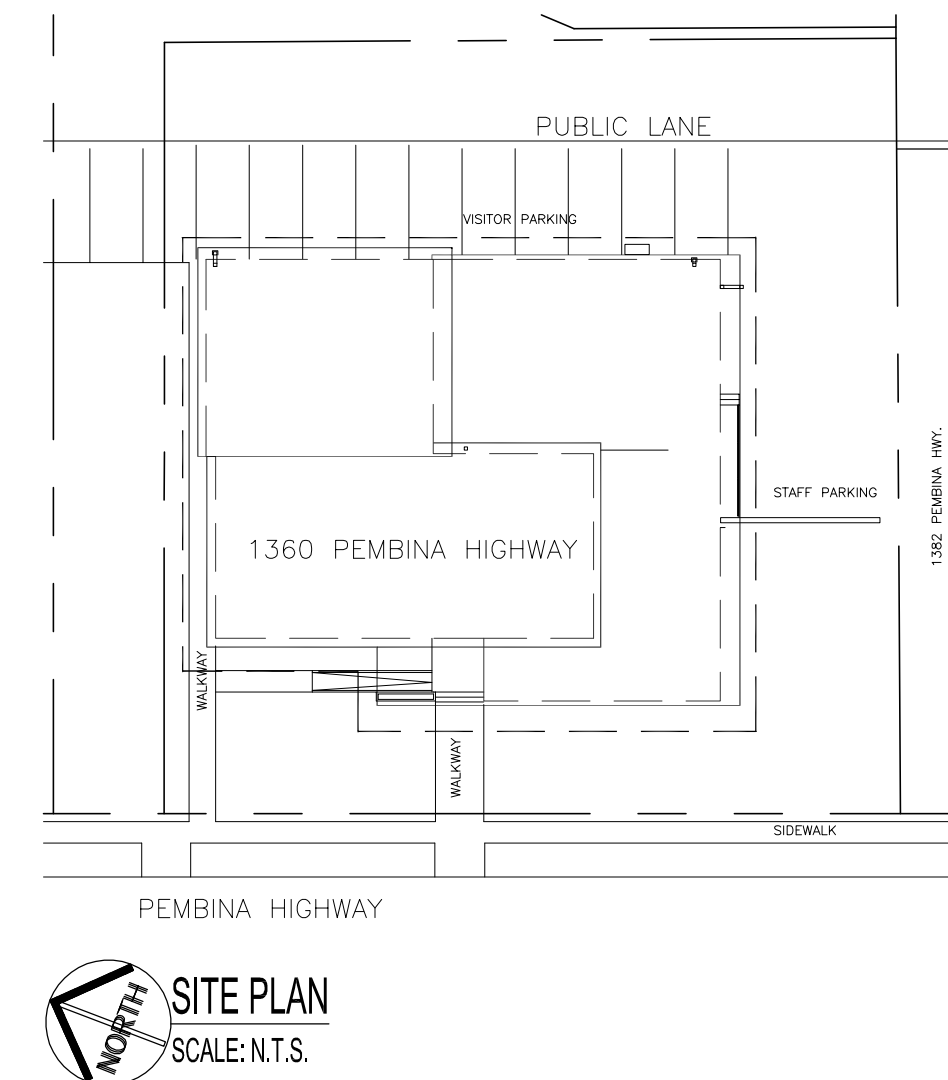


PLUMBING SYMBOLS	
	WATER CLOSET
	LAVATORY
	UNISEX WASHROOM LAVATORY
	KITCHEN SINK
	JANITOR SERVICE SINK
	FLOOR DRAIN
	WALL HYDRANT
	COLD WATER (CW)
	HOT WATER (HW)
	SANITARY ABOVE GRADE
	PLUMBING VENT
	PLUMBING CLEANOUT
	BALL VALVE
	WYE FITTING

MECHANICAL SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WALL MOUNTED EVAPORATORS (SUPPLY & INSTALL) EVAPORATOR UNIT SIZE EVAPORATOR IDENTIFICATION NUMBER. (ALSO SEE SCHEDULE)		ROOF TOP MAKE-UP AIR (MUA) UNIT & CONNECTED DUCTWORK (TO BE DEMOLISHED).
	CONDENSING UNIT IDENTIFICATION NUMBER. CONDENSING UNITS (SUPPLY & INSTALL)		ROOF TOP UNIT (RTU-1), (SUPPLY & INSTALL) SEE HVAC SCHEDULE
	RADIATOR FIN TUBES: CONTRACTOR TO CLEAN & STRAIGHTEN ALL MAIN & MEZZANINE FLOOR RADIATOR FIN TUBE TINES. RADIATOR FIN TUBE COVERS: ALL EXISTING RADIATOR FIN TUBE COVERS TO BE CLEANED, PRIMED & PAINTED TO MATCH EXISTING COLOR. WHERE MAIN FLOOR RADIATOR COVERS ARE MISSING THE CONTRACTOR SHALL SUPPLY & INSTALL NEW COVERS & PAINT TO MATCH EXISTING. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR APPROVAL. RADIATOR WALL SUPPORT BRACKETS / HANGERS: CONTRACTOR TO CHECK ALL EXISTING RADIATOR COVER SUPPORT HANGERS AND REPAIR EXISTING OR SUPPLY & INSTALL NEW WALL SUPPORTS (AS REQUIRED) TO ACCOMMODATE NEW COVERS. RADIATOR GRILLES: ALL EXISTING ALUMINUM RADIATOR GRILLES UNDER INTERIOR WEST WINDOWS TO BE REMOVED, CLEANED & RE-INSTALLED.		CENTRALIZED DIGITAL CONTROL FOR ROOF TOP CONDENSING UNITS. (SEE HVAC EQUIPMENT SCHEDULE).
	ROOF TOP A/C CONDENSING UNITS (TO BE DEMOLISHED)		WALL MOUNTED EVAPORATORS CONTROLS. X DENOTES EVAPORATOR NUMBER (SEE HVAC EQUIPMENT SCHEDULE).
	GAS PIPE (EXISTING TO REMAIN)		MEN'S WASHROOM ROOF TOP EXHAUST HOOD (TO BE DEMOLISHED).
	GAS METER (EXISTING TO REMAIN)		MEN'S & WOMEN'S WASHROOM ROOF TOP EXHAUST HOODS (TO BE DEMOLISHED).
	BOILER CHIMNEY (EXISTING TO REMAIN)		ROOF TOP A/C CONDENSING UNIT FOR (MUA), (TO BE DEMOLISHED)
	ROOF ACCESS HATCH (EXISTING TO REMAIN)		TYPE OF GRILLE OR DIFFUSER SIZE IN INCHES CAPACITY IN CFM (EXH-EXHAUST) (RIA-RETURN AIR)
	PITCH PAN (SEE ROOF DEMOLITION & RENOVATION DWG.)		
	SUPPLY AIR		
	RETURN AIR, EXHAUST		
	ISOLATION CONNECTION		



**SITE PLAN**  
SCALE: N.T.S.

DRAWING LIST	
SHEET No:	SHEET TITLE
M1	ROOF PLAN - DEMOLITION - MECHANICAL
M2	ROOF PLAN & SCHEDULES - RENOVATION - MECHANICAL
M3	CRAWLSPACE, BASEMENT, MAIN & MEZZANINE FLOOR PLAN - DEMOLITION - MECHANICAL
M4	MEZZANINE & MAIN FLOOR PLAN - RENOVATION - MECHANICAL
M5	BASEMENT & PARTIAL MAIN FLOOR PLAN - DEMOLITION & RENOVATION - PLUMBING
M6	SPECIFICATIONS - MECHANICAL & PLUMBING

**NOTES:**

ALSO SEE ARCHITECTURAL, ROOF & ELECTRICAL DWGS.

THESE DRAWINGS SHALL NOT BE SCALED.

THE CONTRACTOR SHALL VISIT THE SITE AND SATISFY HIMSELF ALL DIMENSIONS, DATUM, AND DETAILED INFORMATION SHOWN ARE CORRECT.

THE CONTRACTOR IS TO REVIEW AND COORDINATE ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS THROUGH ROOFS, FLOORS, WALLS, AND CEILINGS FOR DUCTWORK, PIPE & ELECTRICAL RISERS AND ALL OPENINGS NOT SHOWN ON DRAWINGS.

ALL NEW & EXISTING OPENINGS THROUGH FIRE ASSEMBLIES ARE TO BE FIRE STOPPED AND SEALED WITH ULC APPROVED FIRE STOPPING TO MAINTAIN THE INTEGRITY OF THE FIRE SEPARATION, AND PROVIDE A SMOKE-TIGHT BARRIER.

ALL PRODUCTS AND MATERIALS TO BE USED AND INSTALLED SHALL CONFORM WITH MANUFACTURER'S SPECIFICATIONS & APPLICABLE CODES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH AND MAKE GOOD ALL EXISTING CONSTRUCTION AFFECTED BY THE REMOVAL OF ALL ITEMS FORMING THE PART OF THE RENOVATION WORK.

CONTRACTOR TO CLEAN & RE-INSTALL EXISTING RADIATOR BASEBOARD HEAT PIPE ESCUTCHEON PLATES FLUSH TO NEW FLOORING OR INSTALL NEW AS REQUIRED.

CONTRACTOR TO FOLLOW REFRIGERATION RECOVERY PROCEDURES PRIOR TO DEMOLITION WORK.

CONTRACTOR TO DECOMMISSION (5) EXISTING ROOF TOP A/C CONDENSING UNITS & (1) ROOF TOP MAKE-UP AIR (MUA) UNIT. REMOVE & DISCARD ALL ROOF TOP CONDENSING UNIT REFRIGERATION & CONDENSATE DRAIN LINES TO (1) MAIN FLOOR & (1) MEZZANINE WALL MOUNTED EVAPORATORS.

CONTRACTOR TO RE-USE, WHERE POSSIBLE, EXISTING WALL PENETRATIONS FOR REPLACEMENT OF MEZZANINE & MAIN FLOOR WALL MOUNTED EVAPORATORS. REFRIGERANT LINES, EMT & CONDENSATE DRAIN LINES. PROVIDE NEW PENETRATIONS TO ACCOMMODATE NEW WALL MOUNTED EVAPORATOR LOCATIONS, UNLESS OTHERWISE SPECIFIED.

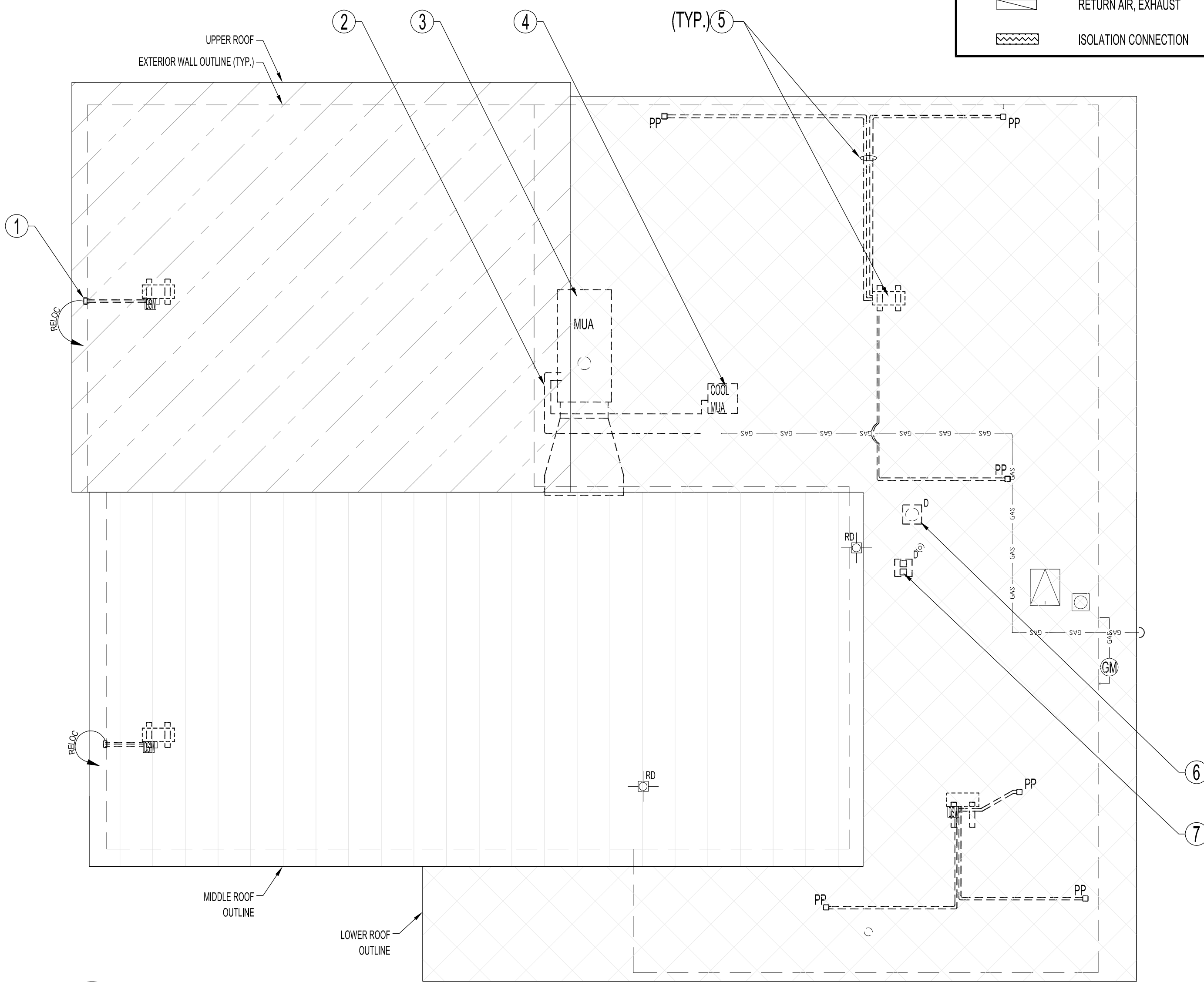
ALL NEW EXTERIOR STEEL SHROUDS FOR EVAPORATORS, TO BE FABRICATED WITH SAME MATERIAL, GAUGE AND PAINTED TO MATCH EXISTING COLORS. TERMINATE ALL NEW COPPER CONDENSATE DRAIN LINES AND SHROUDS 2" (MINIMUM) PAST EXTERIOR BRICK.

ALL ELECTRICAL EMT & WIRING RUNS FROM DEMOLISHED ROOF TOP EQUIPMENT SHALL BE DISCONNECTED FROM EQUIPMENT TO ASSOCIATED BUILDING PANELBOARDS (NOT SHOWN). CONTRACTOR MAY RE-USE EXISTING EMT RUNS BY MODIFYING / EXTENDING RUNS TO ACCOMMODATE NEW EQUIPMENT SELECTION & PLACEMENT.

CONTRACTOR TO CO-ORDINATE NEW MECHANICAL ROOF TOP EQUIPMENT INSTALLATIONS WITH ROOFING CONTRACTOR. ALSO SEE ROOF DWGS.

**CAUTION:**  
CONTRACTOR TO TAKE NECESSARY PRECAUTIONS WHEN ENTERING CRAWLSPACE WORK AREA AND MUST CONTACT THE CITY OF WINNIPEG CENTRAL CONTROL OFFICE AT (204) 488-2128 FOR CONFINED SPACE ENTRY LEVEL 2 PROCEDURES AND PERMIT APPLICATION.

REFER TO ELECTRICAL DRAWINGS FOR MECHANICAL EQUIPMENT POWER SUPPLIES, CONTROLLERS & SEQUENCE OF OPERATIONS.



**DEMOLITION NOTES - MECHANICAL**  
ALSO SEE MAIN FLOOR DEMOLITION MECHANICAL DWG.

— EXISTING TO REMAIN  
- - - - - TO BE DEMOLISHED

- REMOVE, RELOCATE & MODIFY EXISTING (C4 & C5) EXTERIOR CONDUIT & CONDENSATE SHROUDS TO ACCOMMODATE NEW INTERIOR WALL MOUNTED EVAPORATORS EVAP1-A & EVAP3-A.
- REMOVE & DISCARD EXISTING SECTION OF NATURAL GAS PIPING SHOWN DASHED.
- DISMANTLE & DISCARD MAKEUP AIR UNIT (MUA) AND CONNECTED INTERIOR & EXTERIOR DUCTWORK.
- REMOVE & DISCARD (MUA) A/C CONDENSING UNIT.
- DISCONNECT, REMOVE & DISCARD (4) CONDENSING UNITS.
- REMOVE & DISCARD MEN'S & WOMEN'S WASHROOM EXHAUST FAN HOODS. EXISTING OPENING SHALL BE USED FOR NEW EF-2.
- REMOVE & DISCARD WASHROOM EXHAUST HOOD. PATCH OPENING TO ACCEPT RE-ROOFING WORK.

**OUTDOOR AIR CALCULATIONS**

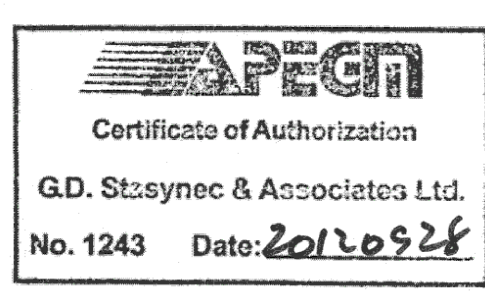
LIBRARY:  
OCCUPANCY: PUBLIC ASSEMBLY SPACES - LIBRARIES  
TOTAL AREA: 5150 SQFT.  
TOTAL POPULATION: 52 BASED ON ASHRAE 62.1 DEFAULTS  
OUTDOOR AIR REQUIRED BASED ON AREA: 0.12 CFM/SQFT. X 5150 SQFT. = 618 CFM  
OUTDOOR AIR REQUIRED BASED ON POPULATION: 5.0 CFM/PERSON X 52 PEOPLE = 260 CFM  
TOTAL OUTDOOR AIR REQUIRED: 878 CFM

STAFF OFFICES:  
OCCUPANCY: OFFICE BUILDINGS - OFFICE SPACE  
TOTAL AREA: 1500 SQFT.  
TOTAL POPULATION: 8 BASED ON ASHRAE 62.1 DEFAULTS  
OUTDOOR AIR REQUIRED BASED ON AREA: 0.06 CFM/SQFT. X 1500 SQFT. = 90 CFM  
OUTDOOR AIR REQUIRED BASED ON POPULATION: 5.0 CFM/PERSON X 8 PEOPLE = 40 CFM  
TOTAL OUTDOOR AIR REQUIRED: 130 CFM

BASEMENT STORAGE:  
OCCUPANCY: GENERAL - STORAGE ROOMS  
TOTAL AREA: 600 SQFT.  
OUTDOOR AIR REQUIRED BASED ON AREA: 0.12 CFM/SQFT. X 600 SQFT. = 72 CFM  
TOTAL OUTDOOR AIR REQUIRED: 72 CFM

TOTAL OUTDOOR AIR REQUIRED: 1080 CFM  
TOTAL OUTDOOR AIR SPECIFIED: 1100 CFM

1	RE-ISSUED FOR TENDER	AI	2012.09.28
No.	REVISION/DESCRIPTION	BY	DATE



G.D. Staszyniec and Associates Ltd.  
Engineering Consultants  
551 Academy Road Winnipeg, Manitoba R3M 0E4  
Telephone: (204) 488-1332  
Facsimile: (204) 488-1337  
E-mail: staszyniec@telusnet.mb.ca

DRAWN	RCP	CHECKED	DTA	DESIGNED	DTA	APPROVED
DATE	2012.08.17	USER				

THE CITY OF WINNIPEG  
PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT  
MUNICIPAL ACCOMMODATIONS DIVISION  
3-65 GARRY STREET, R3C 4K4

PROJECT  
FORT GARRY LIBRARY  
INTERIOR & EXTERIOR REFURBISHING

1360 PEMBINA HWY  
SHEET TITLE  
ROOF PLAN  
DEMOLITION  
MECHANICAL

SCALE	PROJECT No:	SHEET No:
AS SHOWN	2011-096	M-1 R-1