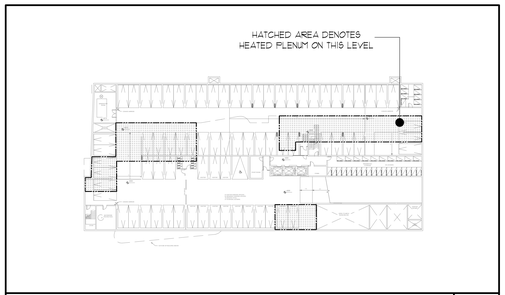
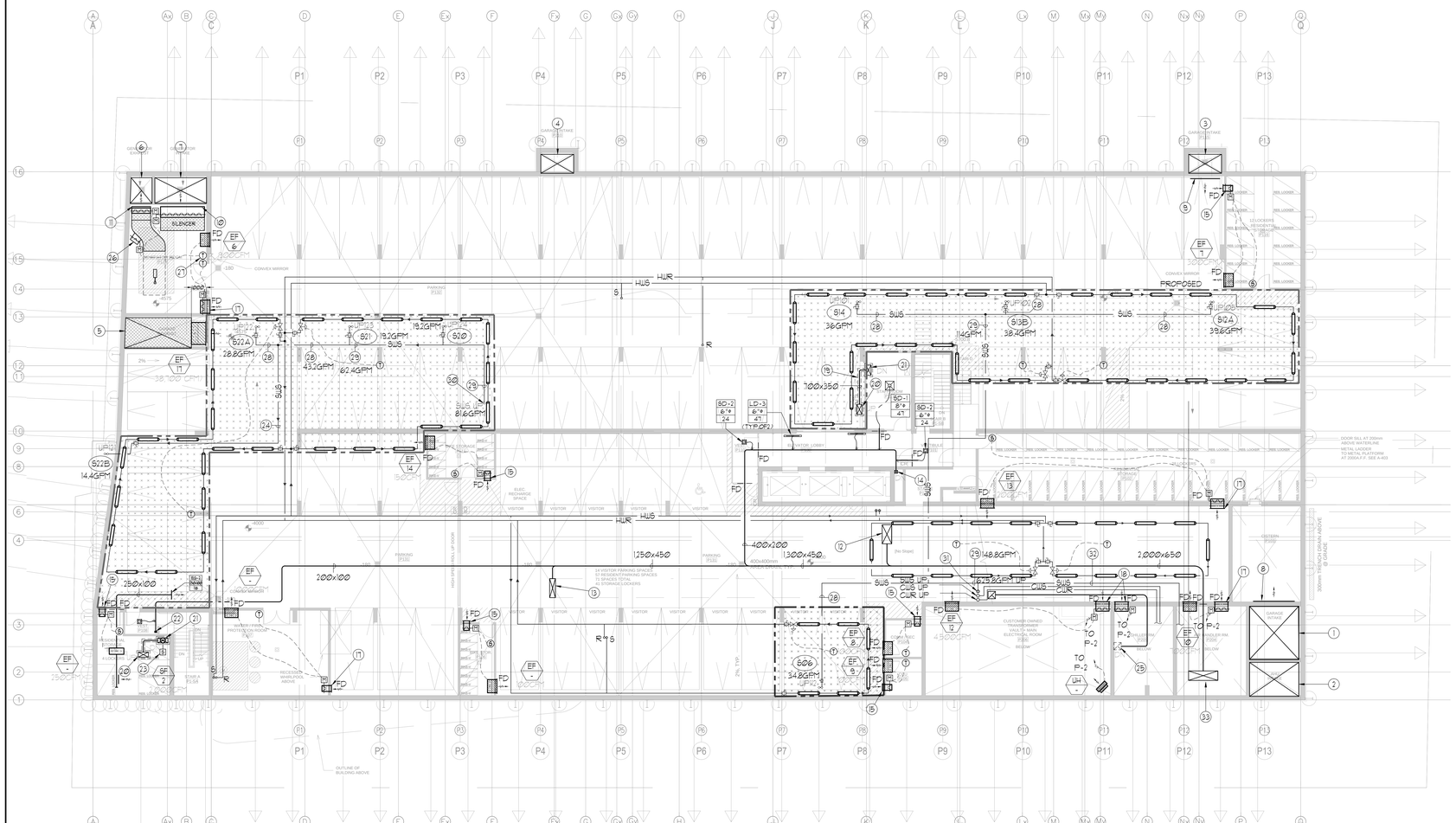


P-1 HEATED PLENUM | N.T.S.



REFER TO DWG. M-X FOR GENERAL AND ACOUSTIC NOTES.

3800 mm CLEAR
FLOOR TO UNDERSLAB

NOTES:

1. 3300x3600 (12.26 M², 132 FT²) FRESH AIR INTAKE SHAFT FOR P-1 & P-2 LEVEL.
2. 3300x2300 (7.8 M², 84 FT²) FRESH AIR INTAKE SHAFT FOR MAU.
3. 2250x1300 (2.93 M², 31.5 FT²) FRESH AIR INTAKE SHAFT FOR P-1 LEVEL.
4. 2250x1300 (2.93 M², 31.5 FT²) FRESH AIR INTAKE SHAFT FOR P-2 LEVEL.
5. 3500x2,000 (11.61 M², 125 FT²) EXHAUST AIR SHAFT FOR P-1 & P-2 LEVEL.
6. 3500x1,700 (6.2 M², 66.8 FT²) INTAKE AIR SHAFT FOR GENERATOR.
7. 1,400x1,700 (2.5 M², 27.6 FT²) EXHAUST AIR SHAFT FOR GENERATOR.
8. 3,100x2,900 WEATHERPROOF INTAKE LOUVRE C/W BIRDSCREEN. (25,000 CFM)
9. 2,000x2,500 WEATHERPROOF INTAKE LOUVRE C/W BIRDSCREEN. (13,700 CFM)
10. 3,400x2,500 WEATHERPROOF INTAKE LOUVRE C/W MOTORIZED DAMPER AND WIRE MESH. (24,400 CFM)
11. 1,300x3,200 WEATHERPROOF EXHAUST LOUVRE C/W MOTORIZED DAMPER AND WIRE MESH. (23,000 CFM)
12. 1,300x650 F/A DUCT UP C/W FIRE DAMPER AT SLAB.
13. 1,300x400 F/A DUCT UP C/W FIRE DAMPER AT SLAB.
14. 200x100 F/A DUCT DOWN C/W FIRE DAMPER AT SLAB.
15. 400x200 INTAKE LOUVRE C/W MOTORIZED DAMPER, FIRE DAMPER & WIRE MESH.
16. 400X400 INTAKE LOUVRE C/W MOTORIZED DAMPER, FIRE DAMPER & WIRE MESH.
17. 800X400 INTAKE LOUVRE C/W MOTORIZED DAMPER, FIRE DAMPER & WIRE MESH.
18. 1,200x800 400x400 INTAKE LOUVRE C/W MOTORIZED DAMPER, FIRE DAMPER & WIRE MESH.
19. DUCT INSIDE 2Hr FIRE RATED ENCLOSURE. ENCLOSURE BY OTHERS.
20. 700x350 STAIR PRESSURIZATION DUCT FROM ABOVE C/W FIRE RATED ENCLOSURE. FIRE RATED ENCLOSURE BY OTHERS.
21. 700x350 STAIR PRESSURIZATION DUCT DOWN C/W FIRE RATED ENCLOSURE. RIRE RATED ENCLOSURE BY OTHERS.
22. 150X100 FRESH AIR DUCT DOWN c/w FIRE DAMPER AT SLAB.
23. SMOKE DETECTOR BY DIV.16 TO BE INSTALLED AT THE DISCHARGE SIDE OF THE FAN.
24. 32ø SWS.
25. ---X--- DUCT DOWN TO P-2 LEVEL.
26. ---X--- BY PASS MOTORIZED DAMPER CONNECTS TO THE TEMPERATURE CONTROLLER.
27. TEMPERATURE CONTROLLER TO BE INTERLOCKED TO GENERATOR INTAKE, RECIRCULATED AND EXHAUST MOTORIZED DAMPERS TO MAINTAIN ROOM TEMPERATURE @10 DEGREES F.
28. 50ø SWS.
29. 63ø SWS.
30. 63ø SWS UP.
31. 150ø SWS UP.
32. 150ø SWS.
33. 2,000x650 F/A DUCT FROM BELOW.

LEGEND
MECHANICAL

SYMBOL	DESCRIPTION
	SUPPLY AIR DIFFUSER
	SUPPLY AIR TROFFER
	LINEAR SUPPLY DIFFUSER
T	THERMOSTAT
S	FAN SWITCH
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN DUCT UP
	RETURN DUCT DOWN
	EXHAUST DUCT UP
	EXHAUST DUCT DOWN
FD	FIRE DAMPER
BD	BALANCING DAMPER
M	MOTORIZED DAMPER
MFD	MOTORIZED FIRE DAMPER
BDD	BACKDRAFT DAMPER
OBD	OPPOSED BLADE VOLUME CONTROL DAMPER C/S LOCKING QUADRANT
	TURNING VANES
	FLEXIBLE CONNECTION
	ACOUSTIC INSULATION
XX	TYPE OF EQUIPMENT
XX	EQUIPMENT IDENTIFICATION
XX-XX	TYPE OF DIFFUSER OR GRILLE
XXX	DIFFUSER / GRILLE / TERMINAL NECK SIZE
XXX	AIRFLOW (CFM OR L/s)
S, S	STARTER / 3 PHASE / 1 PHASE /
S	N-SUITE ERV MASTER SWITCH
S	FAN SWITCH / N-SUITE ERV OVERRIDE BUTTON
CO	CO SENSOR
G	GAS LINE
G	GAS METER
G	GAS COCK
	PRESSURE REDUCING VALVE
S	SANITARY ABOVE GRADE
S	SANITARY BELOW GRADE
S	STORM ABOVE GRADE
S	STORM BELOW GRADE
D	DOMESTIC COLD WATER
D	DOMESTIC HOT WATER
D	DOMESTIC HOT WATER RECIRCULATION
V	SANITARY VENT
W	WATER METER
FD	FLOOR DRAIN
FFD	FUNNEL FLOOR DRAIN
HD	HUB DRAIN
RD	ROOF DRAIN
SLD	SLAB DRAIN
AD	AREA DRAIN
BLAD	BI-LEVEL AREA DRAIN
CB	CATCH BASIN
	SANITARY TRAP
	ELBOW UP
	ELBOW DOWN
CO	WALL CLEANOUT
CO	FLOOR CLEANOUT
HB	HOSE BIBB
NFHB	NON-FREEZE HOSE BIBB
	GLOBE VALVE
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PRESSURE REDUCING VALVE
	CHECK VALVE
	CAP
CA	COMPRESSED AIR OUTLET
NV	BACKFLOW PREVENTER
	CIRCUIT BALANCING VALVE
	MULTIPLE PIPES / / DENOTES NO. OF PIPES
T	TEMPERATURE SENSOR
T	THERMOMETER
2	2-WAY MODULATING VALVE
3	3-WAY MODULATING VALVE
T	127x4"ID THERMOWELL C/S 1/2" BUSHING x 1/2" PLUG
XXX	FLOOR ELEVATION ABOVE LEVEL
XXX	FLOOR ELEVATION THIS LEVEL
XXX	HEADROOM (FLOOR TO U/S HEIGHT)

DATE	NO.	DESCRIPTION	BY
07/10/14	2	RE-ISSUED FOR PERMIT	E.P.
09/26/14	1	ISSUED FOR PERMIT	E.P.
DATE	NO.	DESCRIPTION	BY

MARK VOID ALL PRINTS DATED PREVIOUS TO FINAL DATE ABOVE

REVISIONS

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB AND REPORT DISCREPANCIES TO THE ENGINEERS BEFORE PROCEEDING WITH THE WORK. THIS DRAWING IS THE PROPERTY OF THE ENGINEERS AND MUST BE RETURNED UPON COMPLETION OF THE WORK.

DRAWINGS ARE NOT TO BE SCALED

NOVA TREND ENGINEERING GROUP LTD.

REGISTERED PROFESSIONAL ENGINEER
07/10/14
ERIC PUI KAI PUN
LICENCE OF ONTARIO

175 West Beaver Creek Road, Unit 31
Richmond Hill, Ontario L4B 3M1
Tel: 905 882-5445
Fax: 905 882-5447
Email: cad@novatrendeng.com

DRAWING TITLE:
P-1 FLOOR PLAN
HVAC LAYOUT

PROJECT TITLE:
ALEXANDRA PARK

XXX
TORONTO ONTARIO

DRAWN BY:	CHECKED BY:	SCALE:
G.S.	E.P.	1:100

DATE:	PROJECT NUMBER:	DRAWING NUMBER:
FEB. 13	1313	M-4 OF 39