

GENERAL NOTES:

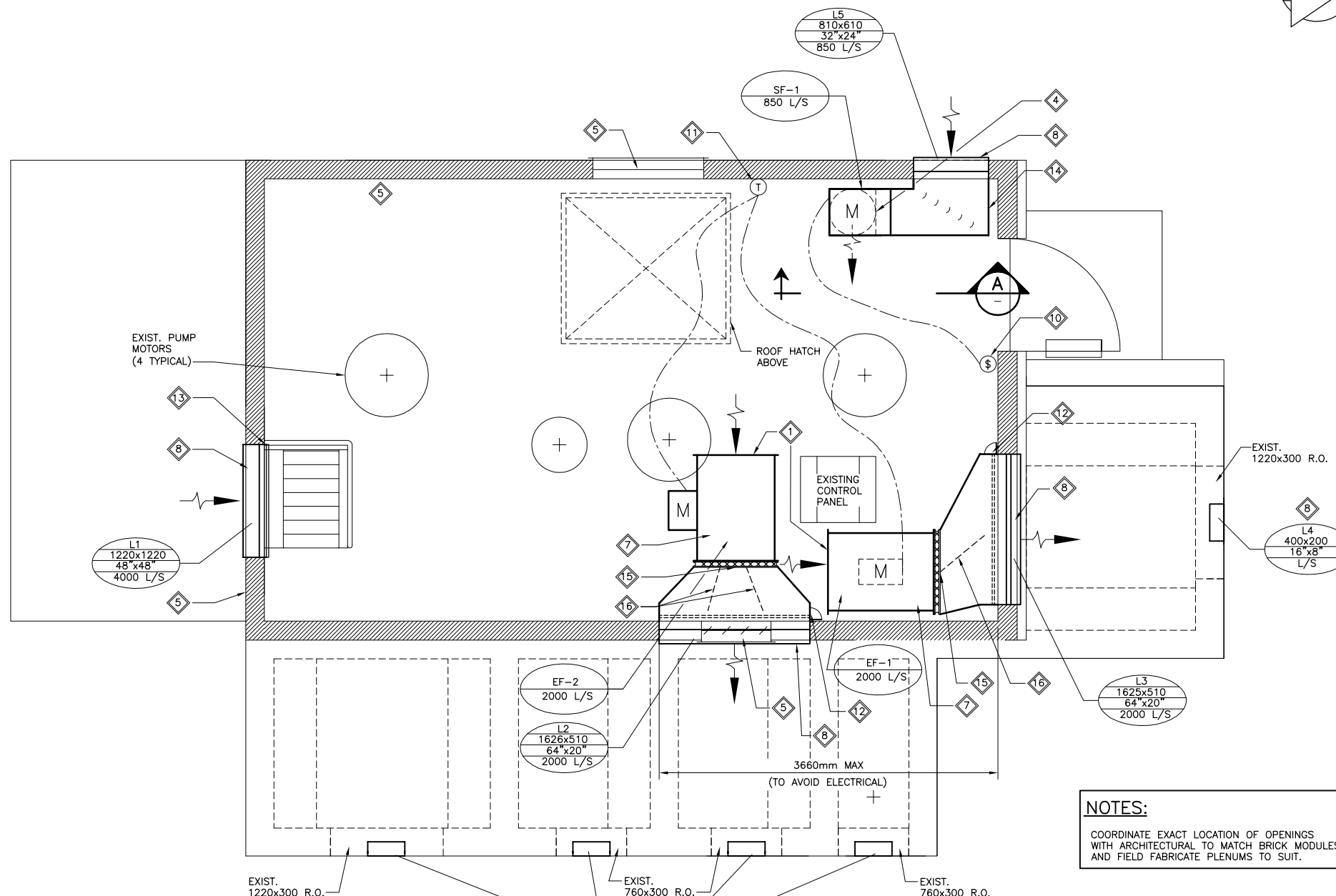
1. PROVIDE A NEW DRYWELL VENTILATION SYSTEM WITH L-5, SF-1 AND DUCTWORK AS SHOWN.
2. PROVIDE A NEW MAIN FLOOR FREE COOLING VENTILATION SYSTEM WITH L-1, L-2, L-3, EF-1, EF-2 AND DUCTWORK AS SHOWN.
3. PROVIDE L-4 LOUVRES AS SHOWN.
4. PERFORM WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
5. REVIEW DUCT ROUTING AND FINAL EQUIPMENT LOCATIONS WITH CONTRACT ADMINISTRATOR PRIOR TO INSTALLATION.
6. CONFORM TO SMACNA STANDARDS FOR SUPPLY AND INSTALLATION OF DUCTWORK.
7. SEAL ALL WALL PENETRATIONS WATER TIGHT. COORDINATE WITH ARCHITECTURAL DRAWINGS.
8. ALL CONCRETE FLOOR REPAIR & NEW OPENINGS PROVIDED BY STRUCTURAL.
9. ALL CONCRETE WALL REPAIR AND NEW OPENINGS PROVIDED BY STRUCTURAL.

KEY NOTES:

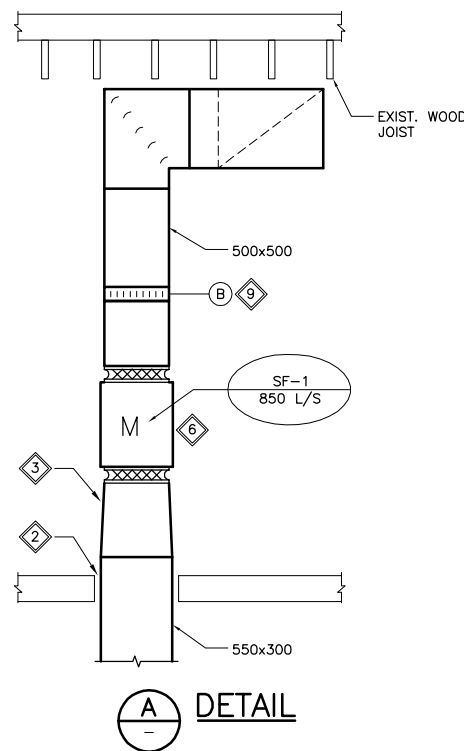
1. PROVIDE A GALVANIZED STEEL, 6mm ROD, WELDED, 50mm SQUARE GRID PROTECTIVE SCREEN ON AIR INTAKE SIDE OF FAN (DETAIL OF PROTECTIVE SCREEN TO BE SHOWN ON SHOP DRAWING AND VERIFIED WITH CONTRACT ADMINISTRATOR).
2. CONCRETE FLOOR HOLE TO ACCOMMODATE 300mm x 550mm DUCT BY STRUCTURAL. RUN DRYWELL VENTILATION DUCTWORK DOWN THROUGH MAIN FLOOR SLAB INTO DRYWELL BELOW TO 1000mm ABOVE FLOOR.
3. MOUNT DUCTWORK CLOSE TO WALL WITH WALL BRACKETS.
4. RUN DUCT DOWN APPROXIMATELY 5.2m BELOW THE MAIN FLOOR TO 1m ABOVE DRYWELL BASEMENT LEVEL FLOOR. PROVIDE A 90 DEGREE ELBOW AT OUTLET OF DUCT DIRECTING AIRFLOW TOWARDS EAST SIDE OF DRYWELL.
5. REMOVE 3 EXISTING LOUVRES, 2 FANS AND RELATED DUCTWORK AND DISPOSE OFFSITE. VIEW FANS & DUCTWORK DURING SITE INVESTIGATION.
6. PROVIDE NEW SUPPLY FAN, SF-1, AS SHOWN. FAN SHALL BE A "GREENHECK" OR EQUAL IN ACCORDANCE WITH B6, MODEL SQ-120-14, CENTRIFUGAL DIRECT DRIVE, 0.5 HP, 120/1/60, 850 L/S AT 125 Pa, FRONT (EAST) SIDE ACCESS PANEL, CONTINUOUS DUTY TWO-SPEED MOTOR. PROVIDE VIBRATION ISOLATION HANGERS, FLEX CONNECTIONS TO DUCT WORK. SUPPORT FAN FROM FLOOR.
7. PROVIDE NEW EXHAUST FANS, EF-1 AND EF-2, AS SHOWN. FAN SHALL BE A NORTHERN BLOWER OR EQUAL, DESIGN 8091, SIZE 2450, CENTRIFUGAL AIRFLOW, BELT DRIVE MOTOR, 1 HP, 575/3/60, 2000 L/S AT 125 Pa, TEFC, HIGH EFFICIENCY MOTOR. PROVIDE VIBRATION ISOLATION HANGERS, FLEX CONNECTION TO DUCTWORK AND MOUNT UNIT TIGHT TO CEILING (100mm). ATTACH PROTECTIVE SCREEN ON AIR INTAKE SIDE OF FAN (DETAIL OF PROTECTIVE SCREEN TO BE SHOWN ON SHOP DRAWING.) LOCATE MOTORS AS SHOWN. PROVIDE SIDE ACCESS PANELS. SUPPORT FROM WOOD BEAMS ABOVE AS PER EXISTING FAN. PROVIDE VIBRATION ISOLATORS ON FAN SUPPORTS.
8. PROVIDE INTAKE AND EXHAUST LOUVRES WITH DIMENSIONS AS SHOWN. COORDINATE EXACT LOCATIONS WITH ARCHITECTURAL DRAWINGS.
L-1, L-2, L-3, L-4 AND L-5 SHALL BE GREENHECK OR EQUAL, MODEL ESD-635, DRAINABLE, EXTRUDED ALUMINUM LOUVER COMPLETE WITH BIRDSCREEN, MOUNTING AND FINISH TO BE CONFIRMED WITH CONSULTANT. PROVIDE DUCTWORK TO CONNECT LOUVRES TO FAN AS SHOWN WITH AIR TIGHT SEAL. INSTALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS. REFER TO STRUCTURAL/ARCHITECTURAL DRAWINGS FOR WALL DETAIL.
INSTALL L-2, L-3 AND L-5 TIGHT TO CEILING JOISTS/TIMBER LINTEL BEAM.
9. PROVIDE MANUAL BALANCE DAMPER ON VERTICAL SECTION OF DUCT ON MAIN FLOOR, 1500mm ABOVE FLOOR LEVEL.
10. ON/OFF SWITCH AND CONTROL OF FAN, SF-1, BY ELECTRICAL.
11. THERMOSTAT AND CONTROL OF FANS, EF-1 AND EF-2, BY ELECTRICAL.
12. PROVIDE A 25mm THICK INSULATED GALVANIZED STEEL COVERED WINTER CLOSURE PANEL. PROVIDE HINGED ACCESS DOOR AND GUIDES TO PERMIT INSERTION OF PANEL. PANEL TO BE IN 2 OR 3 PARTS WITH DEVICES TO FACILITATE INSTALLATION AND REMOVAL THROUGH THE ACCESS DOOR. PROVIDE HANDLE FOR PANEL REMOVAL. PROVIDE PANEL SHOP DRAWING FOR REVIEW BEFORE FABRICATION. FIELD LOCATE/FABRICATE ACCESS DOOR AND GUIDES TO ENSURE EF-2 PANEL CLEARANCE BETWEEN EF-1 AND THE EAST WALL.
13. PROVIDE A 25mm THICK INSULATED GALVANIZED STEEL COVERED WINTER CLOSURE PANEL WITH GASKETING ON FACE TO SEAL PANEL AGAINST LOUVER FRAME. PROVIDE FASTENING SYSTEM TO SECURE PANEL AGAINST FACE OF LOUVER. PROVIDE HANDLES FOR PANEL REMOVAL. PROVIDE PANEL SHOP DRAWING FOR REVIEW BEFORE FABRICATION.
14. SLOPE PLENUM AT 1% TO DRAIN MOISTURE TO OUTSIDE.
15. PROVIDE A 10mm DRAIN HOLE AT BOTTOM OF PLENUM NEAR FLEX CONNECTION. CONSTRUCT PLENUM TO SLOPE TO DRAIN HOLE.
16. PROVIDE PLENUM VEINS TO REDIRECT AND DISTRIBUTE THE AIRFLOW AS SHOWN. VEINS TO BE RIGID SHEET METAL CONSTRUCTION SECURELY FASTENED AND BRACED AS NECESSARY INSIDE THE PLENUM TO PREVENT NOISE. KEEP 50mm CLEARANCE BETWEEN VEINS AND CLOSURE PANEL GUIDES.

NOTES:

COORDINATE EXACT LOCATION OF OPENINGS WITH ARCHITECTURAL TO MATCH BRICK MODULES AND FIELD FABRICATE PLENUMS TO SUIT.



MAIN FLOOR PLAN



DETAIL

LEGEND:

- T THERMOSTAT
- Ⓢ ON/OFF ELECTRICAL SWITCH
- B MULTI-BLADE, GASKETED BALANCE DAMPER

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



SCALE: 1:30 METRIC A1
1:15 METRIC A3

B.M.	XX-XXX			
ELEV.	XXX.XXX			
NO.	REVISIONS	DATE	BY	
0	ISSUED FOR CONSTRUCTION	19/06/08	HW	

KGS CONSULTING ENGINEERS & PROJECT MANAGERS GROUP
 WINNIPEG (204) 896-1209
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DESIGNED BY	JT	CHECKED BY	RED
DRAWN BY	CGW/FV	APPROVED BY	HW
SCALE:	AS NOTED	RELEASED FOR CONSTRUCTION:	
DATE	17/01/08	DATE	

ENGINEER'S SEAL
 ORIGINAL DRAWING SIGNED BY
 H. WILLIAMS
 19/06/08
 CONSULTANT DRAWING NO.
 06-0107-15-M1

THE CITY OF WINNIPEG WATER & WASTE DEPARTMENT
Winnipeg
BANNATYNE FLOOD PUMPING STATION BUILDING UPGRADE
MECHANICAL VENTILATION PLAN

SHEET 01 OF 01
 CAD FILE DRAWING NUMBER 06-0107-15-M1
 CITY DRAWING NUMBER LD-5052

APEGN
 Certificate of Authorization
 KGS Group
 No. 245 Date: 2008-06-19