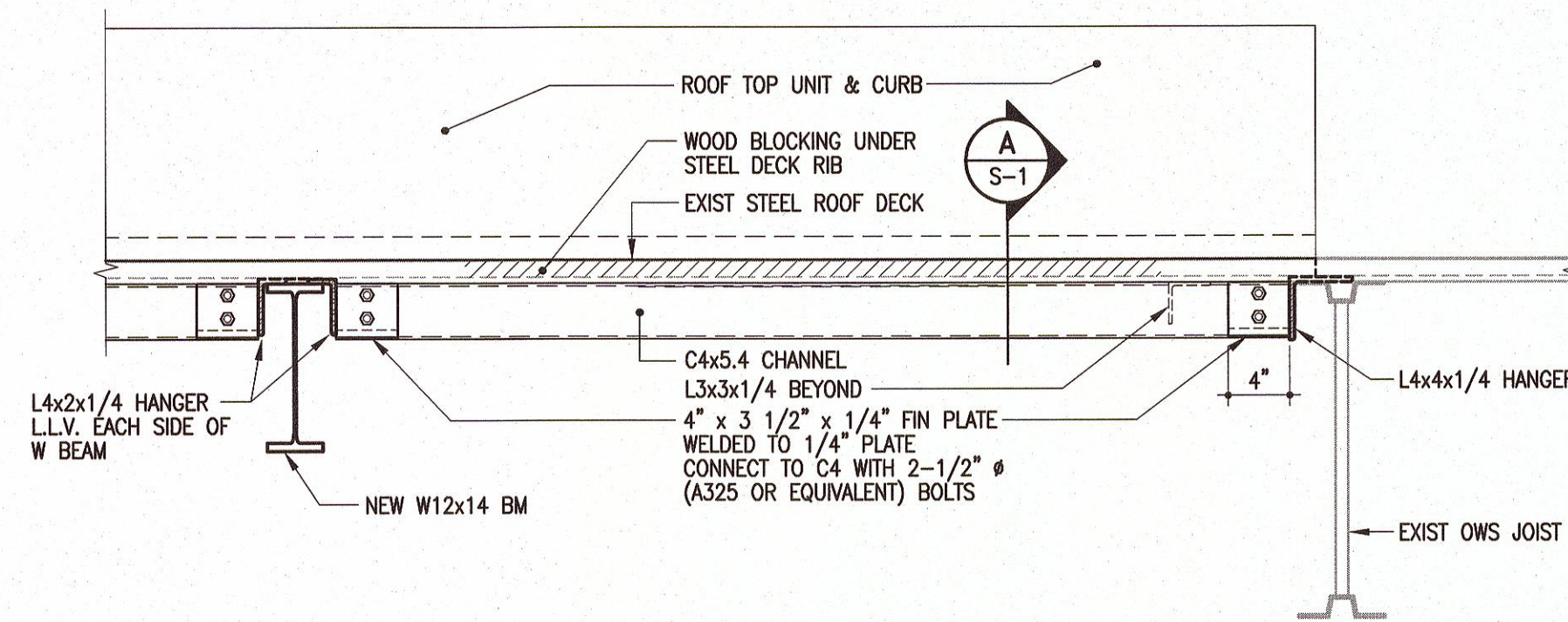
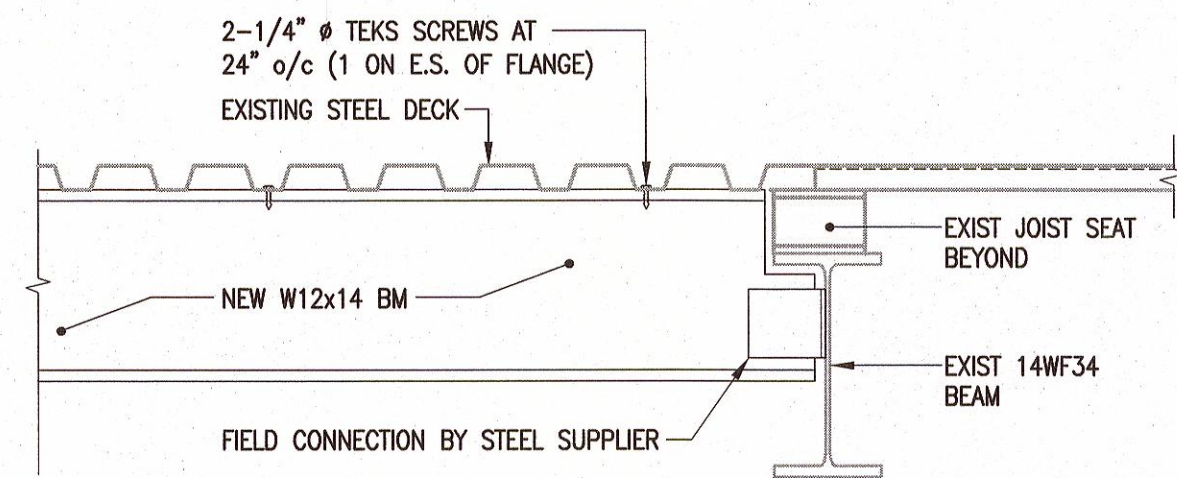


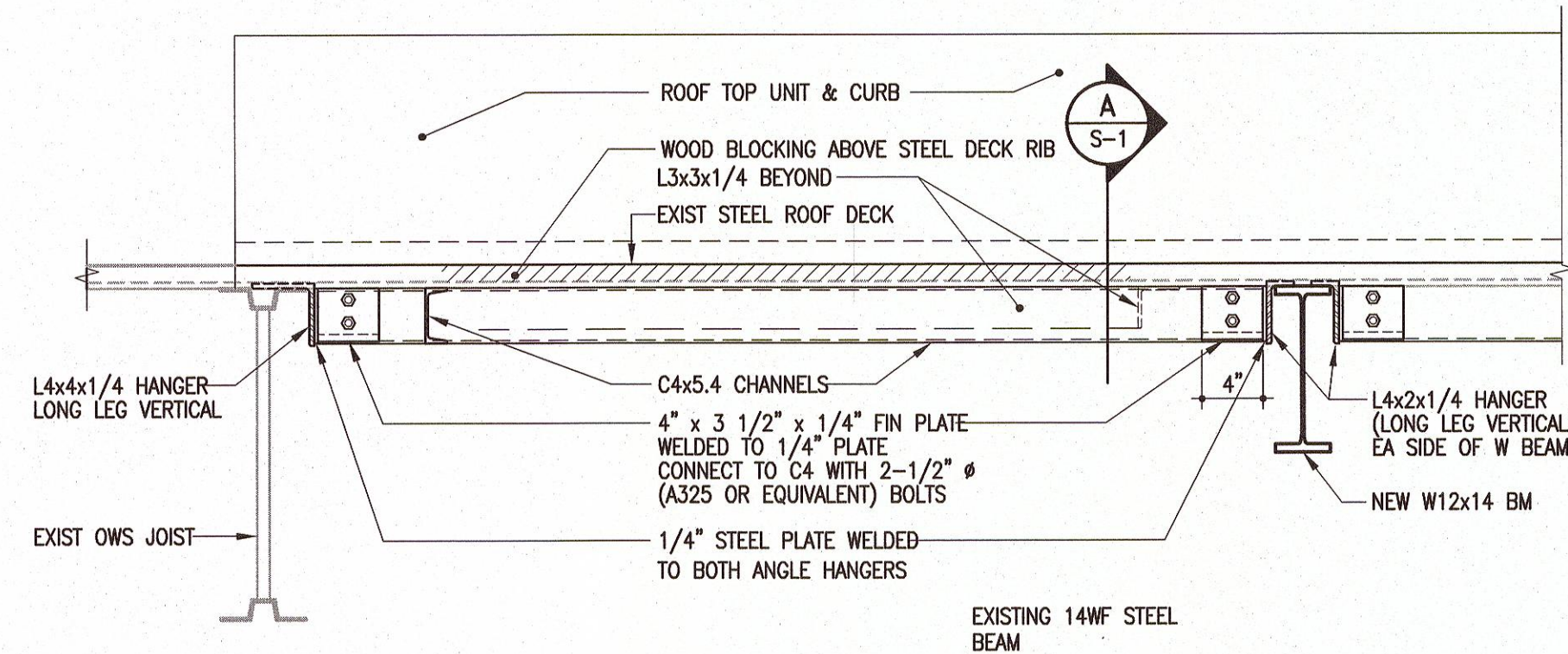
A SUPPLEMENTAL STEEL SUPPORT BELOW MECHANICAL UNITS
S-1 1" = 1'-0"



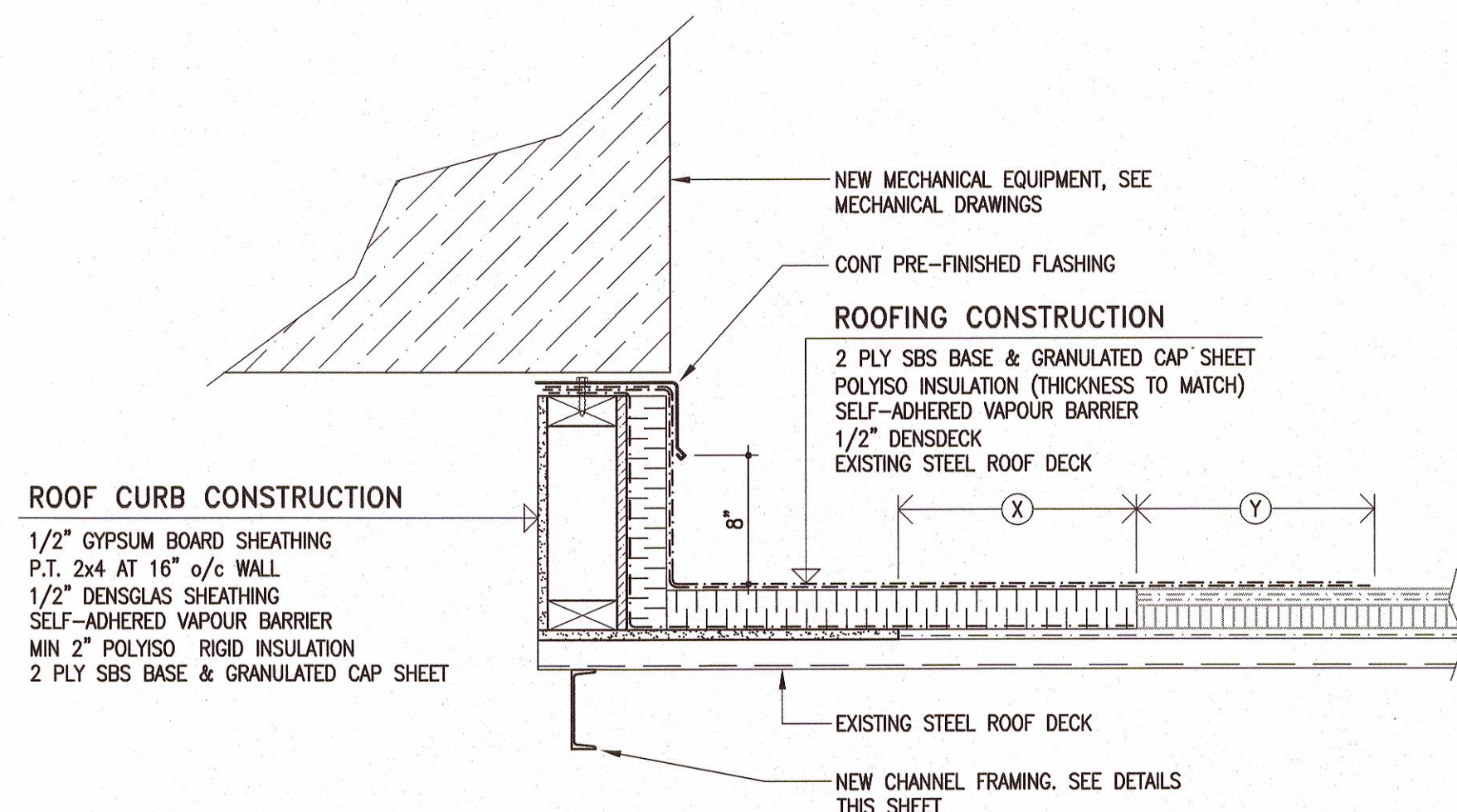
1 SECTION
S-1 1" = 1'-0"
DETAIL IF CHANNEL FALLS IN HIGH DECK FLUTE



3 SECTION
S-1 1" = 1'-0"

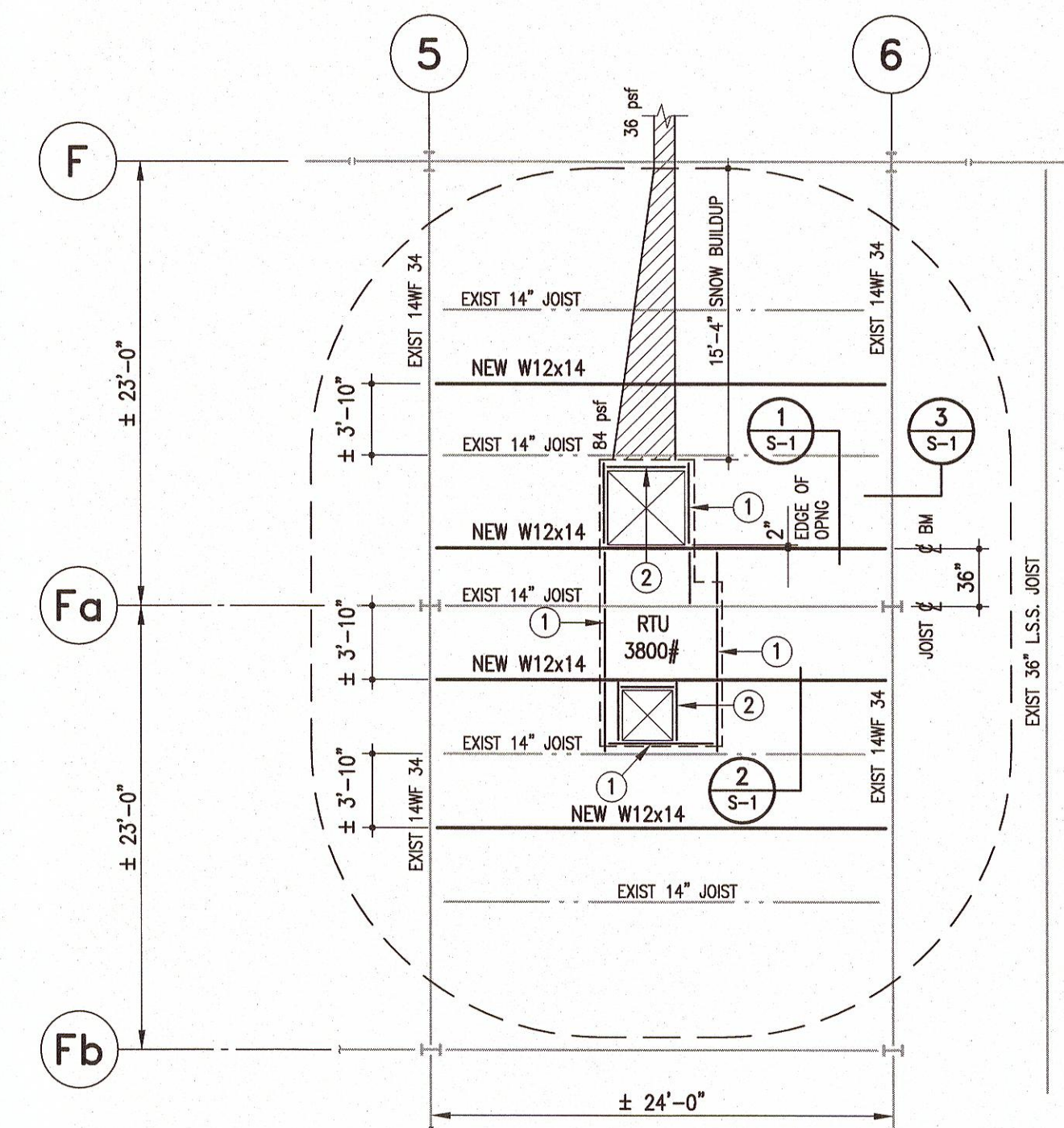


2 SECTION
S-1 1" = 1'-0"
DETAIL IF CHANNEL FALLS IN LOW DECK FLUTE



B TYPICAL ROOF CURB DETAIL
S-1 N.T.S.

- (X) LAP NEW VAPOUR BARRIER MINIMUM 12" ONTO EXISTING SHEATHING
- (Y) DEGRANULATE EXISTING BUILT-UP ROOFING AND LAP NEW 2 PLY SBS ROOFING MINIMUM 12" ONTO EXISTING



PARTIAL ROOF FRAMING PLAN

1/8" = 1'-0"

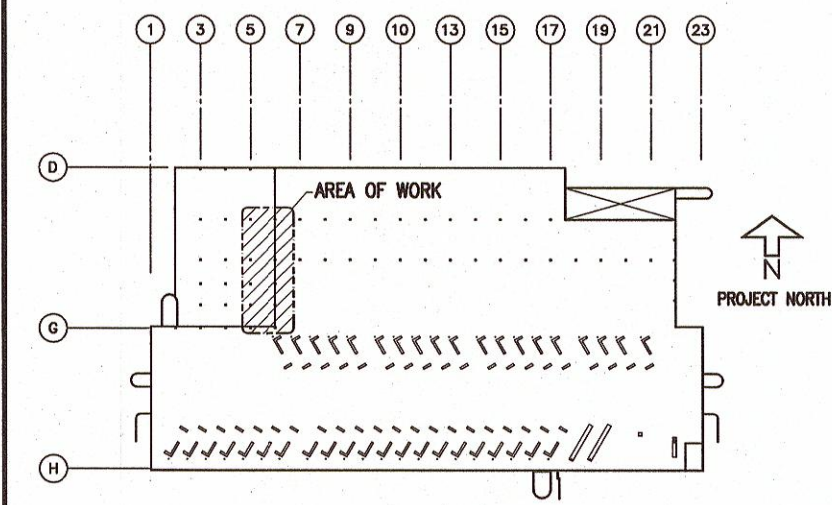
- ① PROVIDE C4x5.4 AT UNDERSIDE OF STEEL DECK AROUND PERIMETER OF NEW RTU. UNIT SUPPLIER TO CO-ORDINATE EXACT LOCATION OF RTU CURB AND NEW FRAMING MEMBERS BENEATH. UNIT TO BE PLACED IN LOCATION SHOWN UNLESS AUTHORIZED BY CONTRACT ADMINISTRATOR.
- ② DUCT OPENING THROUGH EXISTING ROOF DECK TO BE FRAMED WITH L3x3x1/4 ANGLES AS SHOWN ON PLAN.

General Notes

1. STRUCTURAL DESIGN BASED ON THE NATIONAL BUILDING CODE OF CANADA 2010 EDITION.
 - A) IMPORTANCE CATEGORY: NORMAL
 - B) GROUND SNOW LOAD: SS = 39.6 P.S.F.
 - C) ASSOCIATED RAIN LOAD: SR = 4.2 P.S.F.
2. SEISMIC SITE CLASSIFICATION: NOT APPLICABLE
3. DO NOT SCALE DRAWINGS.
4. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE EXISTING SITE CONDITIONS AND MECHANICAL UNIT SUPPLIER PRIOR TO CONSTRUCTION.
5. THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.
6. DO NOT CUT INTO JOIST SEAT OR CHORD OF EXISTING OPEN WEB STEEL JOISTS.

STRUCTURAL STEEL

1. THE STRUCTURAL STEEL FABRICATOR'S CONTRACT ADMINISTRATOR SHALL BE RESPONSIBLE FOR LOCATING AND DESIGNING PROVISIONS FOR ALL TEMPORARY FALL PROTECTION SYSTEMS REQUIRED DURING CONSTRUCTION TO MEET MANITOBA WORKPLACE HEALTH AND SAFETY REGULATIONS.
2. STRUCTURAL STEEL TO CONFORM TO CSA-G40.21, "STRUCTURAL QUALITY STEELS" AND CSA-G40.20 "GENERAL REQUIREMENTS FOR ROLLED OR WELDED STRUCTURAL QUALITY STEEL". CHANNELS AND PLATES SHALL BE G40.21-50W. ALL ANGLES, CHANNELS AND PLATES SHALL BE G40.21-44W.
3. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CAN/CSA S16-09, "STEEL STRUCTURES FOR BUILDINGS".
4. ALL WELDING SHALL CONFORM TO THE LATEST EDITION OF CSA W59, "WELDED STEEL CONSTRUCTION". FABRICATORS SHALL BE PROPERLY CERTIFIED IN ACCORDANCE WITH CSA W47.1, "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
5. ALL BOLTED CONNECTIONS TO USE A325 HIGH STRENGTH BOLTS. MINIMUM CONNECTION SHALL CONSIST OF 2 BOLTS.
6. ALL STRUCTURAL STEEL IS TO RECEIVE ONE COAT OF CISC/CPMA 1-73A QUICK DRYING SHOP PRIMER. STEEL TO BE CLEANED IN CONFORMANCE WITH SSPC-SP2. STEEL RECEIVING FINISH PAINTING TO HAVE ONE COAT OF CISC/CPMA 2-75 QUICK DRYING SHOP PRIMER. STEEL TO BE CLEANED IN CONFORMANCE WITH SSPC-SP7.
7. FABRICATOR TO NOTIFY CONTRACT ADMINISTRATOR OF ANY PROPOSED MEMBER SUBSTITUTIONS AND CHANGED CONNECTION DETAILS.
8. THE STRUCTURAL STEEL SUPPLIER SHALL PROVIDE AND BE RESPONSIBLE FOR ALL HOLES IN STEEL SECTIONS REQUIRED BY OTHER TRADES. SECTION SHALL BE STRENGTHENED WHERE REQUIRED TO GUARANTEE THE ORIGINAL STRENGTH OF THE BEAM.
9. ANY CUTTING OF STEEL AT THE JOB SITE SHALL BE DONE ONLY AS DIRECTED AND APPROVED BY THE CONTRACT ADMINISTRATOR.
10. STRUCTURAL STEEL SUPPLIER IS TO SUBMIT ENGINEERING DRAWINGS BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA COVERING THE DESIGN OF CONNECTIONS, TO THE CONTRACT ADMINISTRATOR FOR REVIEW PRIOR TO FABRICATION. CONNECTION DESIGN TO INCLUDE FOR ALL ADJUSTABLE CONNECTIONS REQUIRED TO SUIT FABRICATION AND ERECTION PROCEDURES AND TOLERANCES.
11. PROTECT EXISTING CONSTRUCTION DURING WELDING PROCEDURES.
12. REMOVE EXISTING JOIST CROSS BRIDGING AS REQUIRED AND REPLACE AFTER JOIST STRENGTHENING WORK IS COMPLETE.



KEY PLAN
N. T. S.

NO.	Revisions	BY	DD/MM/YY
0	ISSUED FOR BID OPPORTUNITY	H.J.L.	12/04/13
-	ISSUED FOR FINAL REVIEW	H.J.L.	05/04/13
-	ISSUED FOR CLIENT REVIEW	H.J.L.	25/03/13

APEGN
Certificate of Authorization
Crosier Kilgour & Partners Ltd.
No. 235 Date: Apr. 8, 2013

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Crosier Kilgour & Partners Ltd.
CONSULTING STRUCTURAL ENGINEERS

Project Title
CITY OF WINNIPEG TRANSIT GARAGE PAINT BOOTH #4 MAKEUP AIR UNIT REPLACEMENT
421 Osborne Street Winnipeg MB

Drawing Title
PARTIAL ROOF FRAMING PLAN, DETAILS & GENERAL NOTES

Drawn By	Checked By	Approved By
KGT/MB	H.J.L.	H.J.L.
Scale	Date	Project No.
AS NOTED	April 2013	13-064-01
Revision Number	Drawing Number	Sheet Order
0	S-1	1 OF 1