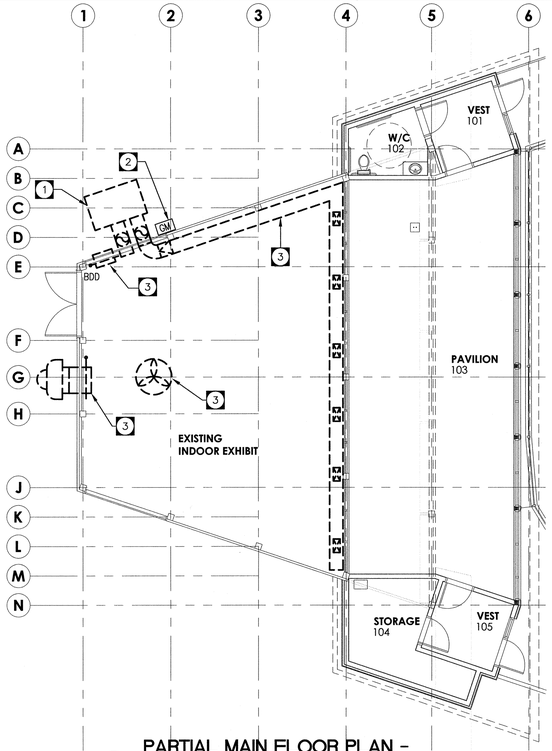
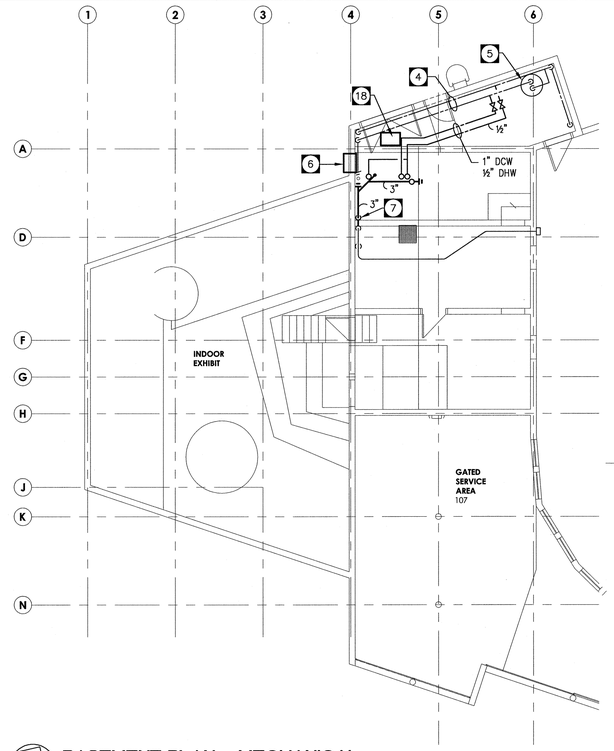


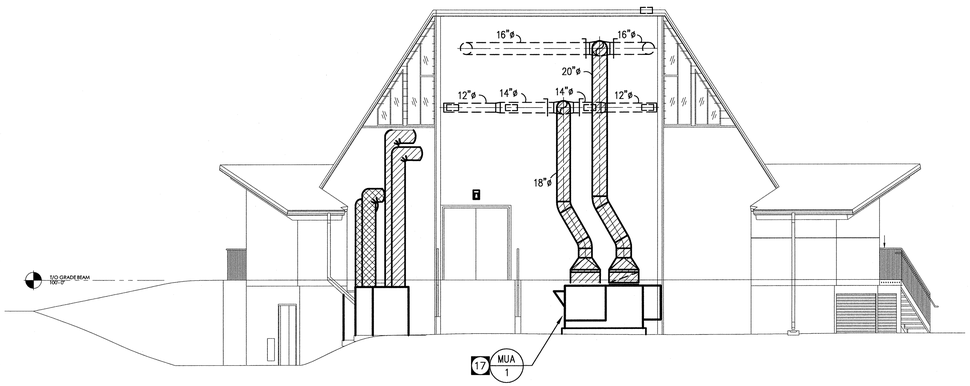
PARTIAL MAIN FLOOR PLAN - INDOOR EXHIBIT DEMOLITION

SCALE: 1/8"=1'-0"



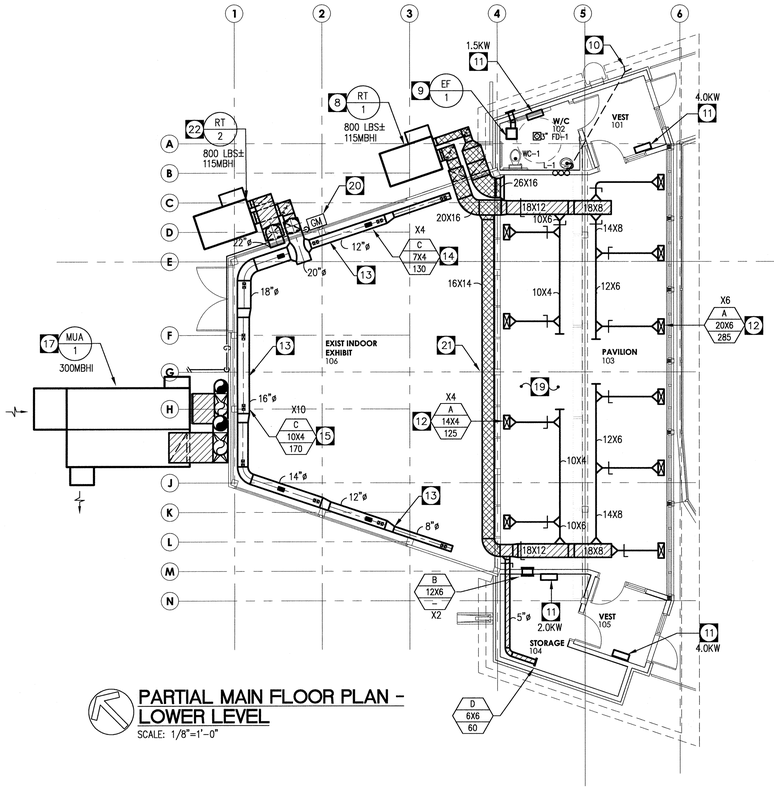
BASEMENT PLAN - MECHANICAL

SCALE: 1/8"=1'-0"



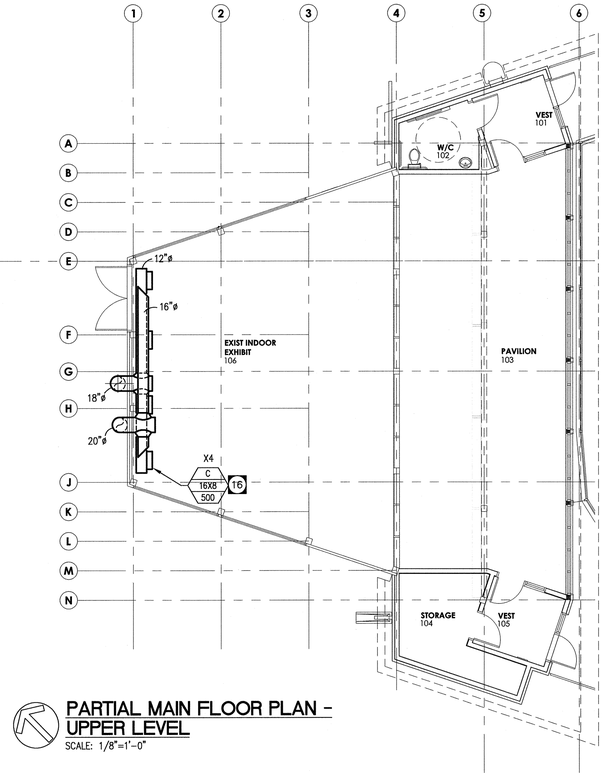
NORTH ELEVATION

SCALE: 1/8"=1'-0"



PARTIAL MAIN FLOOR PLAN - LOWER LEVEL

SCALE: 1/8"=1'-0"



PARTIAL MAIN FLOOR PLAN - UPPER LEVEL

SCALE: 1/8"=1'-0"

DRAWING NOTES

1. APPROXIMATE LOCATION OF PAD MOUNTED AIR HANDLING UNIT; PROVIDE FOR THE REMOVAL OF EXISTING UNIT AND HOUSEKEEPING PAD AND COMPLETE INSTALLATION OF NEW. INCLUDE MODIFICATIONS TO EXISTING NATURAL GAS SERVICE AND ALL ASSOCIATED UTILITY COSTS. CONCRETE PAD MODIFICATIONS, ETC., AS REQUIRED TO FACILITATE INTERCONNECTION. COORDINATE WITH STRUCTURAL DRAWINGS FOR HOUSEKEEPING PAD CONSTRUCTION.
2. EXISTING NATURAL GAS METER; MODIFY/EXTEND AS REQUIRED TO SUIT NEW AIR HANDLING EQUIPMENT INSTALLATIONS.
3. REMOVE ALL EXISTING FANS, DUCT WORK, GRILLES, HANGERS, ETC., SERVING INDOOR EXHIBIT. COORDINATE WITH ARCHITECTURAL PLANS AND CONTRACTOR FOR PATCH/REPAIR OF REMAINING WALL PENETRATIONS.
4. EXISTING DCW/DHW IN BASEMENT; MODIFY/EXTEND AS REQUIRED TO SUIT NEW FIXTURE INSTALLATIONS.
5. EXISTING DOMESTIC HOT WATER HEATER TO REMAIN.
6. EXISTING WALL MOUNT AIR CONDITIONING UNIT TO REMAIN.
7. OFFSET NEW 3" SANITARY DOWN FROM HIGH LEVEL, TIE-IN TO BASE OF EXISTING 4" VERTICAL SANITARY STACK; MODIFY/EXTEND AS REQUIRED TO FACILITATE INTERCONNECTION.
8. NEW PAD MOUNT PACKAGED AIR UNIT; OFFSET INTERIOR INSULATED WATER TIGHT SUPPLY /RETURN DUCTS UP ALONG EXTERIOR WALL, THRU INDOOR EXHIBIT TO PAVILION 103 CEILING SPACE. MODIFY/EXTEND GAS SUPPLY FROM EXISTING GAS METER. COORDINATE WITH STRUCTURAL DRAWINGS FOR HOUSEKEEPING PAD CONSTRUCTION.
9. WASHROOM EXHAUST FAN; EXTEND INSULATED DISCHARGE TO STEEL HOODED WALL CAP W/ BDD, BIRDSCREEN.
10. EXTEND SANITARY VENT UP THRU ROOF C/W 3" INCREASER AT ROOF PENETRATION.
11. ELECTRIC FORCE FLOW HEATER PROVIDED/INSTALLED BY DIVISION 16.
12. SUPPLY GRILLES AT NEW ARCHITECTURAL CEILING; COORDINATE INSTALLATION ACCORDINGLY.
13. SUPPLY DUCT MOUNT AROUND PERIMETER OF INDOOR EXHIBIT, AT ELEVATIONS BELOW NEW WINDOW INSTALLATION.
14. SUPPLY GRILLES MOUNTED ABOVE DUCT FOR UP DISCHARGE AT WINDOWS.
15. SUPPLY GRILLES MOUNTED AT U/S OF DUCT FOR DOWN DISCHARGE.
16. SUPPLY GRILLES DUCT MOUNT WITH DOWN DISCHARGE AT 45-DEGREE TO THE HORIZONTAL.
17. PAD MOUNTED NATURAL GAS MAKE-UP AIR UNIT C/W HEAT RECOVERY (HEAT PIPE). EXTEND EXTERIOR INSULATED/JACKETED DUCT UP AT SIDEWALL OF INDOOR EXHIBIT TO HIGH LEVEL; OFFSET WITHIN EXHIBIT AREA AT HIGH LEVEL. COORDINATE WITH STRUCTURAL DRAWINGS FOR HOUSEKEEPING PAD CONSTRUCTION.
18. EXISTING ELECTRIC FORCE FLOW HEATER.
19. DUCTWORK ABOVE SUSPENDED CEILING IN PAVILION 103 MUST FOLLOW SLOPE OF STRUCTURE; COORDINATE AS REQUIRED TO AVOID CONFLICT WITH LIGHTS, STRUCTURE, ETC.
20. NATURAL GAS METER; MODIFY/EXTEND AS REQUIRED TO ACCOMMODATE NEW GAS FIRED APPLIANCES. TOTAL CONNECTED LOAD: 530MBHI
21. ALL LINED SUPPLY DUCTWORK WITHIN INDOOR EXHIBIT TO/FROM RT-1 (SERVING INDOOR PAVILION) TO BE WELDED STAINLESS STEEL, SEALED WATER TIGHT. COORDINATE ACCORDINGLY FOR WATER TIGHT SEAL ALL THERMAL ENVELOPE WALL PENETRATIONS.
22. NEW PAD MOUNT PACKAGED AIR UNIT; OFFSET EXTERIOR INSULATED/JACKETED SUPPLY /RETURN DUCTS UP ALONG EXTERIOR WALL, THRU TO INDOOR EXHIBIT. MODIFY/EXTEND GAS SUPPLY FROM EXISTING GAS METER. COORDINATE WITH STRUCTURAL DRAWINGS FOR HOUSEKEEPING PAD CONSTRUCTION.

GENERAL NOTES:

1. COORDINATE THE EXACT LOCATION OF THE GRILLES AND DIFFUSERS ON SITE WITH THE APPROPRIATE CONTRACTORS, ARCHITECTURAL CEILING PLAN, LIGHTING LAYOUT, ETC. TO ENSURE THAT THERE ARE NOT ANY CONFLICTS DURING INSTALLATION.
2. PROVIDE BALANCE DAMPER FOR EACH SUPPLY/EXHAUST AIR GRILLE OR DIFFUSER TO ALLOW FOR THE PROPER BALANCING OF THE SYSTEM. PROVIDE OPPOSED BLADE DAMPERS WITH THE DIFFUSER AND ADJUSTABLE FROM THE DIFFUSER FACE WHEN A DUCT MOUNTED BALANCE DAMPER WOULD NOT BE ACCESIBLE.
3. ALL DUCT DIMENSIONS DENOTE INTERNAL "OPEN" AREA OF THE DUCT.
4. ALL DUCTWORK PENETRATING THE BUILDING THERMAL ENVELOPE SHALL BE INSULATED A MINIMUM 3M BACK FROM THE BUILDING PENETRATION.
5. REFER TO ARCHITECTURAL DRAWINGS AND PROVIDE FIRE DAMPERS IN ALL WALLS DENOTED AS FIRE SEPARATIONS.
6. COORDINATE THE EXACT LOCATIONS OF EQUIPMENT, DUCT OPENINGS, AND DUCT LOCATIONS WITH THE EXISTING STRUCTURE AND THE APPROPRIATE CONTRACT ADMINISTRATOR.
7. CONTRACTOR TO PROVIDE BALANCE DAMPERS AT ALL MAIN BRANCH DUCT RUNS TO EASE AIR BALANCING OF SYSTEM.

VENTILATION SUMMARY

BASED ON ASHRAE 62.1-2004, TABLE 6-1

RT-1 INDOOR PAVILION (BASED ON MUSEUM/GALLERY OCCUPANCY):
(50 OCC. X 7.5CFM/OCC.) + (850SQ.FT. X 0.06CFM/SQ.FT.) = 426CFM O/A

APEGM
Certificate of Authorization
Nova 3 Engineering Ltd.
No.962 Date: 2009/02/05

NOVA 3 ENGINEERING LTD.
CONSULTING ENGINEERS
201-120 FORT STREET TEL.: (204) 943-6142
WINNIPEG, MANITOBA FAX.: (204) 942-1276
R3C 1C7 JN.28156

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NOVA 3 ENGINEERING LTD. AND MAY ONLY BE REPRODUCED WITH THE WRITTEN PERMISSION OF NOVA 3 ENGINEERING LTD.
THE CONCEPT AND DESIGN INCORPORATED INTO THIS DRAWING ARE BASED ON INFORMATION PROVIDED BY THE CLIENT AND OTHER RELATED SOURCES. PROFESSIONAL ENGINEER ACCEPTS NO RESPONSIBILITY FOR DRAWING AND DESIGN UNLESS DRAWING IS ACCOMPANIED BY ORIGINAL SEALED AND SIGNED LETTER OF INTENT AND CERTIFICATE OF INSPECTION.
REFER TO WWW.NOVA3.CA FOR CAUTIONARY NOTES.

bridgmancollaborative
ARCHITECTURE
678 MAIN STREET WINNIPEG, MB R3B 1E4
204 488 3857 tel. 204 488 0216 fax.
www.bridgmancollaborative.ca

bridgmancollaborative

PROVINCE OF MANITOBA
K.H. GUENTHER
2009/02/05
REGISTERED ENGINEER

Project:
ASSINIBOINE PARK ZOO
ASIATIC LION PAVILION
WINNIPEG, MANITOBA

Drawing Title:
FLOOR PLANS
MECHANICAL

Project Number: 0714

Date: JAN.23/09

Issued For: TENDER

Sheet No:
M1

This drawing is property of the Architect and cannot be reproduced or used without the consent of the Architect. Contractor is responsible for confirming and verifying all levels and dimensions and must report all discrepancies to the Architect and obtain clarification prior to commencing work.