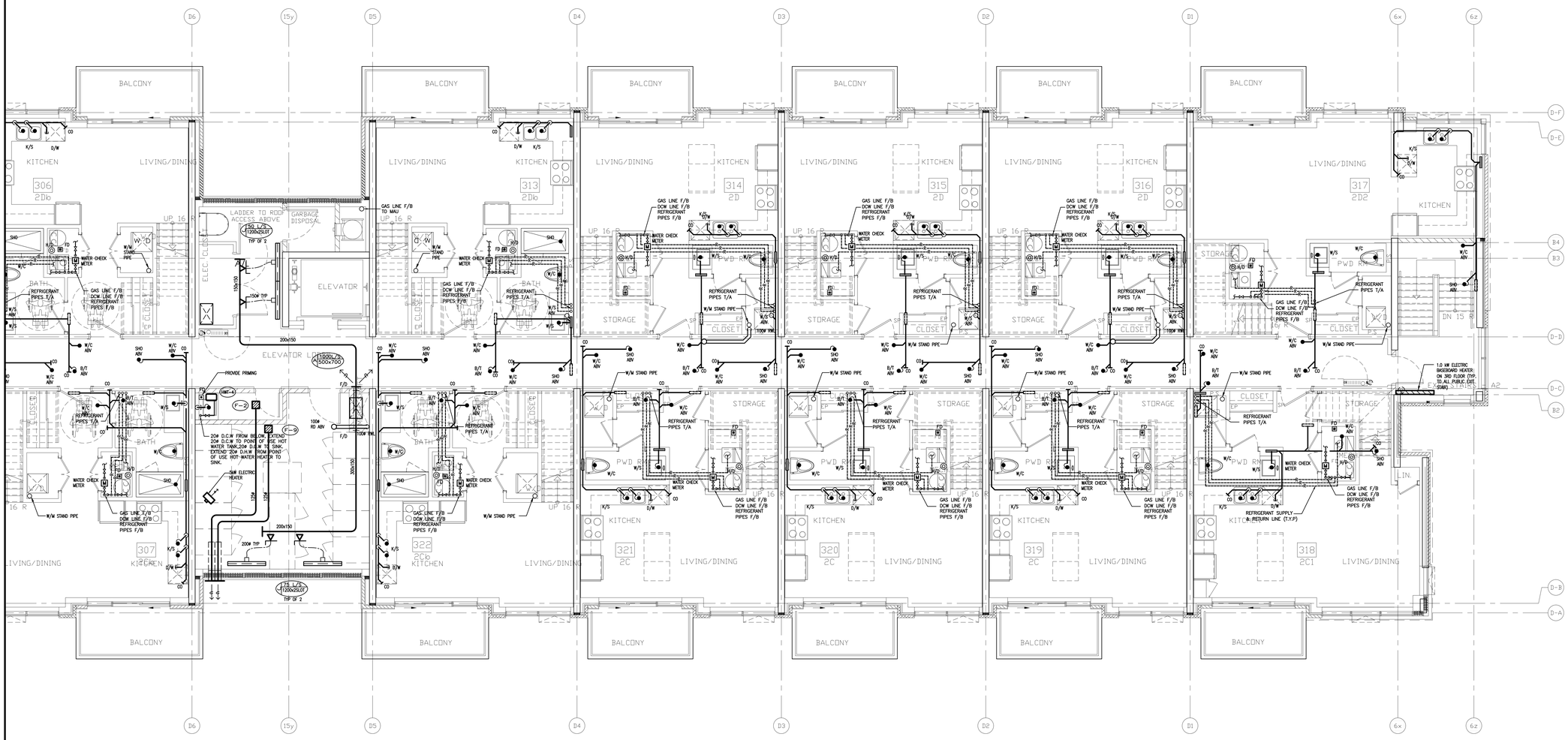
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Y. HOU
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TITLE
**BLOCK 'A'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-39 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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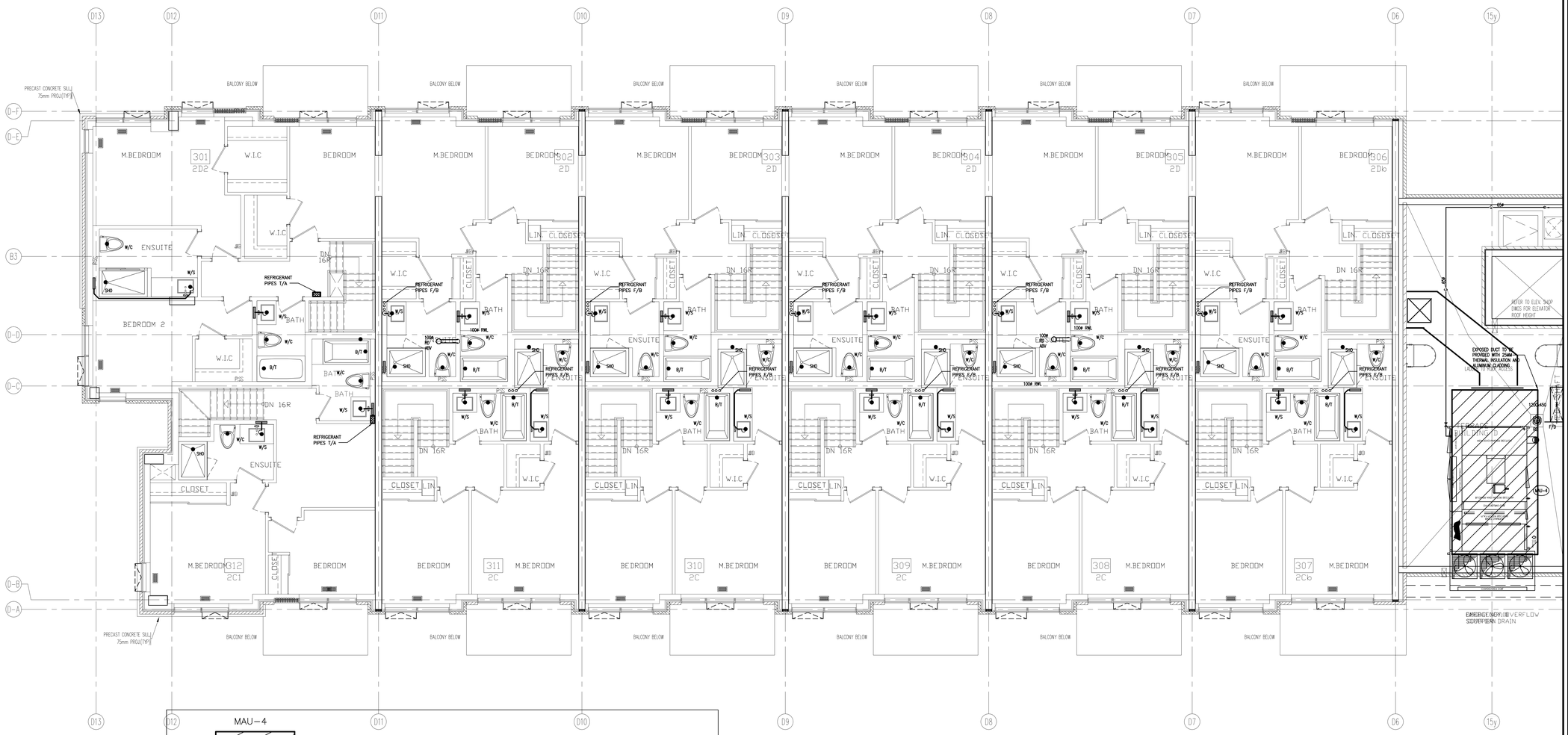
LICENCED PROFESSIONAL ENGINEER
Y. HOU
100117097
PROVINCE OF ONTARIO

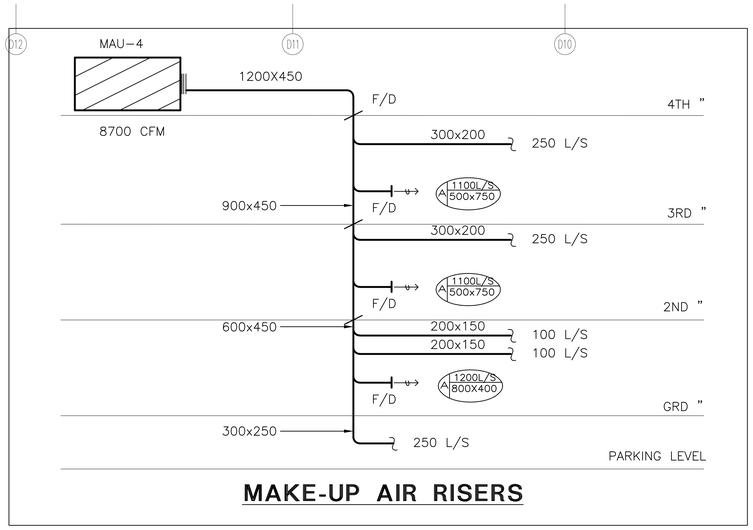
**UNITED ENGINEERING INC.**
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TITLE
**BLOCK 'A'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-40 |
| | | OF - |




## MAKE-UP AIR RISERS

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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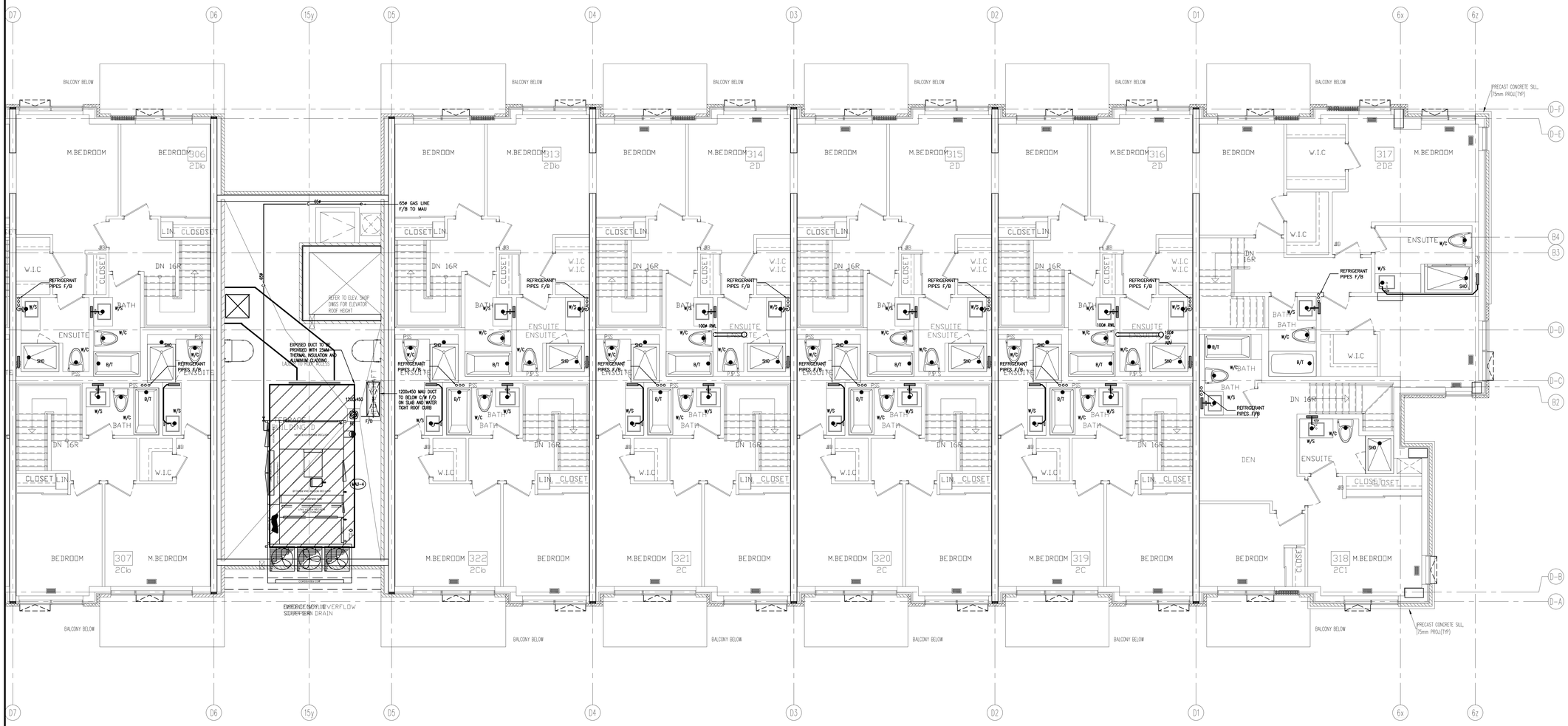
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Tel: (416) 398 1999 Fax: (416) 398 1933

TITLE
**BLOCK 'A'**
**4TH FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-41 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
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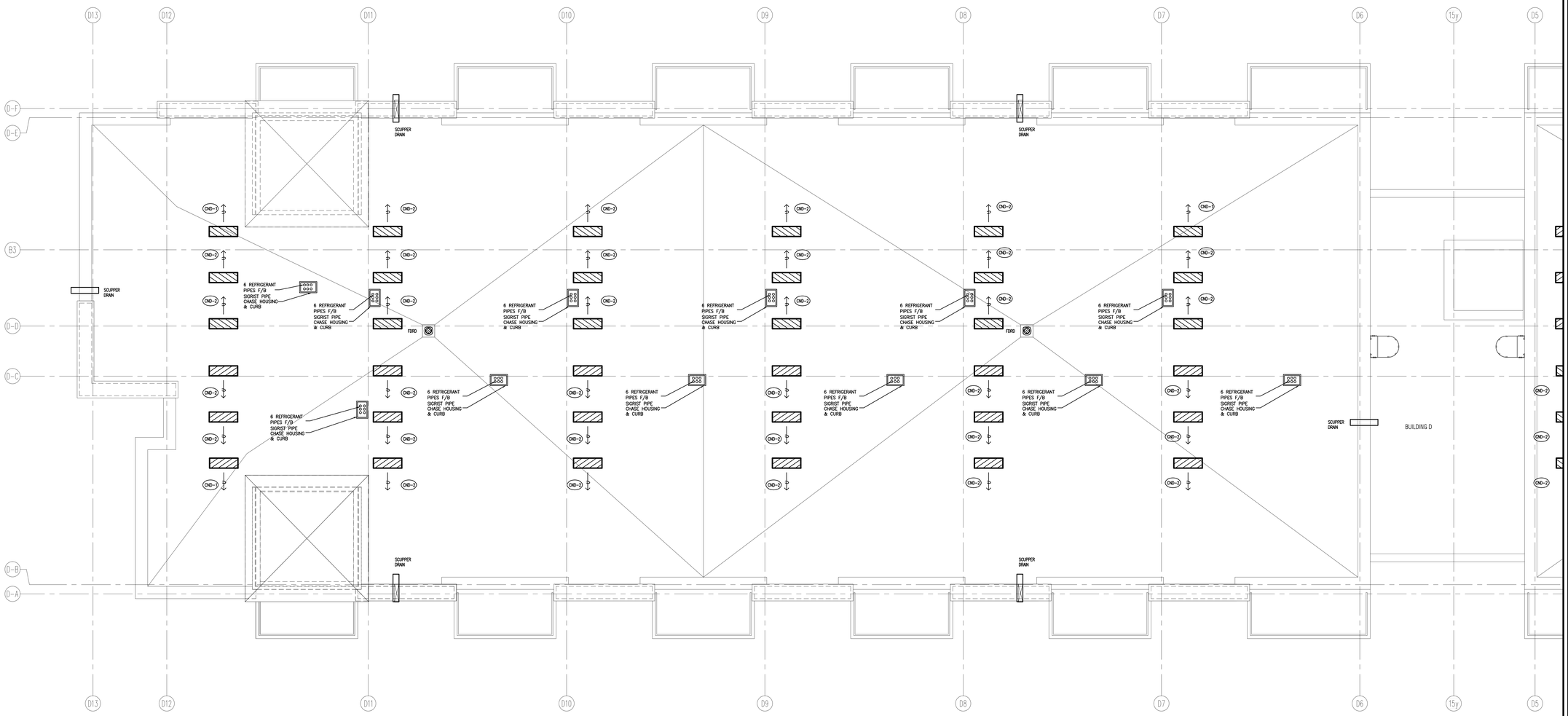
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TITLE
**BLOCK 'A'**
**3RD FLOOR - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-42 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
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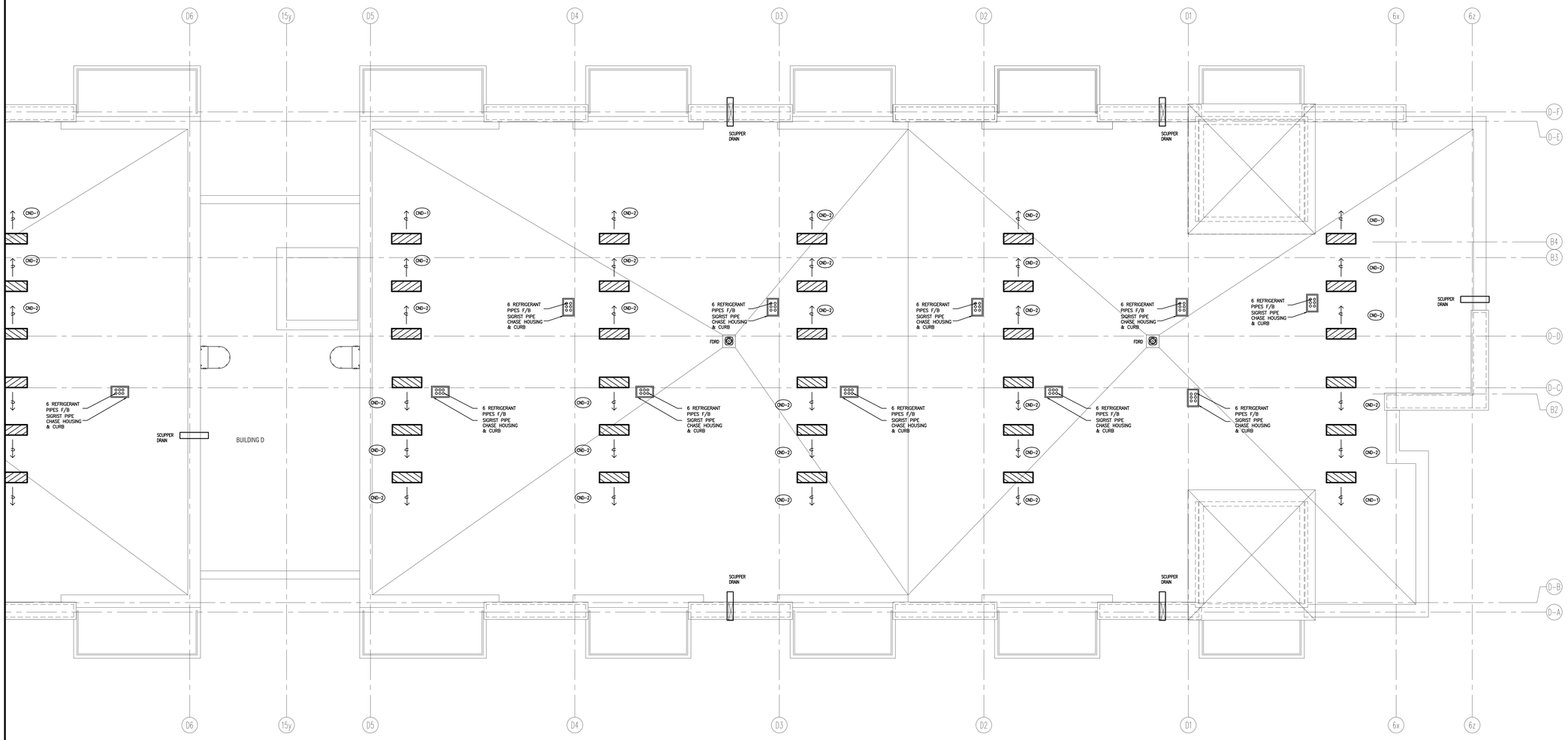
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TITLE
**BLOCK 'A'**
**ROOF - PLUMBING/SANITARY**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-43 |
| | | OF - |




| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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100117097
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Tel: (416) 398 1999 Fax: (416) 398 1933

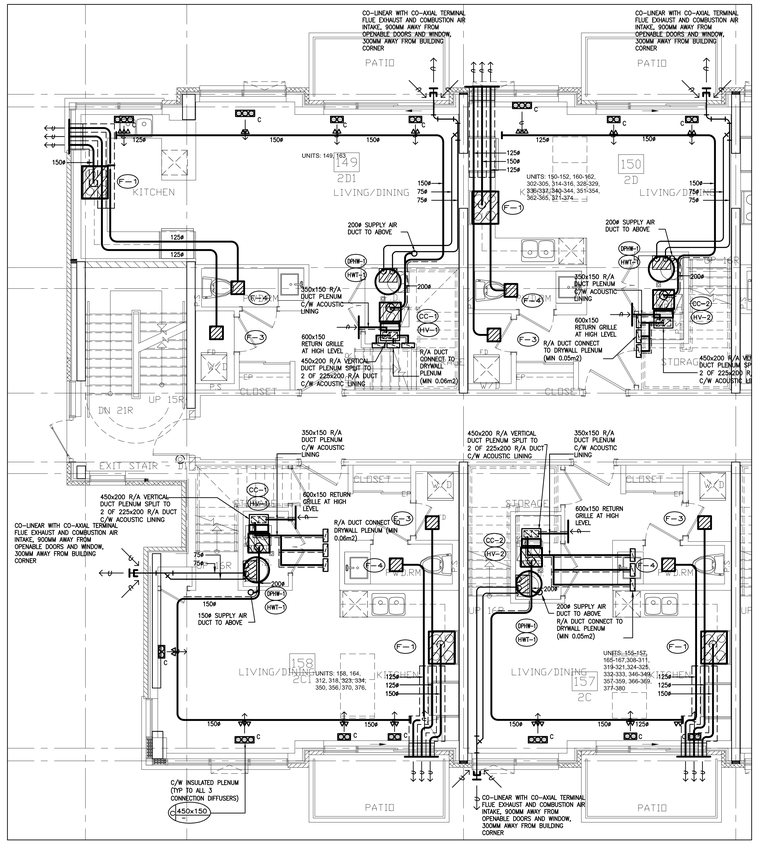
TITLE
**BLOCK 'A'**
**ROOF - PLUMBING/SANITARY**

PROJECT

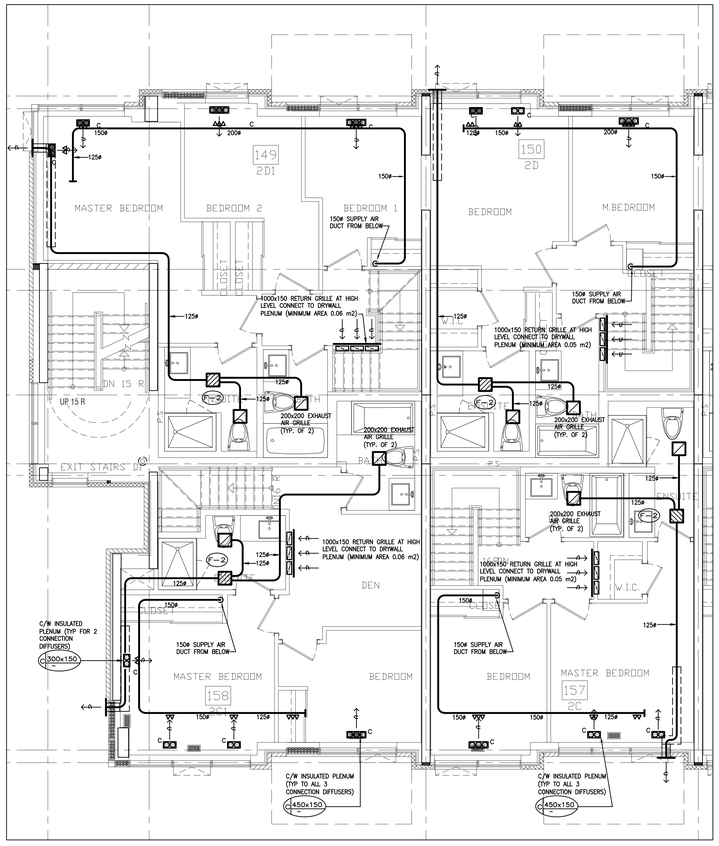
# BRAMPTON STACKED FORESTSIDE ESTATES

ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

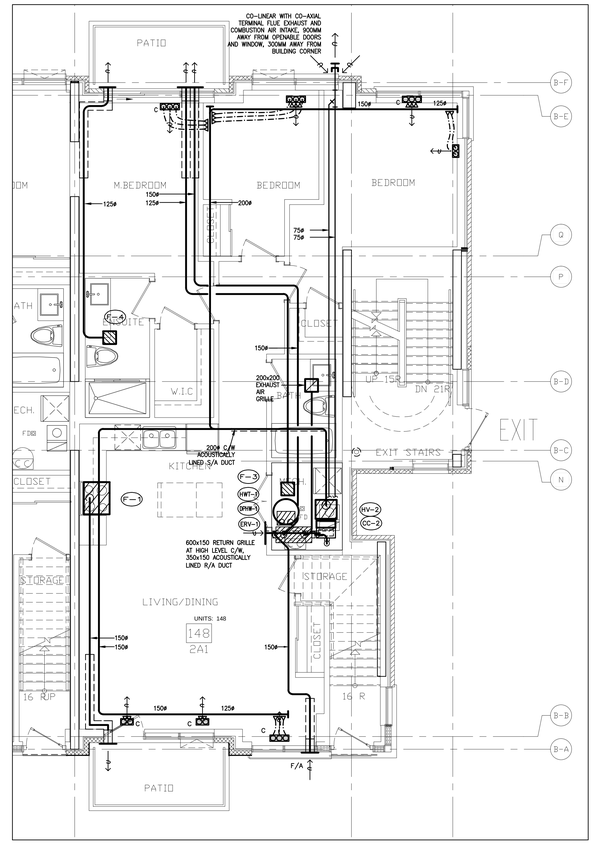
| DRAWN | CHECKED | SCALE |
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| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-44 |
| | | OF - |



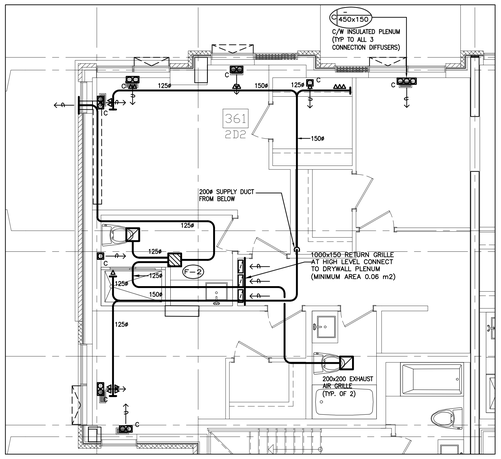

GROUND FLOOR, 3RD FLOOR TYPICAL SUITE LAYOUT TYPE 2C1, 2C, 2D1 & 2D



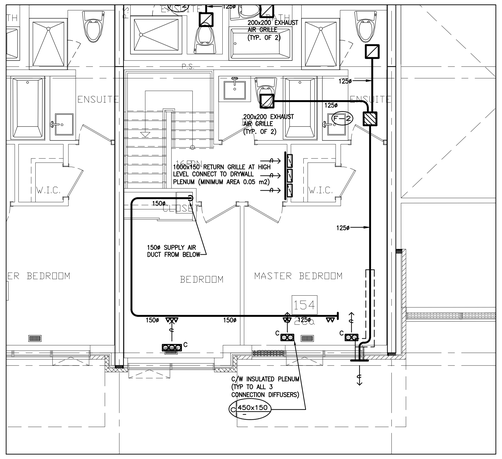

2ND FLOOR, 4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2C1, 2C, 2D1 &, 2D



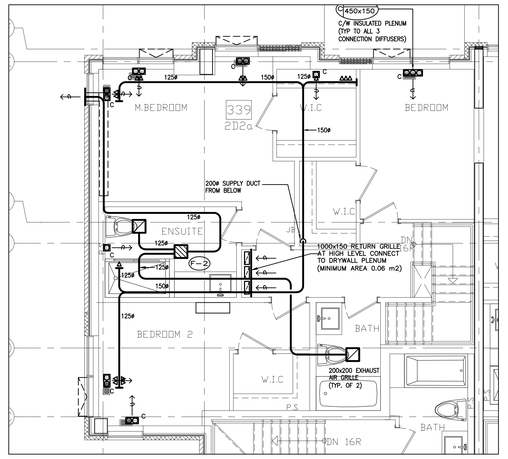

GROUND FLOOR TYPICAL SUITE LAYOUT TYPE 2A1



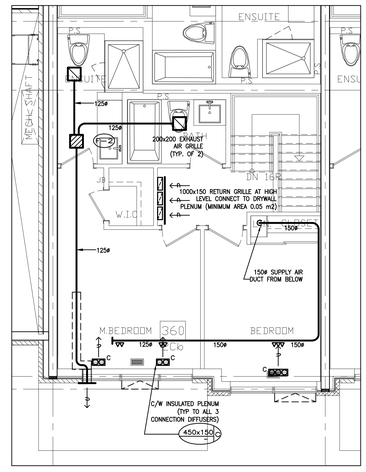

2ND FLOOR TYPICAL SUITE LAYOUT TYPE 2D2
4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2D2



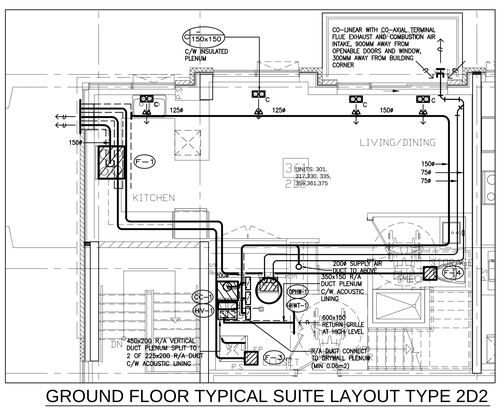

2ND FLOOR TYPICAL SUITE LAYOUT TYPE 2Ca
4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2Ca



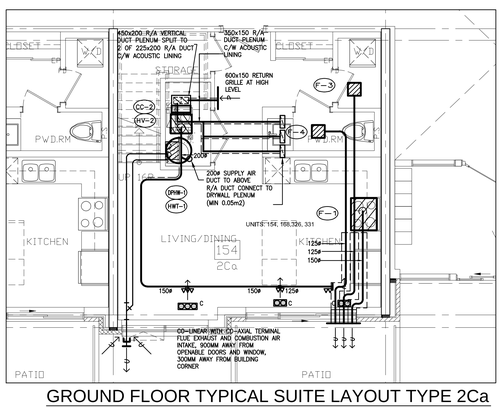

2ND FLOOR TYPICAL SUITE LAYOUT TYPE 2D2a
4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2D2a



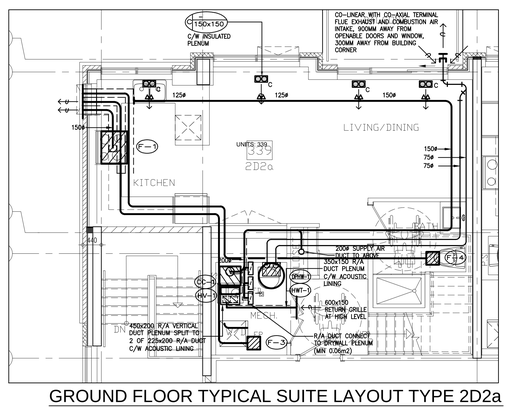

2ND FLOOR, 4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2Cb



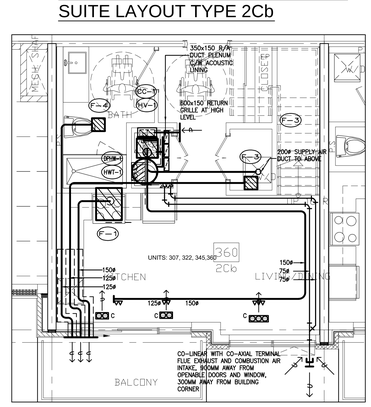

GROUND FLOOR TYPICAL SUITE LAYOUT TYPE 2D2
3RD FLOOR TYPICAL SUITE LAYOUT TYPE 2D2




GROUND FLOOR TYPICAL SUITE LAYOUT TYPE 2Ca
3RD FLOOR TYPICAL SUITE LAYOUT TYPE 2Ca




GROUND FLOOR TYPICAL SUITE LAYOUT TYPE 2D2a
3RD FLOOR TYPICAL SUITE LAYOUT TYPE 2D2a




GROUND FLOOR, 3RD FLOOR TYPICAL SUITE LAYOUT TYPE 2Cb

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 05 | LB | ISSUED AS PER ADD M-05 | JAN. 20, 2021 |
| 04 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
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| 02 | RC | ADDENDUM #02 | SEP. 13, 2019 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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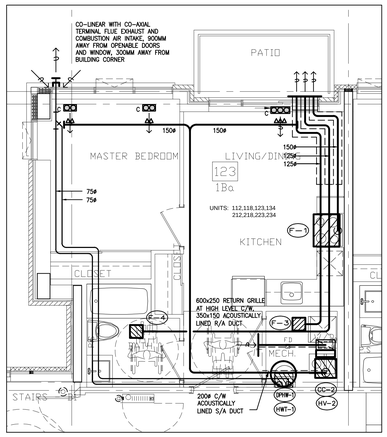
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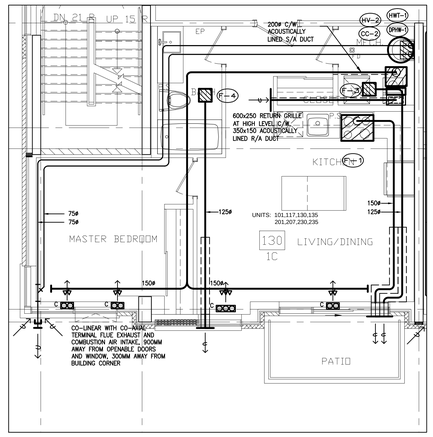
TITLE
TYPICAL SUITES LAYOUT MECHANICAL

PROJECT
BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

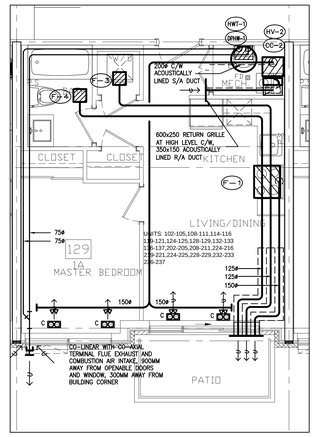
| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-46 |
| | | OF - |



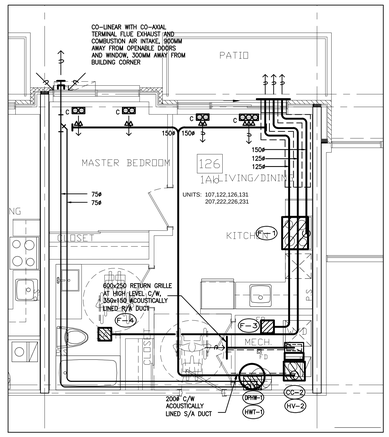

TYPICAL SUITE LAYOUT TYPE 1Ba



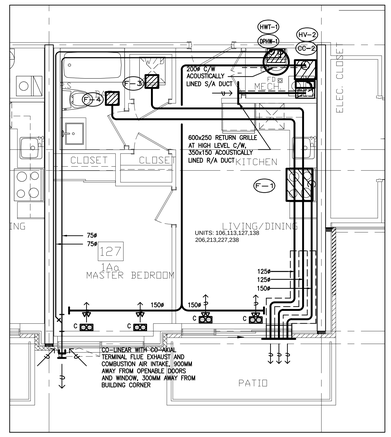

TYPICAL SUITE LAYOUT TYPE 1C



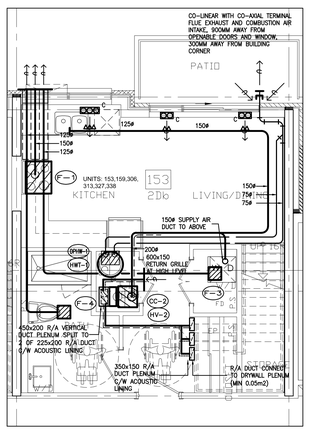

TYPICAL SUITE LAYOUT TYPE 1A



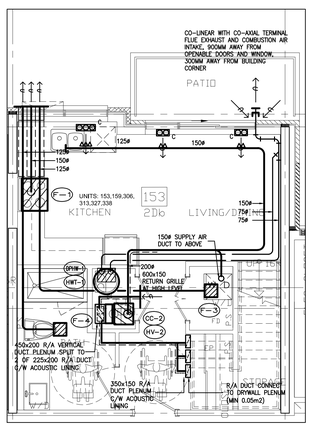

TYPICAL SUITE LAYOUT TYPE 1Ab



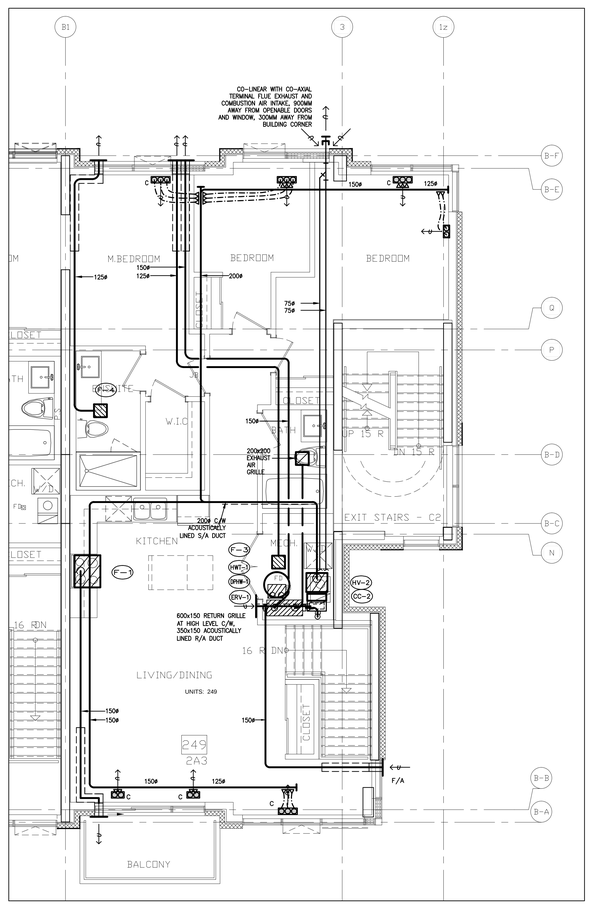

TYPICAL SUITE LAYOUT TYPE 1Aa




2ND FLOOR, 4TH FLOOR TYPICAL SUITE LAYOUT TYPE 2Db




GRD FLOOR, 3RF FLOOR TYPICAL SUITE LAYOUT TYPE 2Db




SECOND FLOOR TYPICAL SUITE LAYOUT TYPE 2A3

| NO. | BY | DESCRIPTION | DATE |
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TITLE
**TYPICAL SUITES LAYOUT MECHANICAL**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | 1:50 |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-47 |
| | | OF - |

## EQUIPMENT SCHEDULE

| UNIT No | DESCRIPTION | LOCATION | HEATING M.B.H. | HEATING L/S C.F.M. | COOLING TOTAL M.B.H. | COOLING TOTAL L/S C.F.M. | L/S G.P.M. | EXTERNAL S.P. INS. | POWER K.P.A. | POWER K.W. AMPS/HP | R.P.M. | ELECTRICAL CHARACTERISTICS | MAKE | MODEL | WEIGHT KG LBS | OPERATING CONDITIONS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (DHW-1) | CONDENSING COMBI BOILER | TOWNHOUSES | 97 MBH | | | | | | | 180W | | 120/1/60 | GLOW BRAND | C95 | 250 | | 2-PIPE VENT, C/W CONCRETE WALL TERMINATION VENT KIT SUITABLE FOR COMBINATION DOMESTIC HOT WATER AND AND HEATING APPLICATION |
| (HV-1) | AIR HANDLER | TOWNHOUSES | 46.28 MBH | 1.5 TONS | 2 TONS | 750 | | | | 9.9 A | | 120/1/60 | MAX AIR | 70e | 95 | | BTUH HEATING @ 140 F EWT |
| (HV-2) | AIR HANDLER | TOWNHOUSES | 35.19 MBH | 1.5 TONS | 2 TONS | 580 | | | | 7.7 A | | 120/1/60 | MAX AIR | 50e | 85 | | BTUH HEATING @ 140 F EWT |
| (CND-1) (CC-1) | CONDENSING UNIT/COOLIN COIL | TOWNHOUSES | | | | | | | | 25A MAX FUSE<br>MCA 17.6 | | 230/1/60 | CARRIER | 25HHA424 | 187 | | SEER 13, REFRIGERAT R410A |
| (CND-2) (CC-2) | CONDENSING UNIT/COOLIN COIL | TOWNHOUSES | | | | 1.5 TONS | | | | 20A MAX FUSE<br>MCA 11.8 | | 230/1/60 | CARRIER | 25HHA418 | 187 | | SEER 13, REFRIGERAT R410A |
| (ERV-1) | ENERGY RECOVERY VENTILATOR | TOWNHOUSES | | 125CFM 0.4" WG | | | | | | 2 OF 1/10 HP | | 120/1/60 | LIFEBREATH | METRO 120 ERV | 100 | | SRE @ 0°C = 74% |

## HOT WATER TANK

| TAG | MANUFACTURER | MODEL NUMBER | TYPE | SERVICE | LOCATION | STORAGE CAPACITY (LITERS) | KW | ELECTRICAL CHARACTERISTICS | TEMP RISE (°F) | FLOW RATE AT TEMP RISE | VENT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (HWT-1) | GIANT | 152ETE-9GTW | INDIRECT STORAGE TANK | TOWNHOUSE | MECH RM | 184L (40.5GALS) | | | | | | |
| (HWT-2) | OA SMITH POINT OF USE | EJC-2 | ELECTRIC | BASEMENT WASHROOM | ABV CLG | 10L (2.5 USGAL) | 1.5 | 120/1/60 | 90 | | | |
| (HWT-3) | OA SMITH POINT OF USE | DEL-20S | ELECTRIC | BASEMENT JANITOR'S RM | ABV CLG | 74L (19 USGAL) | 6.0 | 208/1/60 | 90 | | | |
| (HWT-4) | OA SMITH POINT OF USE | EEC-2P155V | ELECTRIC | THIRD FLOOR WASHROOM | UNDER CABINET | 9.5L (2.5 USGAL) | 1.4 | 120/1/60 | 90 | | | |

## PUMP SCHEDULE

| NO. | TYPE | LOCATION | CAPACITY U.S.GPM L/S | PRES.DIF. FT. KPA. | RPM | H.P. K.W. | ELECTRICAL CHARACTERISTICS | MAKE | MODEL | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| (P-1) | DOMESTIC WATER BOOST PUMP | PARKING RM | 280 | 80PSI | 3600 | 25/25HP | 600/3/60 | BELL & GOSSETT TECHNOFORCE XLS | | C/W CONTROL PANEL, VARIABLE SPEED DRIVE |
| (P-2) | SANITARY SUMP PUMP | PARKING LEVEL | 120 | 40 | 1750 | 2 HP | 208/3/60 | BARNES | 2SEV-L | DUPLEX C/W ALTERNATOR & HIGH WATER ALARM |
| (P-3) | STORM SUMP PUMP | PARKING LEVEL | 120 | 40 | 1750 | 2 HP | 208/3/60 | BARNES | 2SEV-L | DUPLEX C/W ALTERNATOR & HIGH WATER ALARM |
| (P-4) | ELEVATOR SUMP PUMP | PARKING LEVEL | 50 | 20 | 1750 | 1/2 HP | 120/1/60 | HYDROMATIC | SP-40 | SIMPLEX C/W HIGH WATER ALARM |
| (P-5) | BASEMENT WASHROOM | PARKING LEVEL | 80 | 70 | 1750 | 3 HP | 600/3/60 | BARNES | SP-40 | GRINDER |

NOTES:

## SPLIT TYPE AC EQUIPMENT REMARKS,

1. CONTRACTOR SHALL PROVIDE DRAIN LINES FROM THE AC UNIT TO THE NEAREST DRAINS. PROVIDE CONDENSATE PUMP IF THE GRAVITY DISCHARGE IS NOT AVAILABLE.

2. LOW AMBIENT APPLICATION.

3. CONTRACTOR SHALL VERIFY THE LENGTH OF THE REFRIGERANT LINES BETWEEN THE CONDENSING UNIT AND ASSOCIATED INDOOR AC UNIT TO MEET THE MANUFACTURER'S REQUIREMENT.

4. OUTDOOR CONDENSING UNITS SHALL BE SECURED IN PLACE, LEVELED AND PLUMBED ON VIBRATION ISOLATION PADS, ON PRESSURE TREATED WOODEN SLEEPERS.

5. CONTRACTOR SHALL INSTALL THE REFRIGERATION PIPING DISTRIBUTION PER THE MANUFACTURER'S INSTRUCTIONS.

## SPLIT SYSTEM EQUIPMENT SCHEDULE

| UNIT No | DESCRIPTION | LOCATION | HEATING K.W. M.B.H. | HEATING L/S C.F.M. | COOLING TOTAL K.W. M.B.H. | COOLING TOTAL L/S C.F.M. | L/S G.P.M. | EXTERNAL S.P. INS. | POWER K.P.A. | POWER K.W. AMPS/HP | R.P.M. | ELECTRICAL CHARACTERISTICS | MAKE | MODEL | WEIGHT | OPERATING | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (E-1) | SPLIT SYSTEM BLOWER & COIL | ELEV MACH ROOM | | | 18.0 | 570 | | | | MOCP 15A<br>MCA 1A | | 208/1/60 | CARRIER | 40MKCB18B---3 | | | C/W REMOTE SYSTEM TUBING KIT MODEL# TRDS-50S1, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT PIPES THROUGH ELEV MACH RM WALL, RUN CONDENSATE DRAIN THROUGH ELEV MACH RM WALL & TERMINATE OVER BOILER RM FLOOR DRAIN, UNIT TO BE INTERLOCKED EXHAUST SYSTEM TO SHUT-OFF EXHAUST SYSTEM UPON A/C UNIT OPERATION |
| (E-2) | SPLIT SYSTEM CONDENSER UNIT | GARAGE | | | 18.0 | | | | | MOCP 20A<br>MCA 11.8A | | 208/1/60 | CARRIER | 24AHA418A003 | | | |
| (E-3) | SPLIT SYSTEM HORIZONTAL BLOWER & COIL | GARBAGE ROOMS | | | 24.0 MBH | 800 | | 0.4" | | 6.4FLA | | 208/1/60 | CARRIER | 42DEA082L/Y6AT1R | 250 | | C/W THERMOSTAT AND FILTER |
| (E-4) | SPLIT SYSTEM CONDENSING UNIT | GARAGE | | | 24.0 MBH | | | | | MOP 25A<br>MCA 14.8A | | 208/1/60 | CARRIER | 24AHA424A003 | | | C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM GARAGE TO BLOWER ON GROUND FLR |
| (E-5) | SPLIT SYSTEM HORIZONTAL BLOWER & COIL | LOBBY | | | 24.0 MBH | 800 | | 0.4" | 15kW<br>1/2 HP | ELEC HEATER<br>MOP 30A | | 208/1/60 | CARRIER | FV4CNB002 | | | C/W 15kW ELECTRIC HEATER, THERMOSTAT AND FILTER |
| (E-6) | SPLIT SYSTEM CONDENSER UNIT | LOBBY ROOF | | | 24.0 MBH | | | | | MCA 19A | | 208/1/60 | CARRIER | 25HHA424 | | | HEAT PUMP TYPE C/W EXPANSION VALVE KIT, LOW AMBIENT CONTROL KIT, RUN REFRIGERANT LINES FROM ROOF CONDENSER TO 2ND FCU AT 2ND FLR |

## MAKE-UP AIR UNIT

| UNIT No | DESCRIPTION | LOCATION | HEATING K.W. M.B.H. | HEATING L/S C.F.M. | COOLING TOTAL K.W. M.B.H. | COOLING TOTAL L/S C.F.M. | L/S G.P.M. | EXTERNAL S.P. INS. | POWER K.P.A. | POWER K.W. AMPS/HP | R.P.M. | ELECTRICAL CHARACTERISTICS | MAKE | MODEL | WEIGHT | OPERATING | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (MU-1) | MAKE-UP AIR UNIT, INDIRECT GAS FIRED HEATING, DX COOLING | BLK 'D' ROOF | HEATING 250 MBH | 500 | DX COIL 186 MBH | 5500 | | 0.75" | | 40AMP<br>7.5 HP | 1276 | 575/3/60 | ENG AIR | FWE143/DJX60/MV | 4400 | | C/W VARIABLE FREQUENCY DRIVE WITH TIME CLOCK AND TWO SETTINGS<br>CONTROL KIT, RUN REFRIGERANT LINES FROM MOTORIZED INTAKE DAMPER, AMBIENT COMPENSATING PACKAGE<br>ENCOMPASS VIBRATION ISOLATION, EBF-SWB & INSULATED CABINET |
| (MU-2) | MAKE-UP AIR UNIT, INDIRECT GAS FIRED HEATING, DX COOLING | BLK 'C' ROOF | HEATING 250 MBH | 375 | DX COIL 123 MBH | 3700 | | 0.75" | | 30AMP<br>5.0 HP | 1217 | 575/3/60 | ENG AIR | FWE93/DJX40/MV | 4200 | | C/W VARIABLE FREQUENCY DRIVE WITH TIME CLOCK AND TWO SETTINGS<br>CONTROL KIT, RUN REFRIGERANT LINES FROM MOTORIZED INTAKE DAMPER, AMBIENT COMPENSATING PACKAGE<br>ENCOMPASS VIBRATION ISOLATION, EBF-SWB & INSULATED CABINET |
| (MU-3) | MAKE-UP AIR UNIT, INDIRECT GAS FIRED HEATING, DX COOLING | BLK 'B' ROOF | HEATING 250 MBH | 750 | DX COIL 246 MBH | 6950 | | 0.75" | | 50AMP<br>7.5 HP | 1059 | 575/3/60 | ENG AIR | FWE183/DJX100/MV | 6000 | | C/W VARIABLE FREQUENCY DRIVE WITH TIME CLOCK AND TWO SETTINGS<br>CONTROL KIT, RUN REFRIGERANT LINES FROM MOTORIZED INTAKE DAMPER, AMBIENT COMPENSATING PACKAGE<br>ENCOMPASS VIBRATION ISOLATION, EBF-SWB & INSULATED CABINET |
| (MU-4) | MAKE-UP AIR UNIT, INDIRECT GAS FIRED HEATING, DX COOLING | BLK 'A' ROOF | HEATING 250 MBH | 500 | DX COIL 173 MBH | 8700 | | 0.75" | | 50AMP<br>7.5 HP | 926 | 575/3/60 | ENG AIR | FWE224/DJX100/MV | 6600 | | C/W VARIABLE FREQUENCY DRIVE WITH TIME CLOCK AND TWO SETTINGS<br>CONTROL KIT, RUN REFRIGERANT LINES FROM MOTORIZED INTAKE DAMPER, AMBIENT COMPENSATING PACKAGE<br>ENCOMPASS VIBRATION ISOLATION, EBF-SWB & INSULATED CABINET |

NOTE: ALL SUITE FANS SHOULD BE HVI (2001) PERFORMANCE CERTIFIED
✳ NOTE: MOTORS FOR SPECIFIED EQUIPMENT TO BE HIGH EFFICIENCY. TO ASHRA 90.1 STANDARDS

## FAN SCHEDULE

| NO. | TYPE | LOCATION | CAPACITY CFM L/S | STATIC(S.P.) INCHES W.G. KPA. | RPM | H.P. K.W. | ELECTRICAL CHARACTERISTICS | MAKE | MODEL | OPENING INCHES MM | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| (F-1) | EXHAUST | SUITE | 100 | .30 | | 2.0AMPS | 120/1/60 | BROAN<br>BROAN SUREY-REVERSOMATIC | XT-250<br>SC-200, 250C-200 | | COLOUR BY ARCHITECT<br>VARIABLE SPEEDS |
| (F-2) | WASHROOM INLINE EXH FAN | SUITE | 205 | .30 | | 2.5AMPS | 120/1/60 | REVERSOMATIC | TL-240ES | | SOUND RATED TO BE LESS THAN 3.5 SONES |
| (F-3) | DRYER EXHAUST | SUITE | 100<br>50 | .40 | 2800 | 1.15AMPS | 120/1/60 | BARCLAY<br>BROAN-NUTONE | DBC-ATD<br>DFTM50 | | FACTORY MOUNTED & WIRED<br>C/W BACK DRAFT DAMPER<br>INTAKE SCREEN C/W 3M RAP |
| (F-4) | EXHAUST | SUITE | 75 | .30 | 1266 | 0.18AMPS | 120/1/60 | PANASONIC | FV-07VB1+FV-07VBH | | SOUND RATED TO BE LESS THAN 3.5 SONES |
| (F-5) | PARKING LEVEL EXHAUST | U/G GARAGE | 27,470 | .25 | 770 | 5 HP | 600/3/60 | PENN | BCH48 | 54"X54" | DUAL SPEED<br>OVERALL SOUND POWER SHALL BE 75dBA OR LESS |
| (F-6) | AIR MOVING FAN | U/G GARAGE | 3500 | .25 | 492 | 1 HP | 600/3/60 | PENN | ZCC12 | | |
| (F-7) | EXHAUST | SUB ELECT RM BLDG C | 2350 | .25 | 559 | 0.45 HP | 120/1/60 | PENN | ZC12 | | C/W REVERSE ACTING LINE VOLT THERMOSTAT |
| (F-8) | EXHAUST | METER RM | 377 | .25 | 1550 | 130 WATTS | 120/1/60 | PENN | ZBH | | INTERLOCK WITH TEMPERATURE SENSOR/MOT. DAMPER |
| (F-9) | EXHAUST | BWH RM-BLD D LOCKER RM-3RD FLR | 166 | .25 | 1550 | 108 WATTS | 120/1/60 | PENN | Z6H | | |
| (F-10) | EXHAUST | GARBAGE RM BLDG A GARBAGE RM BLDG C | 1250 | .375 | 1420 | 1/3 HP | 120/1/60 | PENN | REX12B | | EASYTAP DUAL SPEED MOTOR. WIRED ON LOW SPEED |
| (F-11) | EXHAUST | SUB ELECT RM BLDG A | 4700 | .25 | 406 | 0.74 BHP | 120/1/60 | PENN | ZCC15 | | |
| (F-12) | EXHAUST | SUB ELECT RM BLDG B | 3768 | .125 | 1050 | 1/2 HP | 120/1/60 | PENN | BREEZEWAY P18HA | | C/W REVERSE ACTING LINE VOLT THERMOSTAT |
| (F-13) | EXHAUST | SUB ELECT RM BLDG C | 2856 | .125 | 1300 | 1/2 HP | 120/1/60 | PENN | BREEZEWAY P16SA | | C/W REVERSE ACTING LINE VOLT THERMOSTAT |
| (F-14) | EXHAUST | BWH RM-BLD A | 196 | .125 | 1550 | 108 WATTS | 120/1/60 | PENN | Z6H | | |
| (F-15) | EXHAUST | LOCKER RM #2 | 812 | .25 | 1050 | 263 WATTS | 120/1/60 | PENN | Z12S | | |
| (F-16) | EXHAUST | GARBAGE RM BLDG B GARBAGE RM BLDG D | 900 | .375 | 1750 | 1/4 HP | 120/1/60 | PENN | REX10Q | | EASYTAP DUAL SPEED MOTOR. WIRED ON LOW SPEED |
| (F-17) | EXHAUST | BWH RM BLDG B BWH RM BLDG C | 122 | .375 | 1550 | 108 WATTS | 120/1/60 | PENN | Z6H | | |
| (F-18) | EXHAUST | LOCKER RM #1 | 1301 | .25 | 1550 | 810 WATTS | 120/1/60 | PENN | Z102H | | |
| (F-19) | EXHAUST | LOCKER RM #3,#5 | 196 | .125 | 1550 | 108 WATTS | 120/1/60 | PENN | Z6H | | TO RUN CONTINUOSLY C/W LETROL SPEED CONTROLLER |
| (F-20) | EXHAUST | LOCKER #4 | 350 | .125 | 1550 | 130 WATTS | 120/1/60 | PENN | Z8H RA | | TO RUN CONTINUOSLY C/W LETROL SPEED CONTROLLER |
| (F-21) | EXHAUST | SUB ELECT RM BLDG C | 2088 | .100 | 1050 | 1/3 HP | 120/1/60 | PENN | BREEZEWAY P16HA | | C/W REVERSE ACTING LINE VOLT THERMOSTAT |
| (F-22) | EXHAUST | MECHANICAL RM | 500 | .25 | 1550 | 79 WATTS | 120/1/60 | PENN | Z5H | | |
| (F-23) | | | | | | | | | | | |
| (F-24) | | | | | | | | | | | |
| (F-25) | | | | | | | | | | | |
| (F-26) | | | | | | | | | | | |

## BRANCH SIZES SCHEDULE

FOR DOMESTIC HOT AND COLD WATER

| UNIT | HOT (Inches) (mm Outside) | COLD (Inches) (mm Outside) |
|---|---|---|
| SINGLE KITCHEN | 13mm (1/2") | 13mm (1/2") |
| SINGLE BATHROOM | 13mm (1/2") | 13mm (1/2") |
| SINGLE BATHROOM/SINGLE KITCHEN | 13mm (1/2") | 13mm (1/2") |
| INDIVIDUAL WASHER | 13mm (1/2") | 13mm (1/2") |
| DOUBLE BATHROOM | 13mm (1/2") | 13mm (1/2") |
| DOUBLE BATHROOM | 19mm (3/4") | 19mm (3/4") |
| THREE OR MORE BATHROOMS | 19mm (3/4") | 19mm (3/4") |

## BRANCH SIZES SCHEDULE

FOR SANITARY LINES CONNECT TO TOWNHOUSES

| UNIT | mm (Inches) |
|---|---|
| WATER CLOSET (TANK) | 75mm (3") |
| SHOWER | 50mm (2") |
| BATHTUB/KITCHEN SINK | 40mm (1-1/2") |
| LAVATORY | 32mm (1-1/4") |
| FLOOR DRAIN | 75mm (3") |
| LAUNDRY WASHER | 40mm (1-1/2") |
| PLUMBING RISER | 100mm (4") |

## TYPICAL SUITE NOTES:

- LAST 6 FEET OF ALL EXHAUST DUCTWORK AND FRESH AIR DUCTWORK C/W INSULATION & VAPOUR BARRIER (TYPICAL)
- PROVIDE ACOUSTIC INSULATION ON SUPPLY AND RETURN DUCTWORK UP TO 5'-0" FROM HV UNIT
- VENTILATION CONTRACTOR SHALL SUPPLY & INSTALL THE FLEXIBLE DRYER HOSE FROM DRYER TO THE EXHAUST FAN AND RIGID EXHAUST DUCT UNLESS OTHERWISE NOTED BY OWNER
- MECHANICAL CONTRACTOR SHALL MAKE ALL DIRECT PLUMBING & DRAINAGE CONNECTIONS TO THE DISHWASHER (C/W SHUT-OFF VALVE & COPPER SUPPLY PIPE)
- DUCT SIZES:
  KITCHEN EXHAUST: 6"ø
  DRYER EXHAUST: 5"ø
  SINGLE WASHROOM EXHAUST: 5"ø
  DOUBLE WASHROOM EXHAUST: 6"ø

PROVIDE 5" OR 3"ø COMBUSTION AND 2"OR 3"ø VENT FOR EACH HIGH BOILER HB-1 OR 2 AND TERMINATE WITH CONCENTRIC ADAPTER ON THE WALL/ROOF. MAINTAIN THE CLEARANCE FROM THE OPERABLE WINDOW AND DOOR. TERMINATION HEIGHT ON ROOF PER MANUFACTURER'S INSTALLATION MANUAL.

AIR OUTLETS
- "C" CEILING MOUNTED
- "F" FLOOR MOUNTED
- "W" WALL MOUNTED

* PROVIDE 6" TO 8" Ø 3-1/2"R FLEXIBLE DUCT FROM DUCT TRUNK TO EACH OUTLET DIFFUSER

PIPING
* INSTALL ALL PIPING AWAY FROM BUILDING EXTERIOR WALLS TO AVOID PIPE FREEZING

## GRILLE SCHEDULE

| TYPE | RATE (L/S) SIZE | DESCRIPTION | DAMPER | MAKE | TYPE | NOTES |
|---|---|---|---|---|---|---|
| (A) | | CORRIDOR FRESH AIR SUPPLY | YES | EH PRICE | 630D | 19MM LOUVER SPACING, FIXED LOUVRE, 45 DEGREE DEFLECTION |
| (B) | | EXHAUST/ RETURN | NO | EH PRICE | 630 | 19MM LOUVER SPACING, FIXED LOUVRE, 45 DEGREE DEFLECTION |
| (C) | | SUPPLY | YES | EH PRICE | 620D | 19MM LOUVER SPACING, DOUBLE DEFLECTION |
| (D) | | LINEAR DIFFUSER | YES | EH PRICE | SDS TYPE B | 25MM WIDE INSULATED SLOT DIFFUSER, COLOUR SUBJECT TO ARCH APPROVAL C/W ENGINEERED PLENUM, CONCEALED MOUNTING BRACKET |

## FORCE FLOW HEATER

| UNIT No. | DESCRIPTION | CAPACITY | MAKE | MODEL | ELECTRICAL CHARACTERISTICS | NOTES |
|---|---|---|---|---|---|---|
| (H-1) | ELECTRIC FORCE FLOW HEATER | 12kW | OUELET | OAWH12008-TAV | 208/1/60 | TRIPLE FORCE FLOW HEATER |
| (H-2) | ELECTRIC FORCE FLOW HEATER | 8kW | OUELET | OAWH08008-TAV | 208/1/60 | DOUBLE FORCE FLOW HEATER |
| (H-3) | ELECTRIC FORCE FLOW HEATER | 4.8kW | OUELET | OAWH04808-TAV | 208/1/60 | SINGLE FORCE FLOW HEATER |

## ACOUSTIC REQUIREMENTS

DRAWINGS TO BE READ IN CONJUNCTION WITH ACOUSTIC DESIGN REVIEW REPORT. ACOUSTIC REPORT SHALL BE PART OF THE MECHANICAL CONTRACTORS CONTRACT.

ALL EQUIPMENT ISOLATION MOUNTS SHALL BE CHOSEN ON THE BASIS OF ACHIEVING AT LEAST 95% VIBRATION ISOLATION EFFICIENCY AT THE LOWEST OPERATING SPEED. THAT IS, THE NATURAL FREQUENCY OF EACH VIBRATION ISOLATION SYSTEM SHALL BE NO HIGHER THAN 1/10 OF THE LOWEST EXCITATION FREQUENCY OF ROTATING MACHINERY, WHENEVER PRACTICABLE, BUT IN NO CASE GREATER THAN 1/7. WHERE STRUCTURAL SUPPORT (FLOOR OR ROOF, ETC.) DEFLECTION WILL EXCEED 1/10 OF THE DETERMINED STATIC DEFLECTION OF THE ISOLATOR, INCREASE THE ISOLATOR STATIC DEFLECTION TO MAINTAIN A MINIMUM RATIO OF ISOLATOR DEFLECTION TO FLOOR DEFLECTION OF 10:1. STATIC DEFLECTIONS SHOWN ON THE DRAWINGS.

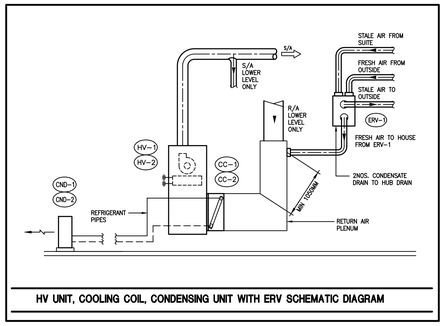
SPECIFICATIONS, OR SCHEDULES ARE A GUIDE ONLY. REQUIRED NATURAL FREQUENCIES AND STATIC DEFLECTIONS ARE TO BE DETERMINED, IN ACCORDANCE WITH THE ABOVE RELATIONSHIPS, BASED ON ACTUAL EXCITATION FREQUENCIES AND OTHER CHARACTERISTICS OF FINAL EQUIPMENT SELECTION. SELECTED VIBRATION ISOLATION MOUNTS ARE TO ACHIEVE THE REQUIRED STATIC DEFLECTION UNDER LOAD, WITH AT LEAST 50% RESERVE DEFLECTION. SUBMIT SHOP DRAWINGS IDENTIFYING EQUIPMENT, LOWEST OPERATING SPEED, WEIGHT, BRAND, TYPE AND LOCATION OF ISOLATORS PRIOR TO ORDERING OR FABRICATION.

PUMPS – FOR PUMPS OPERATING AT 1800 RPM, ISOLATORS WITH A MINIMUM STATIC DEFLECTION OF 1" WILL BE REQUIRED. IN MOST CASES, THIN RUBBER PADS DO NOT PROVIDE ADEQUATE STATIC DEFLECTION FOR SPRING ISOLATORS OR HIGHER DEFLECTION ELASTOMERIC ISOLATORS WILL BE REQUIRED.
PIPE CONNECTIONS TO PUMPS SHOULD INCLUDE FLEXIBLE CONNECTIONS, SUCH AS WITH THE USE OF TWINSPHERE JOINTS.
PIPE SUPPORTS/HANGERS WITHIN MECHANICAL ROOMS SHOULD INCORPORATE VIBRATION ISOLATION.

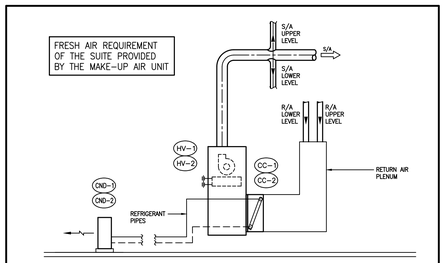
THE SUITE HVAC UNITS MUST BE VIBRATION ISOLATED FROM THE BUILDING STRUCTURE. THE SUITE HVAC UNITS SHOULD BE PLACED ON RESILIENT PADS.

TO MAINTAIN THE SOUND ISOLATION PERFORMANCE OF WALL AND FLOOR/CEILING ASSEMBLIES BETWEEN SUITES:
ALL PIPE PENETRATIONS SHOULD BE SEALED AIR TIGHT. AT VERTICAL PIPE SPACES, THE GYPSUM BOARD FORMING THE PIPE SPACE SHOULD EXTEND UP TO THE UNDERSIDE OF THE DEMISING CEILING ABOVE, RATHER THAN STOPPING AT THE DROPPED FINISHED CEILING.

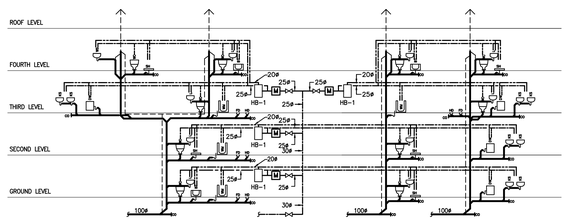
TO CONTROL TRANSMISSION OF PLUMBING NOISE TO SUITES:
CAST IRON DRAIN PIPE SHOULD BE USED FOR STORM AND SANITARY DRAINS. BATT INSULATION SHOULD BE INCLUDED IN VERTICAL PIPE SPACES AS WELL AS DROPPED CEILINGS OR BULKHEADS THAT CONTAIN HORIZONTAL PLUMBING OFFSETS. IF A TRAP OR ELBOW IS LOCATED IN THE CEILING SPACE/BULKHEAD OF A NOISE SENSITIVE SPACE: BOX IN THE DRAIN/ELBOW WITH TWO LAYERS OF GYPSUM BOARD LINED WITH BATT INSULATION; OR ACOUSTICALLY LAG THE PIPE WITH FIBREGLASS PIPE INSULATION AND AN OUTER LAYER OF FLEXIBLE NOISE CONTROL MEMBRANE. REFER TO FIGURE 6-1 OF ACOUSTIC REPORT FOR DETAILS. MAIN RISERS AND MAIN HORIZONTAL OFFSETS LOCATED IN OR NEAR NOISE SENSITIVE SPACES SHOULD BE SUPPORTED USING RESILIENT HANGERS OR MOUNTS. SEE FIGURE 6-2 OF ACOUSTIC REPORT.



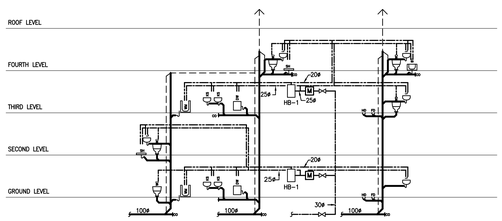

HV UNIT, COOLING COIL, CONDENSING UNIT WITH ERV SCHEMATIC DIAGRAM



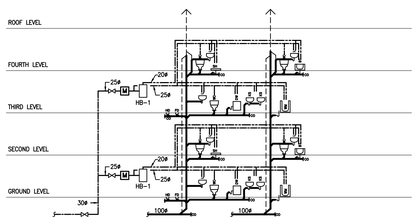

HV UNIT, COOLING COIL, CONDENSING UNIT WITHOUT ERV SCHEMATIC DIAGRAM



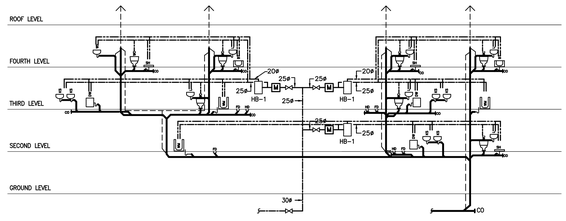

PLUMBING RISER TYPICAL FOR MODEL- 2A1/2A3/2C1/2D2
NTS



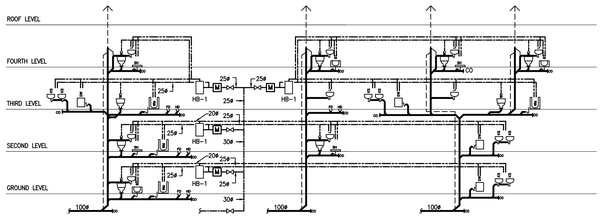

PLUMBING RISER TYPICAL FOR MODEL-2D1, 2D2
NTS



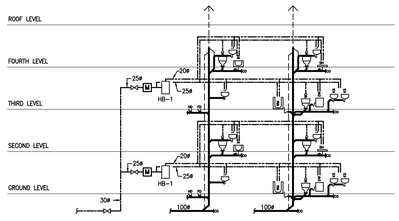

PLUMBING RISER TYPICAL FOR MODEL-2C1
NTS



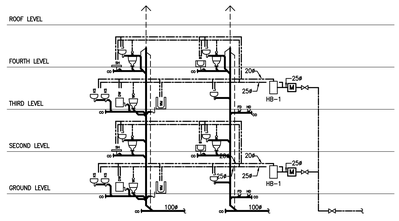

PLUMBING RISER TYPICAL FOR MODEL- 2A4/2C1/2D2
NTS




PLUMBING RISER TYPICAL FOR MODEL- 2A/2A2/2C/2D
NTS




PLUMBING RISER TYPICAL FOR MODEL-2C




PLUMBING RISER TYPICAL FOR MODEL- 2D

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADDENDUM M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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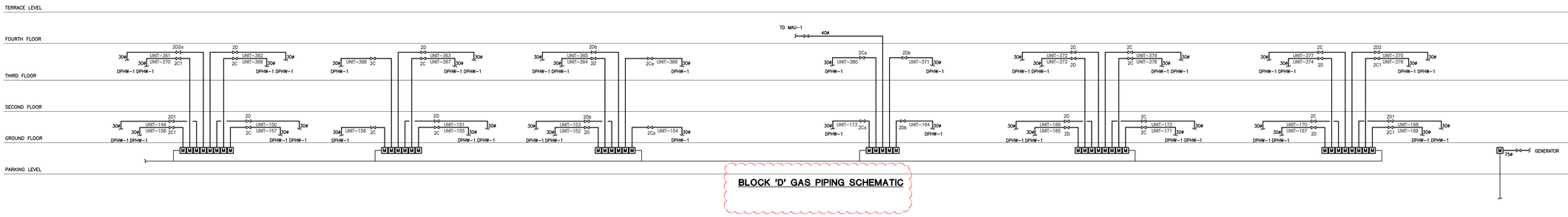
TITLE
SCHEDULES AND SCHEMATIC

PROJECT

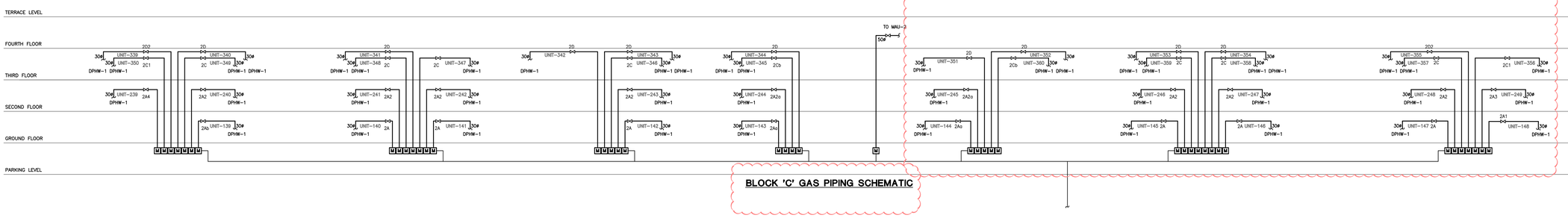
# BRAMPTON STACKED FORESTSIDE ESTATES

ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

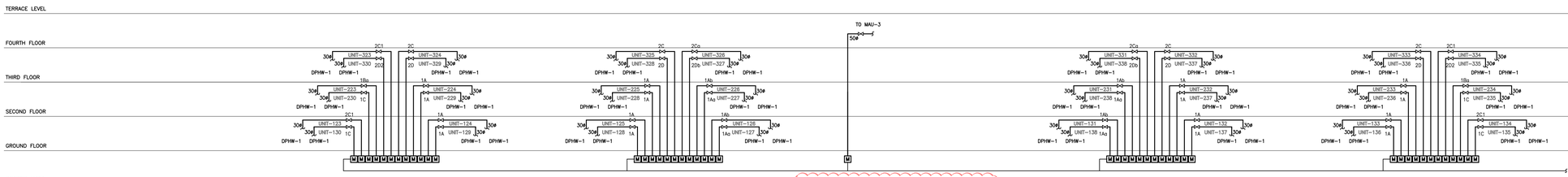
| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | N.T.S. |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-48 |
| | | OF - |



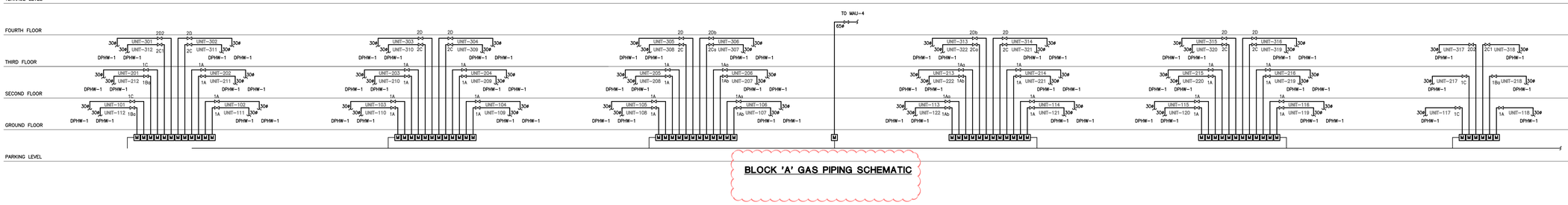

## BLOCK 'D' GAS PIPING SCHEMATIC




## BLOCK 'C' GAS PIPING SCHEMATIC




## BLOCK 'B' GAS PIPING SCHEMATIC




## BLOCK 'A' GAS PIPING SCHEMATIC

| NO. | BY | DESCRIPTION | DATE |
|---|---|---|---|
| 04 | LB | ISSUED AS PER ADD M-05 | JAN. 20, 2021 |
| 03 | LB | ISSUED FOR PERMIT | SEP. 28, 2020 |
| 02 | RC | ADDENDUM #04 | JUN. 12, 2020 |
| 01 | RC | ISSUED FOR TENDER | AUG. 02, 2019 |

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TITLE
**GAS SCHEMATICS**

PROJECT
# BRAMPTON STACKED FORESTSIDE ESTATES
ATTMAR + PALLESCHI DRIVE
BRAMPTON, ONTARIO

| DRAWN | CHECKED | SCALE |
|---|---|---|
| MC | LM | N.T.S. |
| DATE | PROJECT | DRAWING |
| MAY, 2019 | 18-017 | M-49 |
| | | OF - |