



**DRAWING NOTES:**

- 1 UNDERCUT DOOR 200mm (3/4"), COORDINATE WITH CONTRACT ADMINISTRATOR'S DRAWINGS.
- 2 DUCTWORK TO RUN AT HIGH LEVEL BETWEEN JOIST. COORDINATE WITH ALL TRADES.
- 3 KITCHEN MAKE UP AIR UNIT MAU-1 CONTROL PANEL. COORDINATE WITH ALL OTHER TRADES.
- 4 KITCHEN HOOD EXHAUST FAN EF-1 TO BE INTERLOCKED WITH MAU-1. COORDINATE WITH ELECTRICAL SUBCONTRACTOR.
- 5 THE CITY SUPPLIED EXHAUST HOOD H-1 COMPLETE WITH ANSVL FIRE SUPPRESSION SYSTEM. CONTRACTOR TO INSTALL AND COORDINATE INTERLOCKING WITH ELECTRICAL SUBCONTRACTOR.
- 6 CONNECT WELDED EXHAUST DUCT (COMPLIANT WITH N.F.P.A. 98) FROM COLLAR OF HOOD TO EXHAUST FAN EF-1 ON ROOF. PROVIDE ACCESS PANEL ON EACH ELBOW. INSTALLATION SHALL BE AS PER N.F.P.A. 98 REQUIREMENTS. ALL VISIBLE DUCTWORK SHALL BE WELDED STAINLESS STEEL.
- 7 SUPPLY DUCTWORK UP THROUGH ROOF COMPLETE WITH TRANSITION TO UNIT. PROVIDE BURGULAR BARS WHERE APPLICABLE. REFER TO BUGULAR BAR DETAIL FOR INFORMATION IN REGARDS TO THIS MATTER.
- 8 DUST COLLECT HOOD FOR THE CITY SUPPLIED EQUIPMENT. COORDINATE WITH THE CITY AND CONTRACT ADMINISTRATOR FOR FINAL LOCATION OF EQUIPMENT PRIOR TO INSTALLATION. COORDINATE ROUTING OF DUCTWORK WITH ALL TRADES.
- 9 LOCATION OF CITY SUPPLIED DUST COLLECTION UNIT (NIC). DUST COLLECTOR NOT TO EXCEED 708 L/S (1,500 CFM). COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 10 C.O. & NOx SENSOR TO CONTROL EXHAUST FAN EF-2 & MOTORIZED DAMPER.
- 11 REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF ALL PROP FANS. RUN THE WIRING FROM THE PROP FANS BETWEEN THE BACK TO BACK CHANNEL JOIST. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND FURTHER COORDINATION. COORDINATE WITH ALL TRADES PRIOR TO THE INSTALLATION OF EQUIPMENT.
- 12 DUCTWORK TO RUN THROUGH WEBBING OF JOIST AT HIGH LEVEL. COORDINATE ROUTING OF DUCTWORK WITH ALL TRADES.
- 13 PROVIDE HEAVY DUTY PROTECTIVE WIRE CAGE AROUND PROP FAN.
- 14 DUCTWORK TO DROP DOWN AND RUN IN LOWER CEILING SPACE. CONTRACTOR TO VERIFY ROUTING ON SITE PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 15 DUCTWORK TO RUN WITHIN JOIST. COORDINATE WITH ALL TRADES.
- 16 GAS FIRED UNIT HEATER, WITH SEPARATE FLUE GAS AND COMBUSTION AIR CONNECTIONS, INSTALLED AT HIGH LEVEL BETWEEN THE ROOF JOISTS. PROVIDE COMPLETE WITH THRU ROOF CONCENTRIC FLUE GAS/COMBUSTION AIR ADAPTER. SIZE AND INSTALL FLUE GAS AND COMBUSTION AIR PIPING ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND THE AUTHORITIES HAVING JURISDICTION.
- 17 INSTALL DUCTWORK TIGHT TO THE UNDERSIDE OF THE JOISTS AND ABOVE THE TRACKS FOR THE OVERHEAD DOOR. COORDINATE EXACT DUCT DEPTH TO SUIT SITE CONDITIONS.
- 18 PROVIDE TWO SUPPLY AIR GRILLES. LOCATE ONE 150mm (6") BELOW THE CEILING/ROOF DECK LEVEL AND THE OTHER AT 150mm (6") ABOVE THE FLOOR LEVEL.
- 19 GAS FIRED DOMESTIC HOT WATER HEATER, WITH SEPARATE FLUE GAS AND COMBUSTION AIR CONNECTIONS. INSTALLED ON 200mm (4") CONCRETE HOUSEKEEPING PAD. PROVIDE COMPLETE WITH THRU ROOF CONCENTRIC FLUE GAS/COMBUSTION AIR ADAPTER. SIZE AND INSTALL FLUE GAS AND COMBUSTION AIR PIPING ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND THE AUTHORITIES HAVING JURISDICTION.
- 20 GAS FIRED HYDRONIC HEATING SYSTEM BOILER, WITH SEPARATE FLUE GAS AND COMBUSTION AIR CONNECTIONS. INSTALLED ON 200mm (4") CONCRETE HOUSEKEEPING PAD. PROVIDE COMPLETE WITH SEPARATE THRU ROOF FLUE GAS/COMBUSTION AIR PIPING. SIZE AND INSTALL FLUE GAS AND COMBUSTION AIR PIPING ACCORDING TO THE REQUIREMENTS OF THE MANUFACTURER AND THE AUTHORITIES HAVING JURISDICTION.
- 21 PROVIDE TWO EXHAUST AIR GRILLES. LOCATE ONE 150mm (6") BELOW THE CEILING/ROOF DECK LEVEL AND THE OTHER AT 150mm (6") ABOVE THE FLOOR LEVEL.
- 22 LOCATE IN THE UNDERSIDE OF THE BULKHEAD.
- 23 INSTALL LOUVER AT HIGH LEVEL BETWEEN THE JOISTS.
- 24 DUST COLLECTOR DUCTWORK SHALL BE RUN THROUGH JOIST SPACE AT HIGH LEVEL. DUST COLLECTOR DUCTWORK SHALL BE ROUND SPIRAL DUCT DESIGNED TO SMACNA STANDARDS AND CAPABLE OF AT LEAST 2500 KPA (10" H2O) NEGATIVE STATIC PRESSURE. DUCTS SHALL BE DESIGNED TO MAINTAIN A MINIMUM CONVEYANCE VELOCITY OF 17.8 M/S (3500 FPM), (TYPICAL).
- 25 BLAST GATE (TYPICAL).
- 26 DUCT TO DROP DOWN TO SERVE FLOOR SWEEP. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 27 DUCT TO DROP DOWN TO SERVE PLANNER. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 28 DUCT TO DROP DOWN TO SERVE BELT SANDER. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 29 DUCT TO DROP DOWN TO SERVE BAND SAW. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 30 DUCT TO DROP DOWN TO SERVE TABLE SAW. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.
- 31 DUCT TO DROP DOWN TO SERVE SLIDING MITER SAW. REFER DETAILS ON M-3.4. COORDINATE WITH THE CITY AND THE CONTRACT ADMINISTRATOR FOR FINAL EQUIPMENT LOCATION PRIOR TO INSTALLATION. COORDINATE WITH ALL TRADES.

**NOTES:**

THE DRAWING MUST NOT BE SCALED.  
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO COMMENCEMENT OF WORK. ALL DIMENSIONS AND LEVELS TO BE REPORTED TO THE CONTRACT ADMINISTRATOR BEFORE PROCEEDING.  
 VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION OF THE CONTRACT ADMINISTRATOR.  
 THIS DRAWING IS THE EXCLUSIVE PROPERTY OF NUMBER TEN ARCHITECTURAL GROUP AND THE COPYRIGHT IN THE SAME REMAINS RESERVED TO THEM. IT IS TO BE REPRODUCED ONLY WITH THE PERMISSION OF THE CITY OF WINNIPEG.

**GENERAL NOTES:**

1. ALL INLET DUCTWORK ON FANCOIL UNITS SHALL BE INLET SIZED AND ACOUSTICALLY LINED. ALL SUPPLY AIR DUCTWORK OFF FANCOIL UNIT WILL BE ACOUSTICALLY LINED.
2. ALL FAN COIL UNITS TO BE SUSPENDED FROM STRUCTURE AND BETWEEN O.W.S.'S.
3. ALL DUCTWORK TO RUN AS HIGH AS POSSIBLE. COORDINATE ROUTING WITH PIPING AND ALL TRADES.
4. COORDINATE EXACT LOCATION OF GRILLES AND DIFFUSERS ON SITE WITH ELECTRICAL SUBCONTRACTOR, CONTRACTOR, ARCHITECTURAL REFLECTED CEILING PLAN, LIGHTING LAYOUT, ETC. TO ENSURE THAT THERE ARE NO CONFLICTS DURING INSTALLATION.
5. PROVIDE BALANCE DAMPERS AS SHOWN AND AS REQUIRED TO ALLOW PROPER BALANCING OF SYSTEM. PROVIDE OPPOSED BLADE DAMPERS WITH THE DIFFUSER AND ADJUSTABLE FROM THE DIFFUSE WHEN A DUCT MOUNTED BALANCE DAMPER WOULD NOT BE ACCESSIBLE.
6. SINGLE HATCHED DUCTWORK DENOTES DUCTWORK THAT IS TO BE ACOUSTICALLY LINED.
7. ALL DUCT DIMENSIONS DENOTE INTERNAL "FREE" AREA OF THE DUCT.
8. ALL DUCTWORK PENETRATING THE BUILDING THERMAL ENVELOPE SHELL SHALL BE INSULATED FOR A MINIMUM DISTANCE OF 3.0m (10'-0") BACK FROM THE BUILDING PENETRATION WITH 25mm (1") THICK KNAUF FIBERGLAS DUCT WRAP INSULATION COMPLETE WITH FOIL-SKRIM-KRAFT (FSK) COVERING.
9. REFER TO ARCHITECTURAL DRAWING. FIRE DAMPERS SHALL BE PROVIDED IN ALL WALLS DENOTED AS FIRE SEPARATIONS WHETHER SHOWN ON MECHANICAL PLANS OR NOT.
10. COORDINATE THE EXACT LOCATION OF ALL MECHANICAL EQUIPMENT, DUCT OPENINGS AND DUCT LOCATIONS WITH STRUCTURAL.
11. PROVIDE SINGLE THICK NEW TURNING VANES WITH A TRAILING EDGE (AS DETAILED IN THE LATEST SMACNA DUCT DESIGN MANUAL) IN ALL "SQUARE ELBOWS".
12. DIFFUSER & REGISTER TAG:

TYPE	QUANTITY	MODEL TYPE	NECK SIZE	AIR CAPACITY
FC-1	135 L/S	(286 CFM)		
FC-2	135 L/S	(286 CFM)		
FC-3	91 L/S	(192 CFM)		
FC-4	58 L/S	(122 CFM)		
FC-5	39 L/S	(82 CFM)		
FC-6	34 L/S	(73 CFM)		
FC-7	26 L/S	(55 CFM)		
FC-8	35 L/S	(201 CFM)		
FC-9	221 L/S	(468 CFM)		
FC-10	222 L/S	(470 CFM)		
FC-11	202 L/S	(429 CFM)		

TOWER PROJECT NO.: 6150  
**TOWER ENGINEERING GROUP**  
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 architecture • interior design • graphic design

No.	REVISION/ISSUE/PLotted	DATE
1	DESIGN DEVELOPMENT SUBMISSION	31/AUG/07
2	ISSUED FOR 40% REVIEW	28/OCT/07
3	ISSUED FOR 60% REVIEW	07/DEC/07
4	ISSUED FOR 100% REVIEW	11/JAN/08
5	ISSUED FOR TENDER	18/JAN/08

No.	REVISION/DESCRIPTION	BY	DATE

PROVINCE OF MANITOBA  
**J. ABIUSI**  
 REGISTERED PROFESSIONAL ENGINEER  
**APECM**  
 Certificate of Authorization  
 Tower Engineering Group  
 No. 1918 Expiry: April 30, 2008

DRAWN BY LR CHECKED BY LR APPROVED  
 DATE 2007.11.12 USER APPROVAL

CITY OF WINNIPEG  
 PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT  
 CIVIC ACCOMMODATIONS DIVISION  
 300 - 65 GARRY ST. R3C 4K4

PROJECT  
**BRONX PARK COMMUNITY CENTRE**  
**HOME OF GOOD NEIGHBOURS SENIOR CENTRE**  
 WINNIPEG, MB

SHEET TITLE  
**MAIN FLOOR PLAN**  
**VENTILATION LAYOUT**

SCALE	PROJECT NO.	SHEET NO.
AS SHOWN	PP&D 2006-065	M-3.1

DRAWING SHEET SIZE: ARCH E1 (42" x 30") PLOT 1:1

**1 MAIN FLOOR PLAN - VENTILATION**  
 M-3.1 SCALE: 1:100