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PUBLIC WORKS AND GOVERNMENT
SERVICES CANADA
(PWGSC)

Project title

FORT QU'APPELLE, SASKATCHEWAN
2ND FLOOR, 740 SIOUX AVENUE
INAC FORT QU'APPELLE OFFICE FIT-UP

INDIGENOUS AND NORTHERN
AFFAIRS CANADA

Designed by T.B.
Drawn by M.M.
Approved by K.S.

PWGSC Project Manager Administrateur de Projets IPWSC

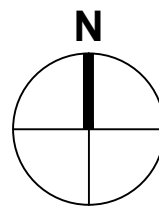
Drawing title

H.V.A.C. PLAN

16729.001

M3.0

OF 7

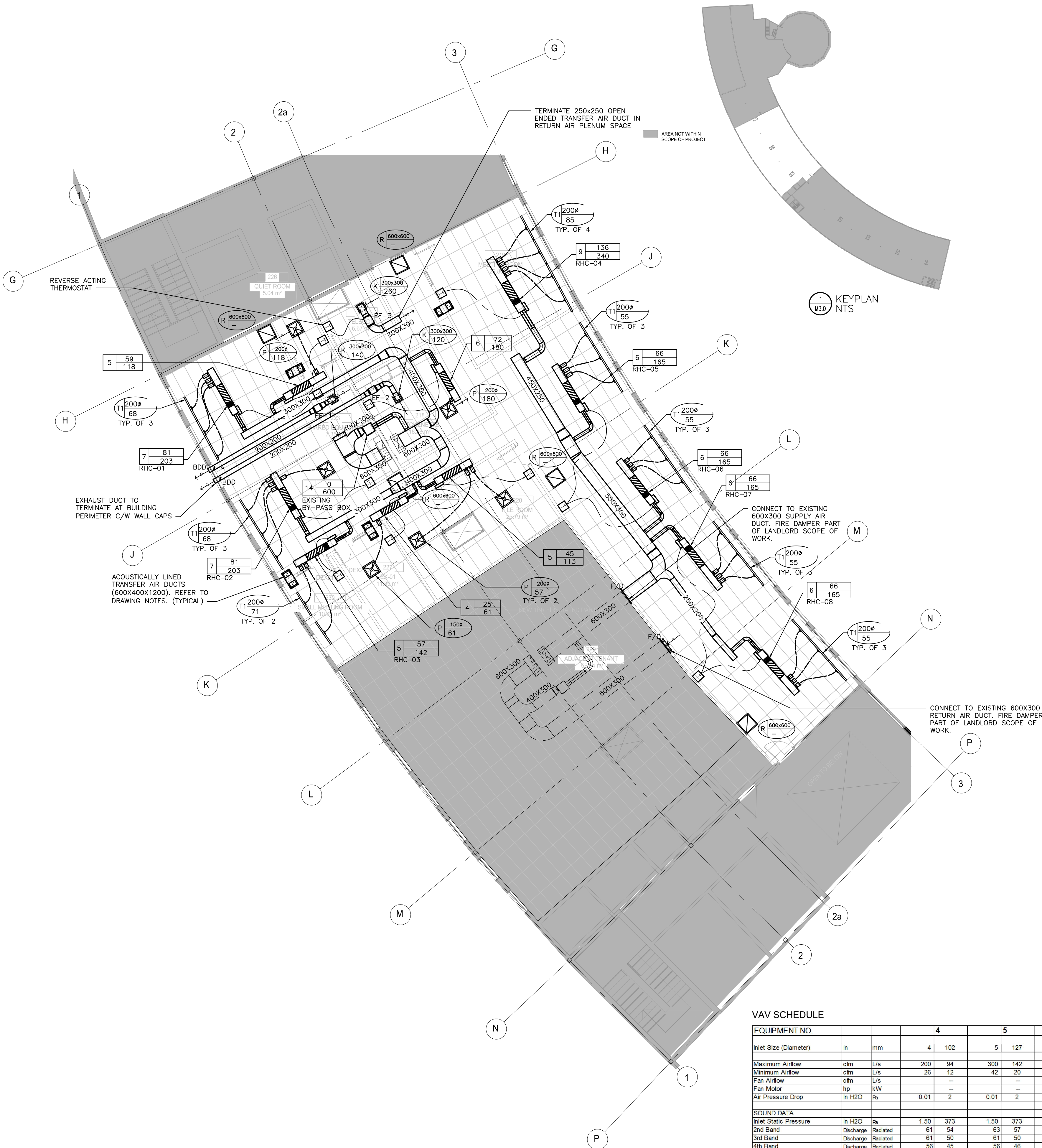


GENERAL NOTES

- DO NOT SCALE DRAWINGS. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR SPECIFIED THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE SITE CONDITIONS. REVIEW ALL REVISIONS WITH THE CONSULTANT.
- FLOOR PLANS SHALL BE READ IN CONJUNCTION WITH SCHEMATICS. INFORMATION SHOWN ON FLOOR PLANS SHALL BE ASSUMED TO BE APPLICABLE TO THE RELATED SYSTEM SCHEMATIC AND VICE-VERSA TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- VERIFY STRUCTURAL INTEGRITY OF ALL TEMPORARY AND PERMANENT OPENINGS. ADDITIONAL FRAMING TO ENSURE STRUCTURAL INTEGRITY SHALL BE INCLUDED UNDER THIS CONTRACT.

HVAC NOTES

- ALL SUPPLY AIR DUCTWORK FROM ROOF TOP UNITS TO VAV BOXES SHALL BE INSTALLED UNDER THE LANDLORD SCOPE OF WORK.
- ALL VAV BOXES, BY-PASS BOXES, AND ASSOCIATED CONTROLS AND THERMOSTATS SHALL BE SUPPLIED AND INSTALLED UNDER THE LANDLORD SCOPE OF WORK. THERMOSTATS SHALL BE SUPPLIED WITH CONTROL WIRING (15 METERS) AND COILED IN CEILING.
- THERMOSTATS SHALL BE INSTALLED ON WALL IN LOCATIONS SHOWN IN THE DRAWING UNDER THE TENANT FIT-UP SCOPE OF WORK.
- ALL FLEX DUCTWORK AND DIFFUSERS SHALL BE SUPPLIED AND INSTALLED UNDER THE TENANT FIT-UP SCOPE OF WORK.
- ALL TRANSFER AIR DUCTS AND RETURN AIR GRILLES IN T-BAR CEILING SHALL BE SUPPLIED AND INSTALLED BY TENANT FIT-UP SCOPE OF WORK.
- ALL EXHAUST FANS AND ASSOCIATED DUCTWORK SHALL BE SUPPLIED AND INSTALLED BY TENANT FIT-UP SCOPE OF WORK.
- ALL TRANSFER AIR DUCTS SHALL BE 600X400X1200 (WXHXL) ACOUSTICALLY LINED ELBOW OR STRAIGHT DUCTS AS SHOWN OR UNLESS INDICATED OTHERWISE. TRANSFER AIR DUCTS SHALL NOT BE USED IN LIEU OF SILENCERS.
- ALL DUCTWORK DOWNSTREAM OF VAV BOXES AND FAN POWERED BOXES SHALL BE EQUAL TO THE BOX OUTLET SIZE (MINIMUM) OR LARGER AS INDICATED. WHERE OUTLET SIZES ARE ODD SIZES, THE DUCT SIZE SHALL BE ROUNDED UP TO THE NEAREST EVEN SIZE (I.E. 318MM (12.5 IN.) OR 330MM (13 IN.) SHALL BE 356MM (14 IN.)). PROVIDE TRANSITION DUCTS AS REQUIRED.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF GRILLES AND DIFFUSERS.
- TEMPERATURE SENSORS ARE LOCATED TO AID IN PRICING ONLY AND ALL REQUIRED SENSORS MAY NOT BE SHOWN (REFER TO SPECIFICATIONS). COORDINATE FINAL LOCATION WITH THE ARCHITECT WITHIN 1000MM (40 IN.) OF LOCATION SHOWN. ALL RELOCATIONS OUTSIDE OF THIS RANGE SHALL BE REVIEWED WITH THE CONSULTANT.
- TEMPERATURE SENSORS SHALL BE NOMINALLY 1050MM (O/C) ABOVE THE FINISHED FLOOR UNLESS INDICATED OTHERWISE.
- DIFFUSER DUCT RUN-OUTS SHALL BE THE SAME SIZE AS THE DIFFUSER INLETS UNLESS INDICATED OTHERWISE.
- AIR FLOW RATES SHALL BE BALANCED EQUALLY BETWEEN ALL INTERIOR DIFFUSERS BASED ON THE MAXIMUM AIR FLOW RATE SHOWN FOR THE ASSOCIATED VAV BOX.
- MAINTAIN A MINIMUM OF 2400MM (96 IN.) CLEARANCE TO THE UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT, ETC. THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS.
- ALL PIPING SHALL BE OVERHEAD, TIGHT TO UNDERSIDE OF THE STRUCTURE WITH SUFFICIENT ROOM FOR INSULATION UNLESS INDICATED OTHERWISE.
- CONTRACTOR TO VERIFY STRUCTURAL INTEGRITY OF TEMPORARY AND PERMANENT OPENINGS. ADDITIONAL FRAMING TO ENSURE STRUCTURAL INTEGRITY SHALL BE INCLUDED UNDER THIS CONTRACT.



VAV SCHEDULE

| EQUIPMENT NO. | | | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 |
|-----------------------|---------------------|----------|--|----------|----------|----------|----------|----------|----------|-----------|-----------|
| Inlet Size (Diameter) | In | mm | | 4 102 | 5 127 | 6 152 | 7 178 | 8 203 | 9 229 | 10 254 | 12 305 |
| Maximum Airflow | cfm | L/s | | 200 94 | 300 142 | 400 189 | 550 260 | 700 330 | 950 448 | 1,150 543 | 1,700 802 |
| Minimum Airflow | cfm | L/s | | 26 12 | 42 20 | 62 29 | 85 40 | 110 52 | 140 66 | 180 85 | 270 127 |
| Fan Airflow | cfm | L/s | | -- | -- | -- | -- | -- | -- | -- | -- |
| Fan Motor | hp | kW | | -- | -- | -- | -- | -- | -- | -- | -- |
| Air Pressure Drop | In H ₂ O | Pa | | 0.01 2 | 0.01 2 | 0.16 40 | 0.07 17 | 0.01 2 | 0.01 2 | 0.01 2 | 0.01 2 |
| SOUND DATA | | | | | | | | | | | |
| Inlet Static Pressure | In H ₂ O | Pa | | 1.50 373 | 1.50 373 | 1.50 373 | 1.50 373 | 1.50 373 | 1.50 373 | 1.50 373 | 1.50 373 |
| 2nd Band | Discharge | Radiated | | 61 54 | 63 57 | 64 58 | 64 62 | 65 61 | 68 60 | 67 61 | 71 62 |
| 3rd Band | Discharge | Radiated | | 61 50 | 61 50 | 64 51 | 66 53 | 66 53 | 68 53 | 66 55 | 68 56 |
| 4th Band | Discharge | Radiated | | 56 45 | 56 46 | 58 47 | 61 47 | 60 47 | 61 48 | 60 49 | 66 51 |
| Outlet Width | In | mm | | 12.0 305 | 12.0 305 | 12.0 305 | 12.0 305 | 12.0 305 | 14.0 356 | 14.0 356 | 16.0 406 |
| Outlet Height | In | mm | | 8.0 203 | 8.0 203 | 8.0 203 | 10.0 254 | 10.0 254 | 12.5 318 | 12.5 318 | 15.0 381 |
| Return Width | In | mm | | -- | -- | -- | -- | -- | -- | -- | -- |
| Return Height | In | mm | | -- | -- | -- | -- | -- | -- | -- | -- |
| Remarks | | | | | | | | | | | |

2 PARTIAL 2ND FLOOR PLAN - H.V.A.C.
M3.0 1:100

0 10 20 30 40 50 60 70 80 90 100mm