

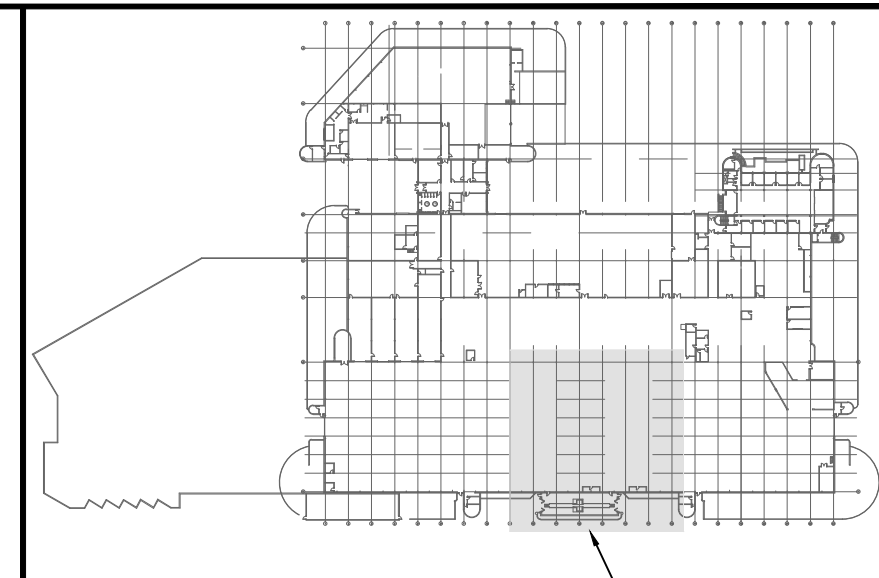
**1 PARTIAL ROOF PLAN - ELECTRICAL - NEW CONSTRUCTION**  
 E2.2 SCALE: 1/16" = 1'-0"

**GENERAL NOTES**

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING EXACT LAYOUT, ROUTING, ETC. VERIFY EXISTING SERVICES ON SITE.
- B. VERIFY ALL EXISTING EQUIPMENT BEING RE-USED IS WORKING PRIOR TO INSTALLATION. SUPPLY NEW EQUIPMENT AS NECESSARY.
- C. CONTRACTOR TO DETERMINE EXACT CABLE ROUTES ON SITE. WHERE POSSIBLE FOLLOW EXISTING CABLE ROUTES THROUGH BUILDING. RE-USE EXISTING OPENINGS AND PENETRATIONS TO ROUTE CABLES. PROVIDE NEW PENETRATIONS WHERE EXISTING CANNOT BE RE-USED. SEAL ALL PENETRATIONS.
- D. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS WITH FIRE STOP MATERIAL AS REQUIRED TO MAINTAIN ASSEMBLY RATING.
- E. COORDINATE FULLY WITH MECHANICAL FOR THE SEQUENCE OF DEMOLITION AND CONSTRUCTION.
- F. COORDINATE WITH THE CITY PRIOR TO SHUT DOWN OF EQUIPMENT.
- G. DRAWINGS SHOW ONLY A GENERAL SCHEMATIC OF NEW AND SOME EXISTING SYSTEMS. ROUTING CONDUITS AND/OR CABLES AND LOCATIONS SHALL SUIT SITE CONDITIONS AND MAY HAVE TO BE CHANGED TO AVOID CONFLICT WITH EXISTING STRUCTURE AND SERVICES. WHEN A CONFLICT CANNOT BE AVOIDED, THE EXISTING SERVICES SHALL BE MODIFIED AS REQUIRED.
- H. PROVIDE LIQUID TIGHT CONNECTORS FOR ALL CONDUITS INSTALLED INSIDE GARAGE AND ON ROOF.
- I. CONTRACTOR SHALL ENSURE COORDINATION BETWEEN ALL SUBCONTRACTORS AND CONTRACT ADMINISTRATOR, ON AND OFF SITE, AS REQUIRED FOR INSTALLATION OF ELECTRICAL EQUIPMENT.
- J. ARRANGE AND PAY CERTIFIED ROOFING CONTRACTOR TO PROVIDE NEW ROOF PITCH BOXES, SEAL ROOF OPENINGS EXPOSED FROM REMOVAL OF EXISTING FEEDERS. REFER TO SPECIFICATION FOR ADDITIONAL DETAILS.
- K. CONTRACTOR TO VISIT SITE DURING BID AND VERIFY ALL EXISTING SERVICES ON SITE PRIOR TO SUBMITTING BID. REPORT ANY DISCREPANCIES TO CONTRACT ADMINISTRATOR DURING BID PERIOD.
- L. THIS BUILDING MAY CONTAIN ASBESTOS. REFER TO FRONT END SPECIFICATION FOR FURTHER INFORMATION.

**KEY NOTES**

- 1. NEW HEAT RECOVERY UNIT BY MECHANICAL. WIRE AND CONNECT TO EXISTING CPD-A LOCATED ON MAIN FLOOR. FEEDER/CONDUIT TO PENETRATE ROOF WITHIN NEW PITCH BOX. REFER TO MOTOR SCHEDULE AND SINGLE LINE FOR FURTHER DETAILS. PROVIDE LOCAL WEATHERPROOF DISCONNECT (NEMA 4) IN ACCORDANCE WITH CEC AND CITY OF WINNIPEG BY-LAWS. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.
- 2. CONTRACTOR TO DETERMINE EXACT FEEDER ROUTE ON SITE. ROUTE FEEDERS/CONDUIT PARALLEL TO MECHANICAL PIPING WHERE POSSIBLE. PROVIDE PRE-MANUFACTURED CONDUIT SUPPORTS (EATON DURA-BLOCK ROOFTOP SUPPORT DBS SERIES OR APPROVED EQUAL) AS REQUIRED TO SUPPORT CONDUIT ON ROOF. REFER TO DETAIL 2 ON DRAWING E3.1 FOR FURTHER INFORMATION.
- 3. SUPPLY, WIRE AND INSTALL A NEW 20A 5-20R WEATHERPROOF GFI RECEPTACLE ON ROOF IN VICINITY (WITHIN 7.5M) OF NEW MECHANICAL ROOF TOP UNITS. CONNECT TO A NEW DEDICATED 20A CIRCUIT FROM PANEL EE WITH 2#10 IN CONDUIT (ALL NEW ROOFTOP RECEPTACLES SHALL BE FED FROM THE SAME NEW DEDICATED 20A CIRCUIT). ROUTE CONDUIT ALONG SAME PATH AS EQUIPMENT FEEDERS. INSTALL AS PER REQUIREMENTS OF CEC 26-708 AND CEC 26-710 AND WEB 26-708.
- 4. PROVIDE NEW UNISTRUT SECURED TO EXISTING ROOF/CURB AS REQUIRED TO INDEPENDENTLY MOUNT NEW ROOFTOP DISCONNECTS AND RECEPTACLES OFF MECHANICAL EQUIPMENT. PROVIDE NECESSARY BRACKETS, SUPPORTS, ETC. AS NECESSARY TO SECURE THE UNISTRUT TO THE CURB. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR. REFER TO DETAIL 3 ON DRAWING E3.1 FOR FURTHER INFORMATION.
- 5. PROVIDE NEW PITCH BOX(ES) AS REQUIRED FOR INSTALLATION OF NEW FEEDERS/CONDUITS. REFER TO CONDUIT BOX DETAIL IN THE SPECIFICATION FOR ADDITIONAL DETAILS. SEAL ALL PENETRATIONS AND MAKE WEATHER TIGHT. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.
- 6. PROVIDE NEW SELF-REGULATING HEAT TRACE (RAYCHEM GM2XT OR APPROVED EQUIVALENT) ON HEAT RECOVERY UNIT DRAIN LINES LOCATED OUTDOORS. HEAT TRACE TO BE PLACED INSIDE PIPES. WIRE AND CONNECT HEAT TRACE LEADS TO A NEW CONNECTION KIT (RAYCLIC OR APPROVED EQUAL) AND WIRE TO NEW HEAT TRACE CONTROLLER LOCATED ON THE MAIN FLOOR WITH 2#10 (PLUS BONDING CONDUCTOR) IN CONDUIT. CONTRACTOR TO VERIFY EXACT LENGTH OF HEAT TRACE CABLES WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING (PROVIDE MINIMUM 10 FEET OF HEAT TRACE PER DRAIN LINE). INSTALL AS PER MANUFACTURERS REQUIREMENTS. PROVIDE ALL NECESSARY ACCESSORIES FOR A COMPLETE INSTALLATION. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.
- 7. WIRE AND CONNECT NEW AMBIENT TEMPERATURE SENSOR TO NEW HEAT TRACE CONTROLLER. ROUTE SENSOR CABLE IN CONDUIT. EXTEND SENSOR WIRING AS REQUIRED. INSTALL AS PER MANUFACTURERS REQUIREMENT. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR.
- 8. PROVIDE NEW JUNCTION BOX AS REQUIRED TO RE-FEED EXISTING WALL MOUNTED RECEPTACLES ON ROOF NOT REMOVED DURING DEMOLITION. EXISTING WIRE/CONDUIT PULLED BACK TO ACCESSIBLE LOCATION WITHIN INTERIOR OF BUILDING DURING DEMOLITION SHALL BE EXTENDED TO ROOF THROUGH NEW ROOF TOP PITCH BOX. RECONNECT EXISTING RECEPTACLES. EXTEND ASSOCIATED WIRE, CONDUIT, ETC. AS REQUIRED. COORDINATE INSTALLATION WITH MECHANICAL CONTRACTOR TO ENSURE JUNCTION BOX IS IN ACCESSIBLE LOCATION.



**KEY PLAN**  
SCALE: NTS

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NO.	Description	BY	DDMMYY

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**Winnipeg Transit**

Project Title  
**TRANSIT MAINTENANCE AND REPAIR BUILDING MECHANICAL UPGRADE - CENTRE HIGH BAY**  
 WINNIPEG MANITOBA

Drawing Title  
**PARTIAL ROOF PLAN - ELECTRICAL - NEW CONSTRUCTION**

Drawn By	WPD	Checked By	BG	Approved By	AS
Scale	AS INDICATED	Date	DECEMBER 2024	Project No.	24-256-01
Revision Number	0	Drawing Number	E2.2	Sheet Order	4 OF 5

FILE NAME AND PATH: C:\Projects\2024\256 Transit Maintenance Building Phase 6 HVAC Upgrade\01 CAD Rev\04 Electrical\E2\_2\_GA\_R\_1.dwg  
 LAYOUT: E2.2  
 LAST SAVED BY: jgibson  
 DATE PLotted: Thursday, April 25, 2024 10:02:23 AM