



PO Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

MEMORANDUM

TO: Chair and Members of the Design Advisory Committee

FROM: Saira Smith, Planner II, Planning & Development

DATE: August 9th, 2022

SUBJECT: Case # 24315: Site Plan Approval Application for 5291 Dacosta Row, Halifax, N.S.

Background:

The applicant has submitted a Site Plan Approval under the [Regional Centre Land Use Bylaw](#) (LUB) for 5291 Dacosta Row, Halifax, N.S. (PID 40848822). The proposal has been deemed compliant with the requirements of the LUB.

The applicant is seeking a recommendation from the Design Advisory Committee on Section 390: Roof Edge Setbacks of Height-Exempted Building Rooftop Features, as required by the LUB. Public information and consultation consisted of a sign posted on the site with a website containing information on the proposal, in accordance with the requirements of the LUB. The public engagement period closed on June 24, 2022, and no comments were received from the public.

Existing Use: University Use

Zoning: UC-1 (University and College 1) under the LUB.

Proposal: The proposal before the Committee is for an addition to an existing university building for a research space and Gas Atomizer installation. The applicants are requesting a variation to the roof edge setback for height-exempt building rooftop features. The equipment needed for the addition cannot meet the 3 metre rear and side yard roof setback required in Table 8, Column 4 of the LUB.

Input Requested from Design Advisory Committee:

In accordance with the requirements of the LUB and the Terms of Reference for the Design Advisory Committee, the Committee is being asked to provide a recommendation to the Development Officer regarding the variation requirements of Part IX. The following chapter of Part IX is relevant to this proposal:

<p>Chapter 1: General Variation Criteria Variation: Roof Edge Setbacks of Height-Exempted Building Rooftop Features</p> <p>390 (1) The minimum required roof edge setback for height-exempted building rooftop features, contained in Section 103, may be varied by site plan approval to reduce the required setback.</p> <p>(2) When considering a site plan approval under Subsection 390(1), the following criteria shall be met:</p> <ul style="list-style-type: none"> (a) The lot that is subject of the proposed site plan is located within a DD, DH, CEN-2, CEN-1, COR, HR-2, HR-1, CLI, LI, HRI, INS, UC-2, UC-1, DND, H, PCF, RPK, CDD-2, or CDD-1 zone (b) The variation is to a roof edge that faces a side or rear lot line; (c) The rooftop feature is designed or buffered in such a way to minimize its potential visual impact. 	<p>A variation to the roof edge setback is enabled.</p> <p>This lot is located in the UC-1 zone.</p> <p>The variation would be for the roof edges facing the side and rear lot lines.</p> <p>The applicants have shown a roof screen with a height of 1.5 m will be installed along the side and rear roof edge which will minimize the visual impact of the roof features. The roof features have a height of 2.7 m which means the features will not be entirely covered by the screen. The applicants have said they can not increase the roof screen to cover the entire features as the structural steel would be insufficient for a larger screen. A letter from the applicants explaining the roof screen limitations is included as Attachment C.</p>
---	---

Any recommendations made by the Committee will be considered by the Development Officer prior to approval or refusal of the Site Plan Approval application. Any changes to the building informed by the recommendation of the Committee must meet the requirements of the Land Use Bylaw.

Attachments:

- Attachment A – Variation Rational Letter
- Attachment B – Full Architectural Drawings
- Attachment C – EastPoint Engineering Letter July 7, 2022

Attachment A – Variation Rational Letter



Halifax Branch

20 Duke Street, Suite 201
Bedford, NS B4A 2Z5
Ph. (902) 835-8205
Fax (902) 835-8245

May 18, 2022

HRM Planning & Development

5251 Duke St, 3rd Floor, Suite 300
Halifax, NS
B3J 3S1

Re: BPCOM-2022-03453 - DAL New Addition for Research Lab and Gas Atomizer Facility

To whom this may concern,

The proposed research lab addition to the existing G.H Murray Building (Zone UC-2) will contain a specialized piece of research equipment (Gas Atomizer) which requires a significant amount of ventilation to the space when in use. The size and type of rooftop Air Handling Unit (AHU) shown on the project drawings is required to adequately ventilate the research lab.

Due to the limited size of the roof footprint, approx. 8m x 8.3m, and the size of the AHU itself, there is no way to orientate the HVAC unit such that it meets the required roof edge setback of 3m in all directions. During the design phase, the orientation of this AHU was selected to spread the load of the unit evenly across the open web steel joist roof structure while maintaining adequate roof drainage. Where this layout did not meet the setback requirements, an architectural roof screen was incorporated into the design in order to hide the rooftop equipment from the view of the public below. A visual example of this screen was provided with this submission for reference. Furthermore, the height of this roof screen could be increased as required to fully hide the AHU as necessary.

It appears that the project design meets the three criteria listed in Subsection 390(1) to be exempt from the Roof Edge Setback of Height-Exempted Rooftop Features contained in Section 103. If any further information can be provided that would assist in the review of the site plan approval, please reach out.

Regards,

Drew MacDonald, EIT – Project Manager, Special Projects

20 Duke Street, Suite 201, Bedford, NS B4A 2Z5

www.bird.ca





DALHOUSIE UNIVERSITY GAS ATOMIZER PROJECT 'G' BUILDING, SEXTON CAMPUS

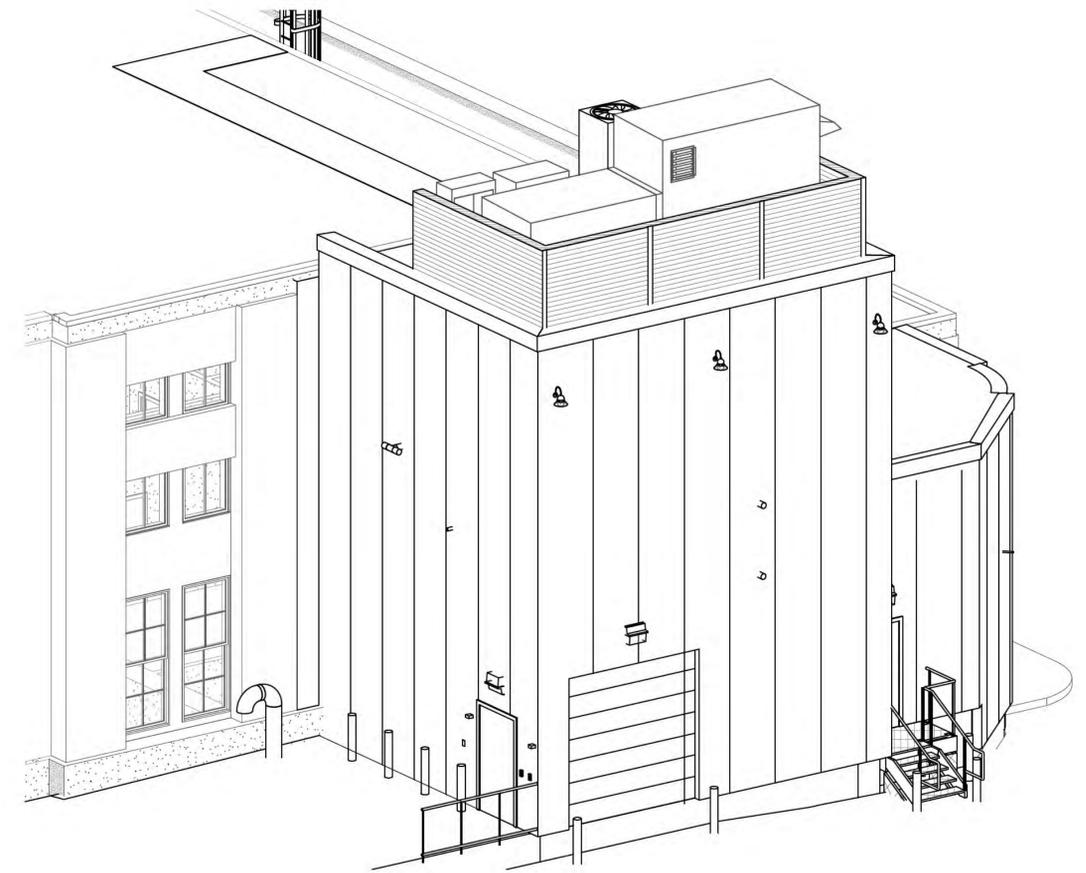
LOCATION: HALIFAX, NS

EP PROJECT NUMBER: 460010

CLIENT: DALHOUSIE UNIVERSITY

DATE: 15/06/22

ISSUED FOR CONSTRUCTION



DRAWING LIST

- A-101 ARCHITECTURAL PARTIAL PLANS LEVEL 1 & ROOF EXISTING & DEMO
- A-102 ARCHITECTURAL PARTIAL PLANS LEVEL 1 & ROOF
- A-103 ARCHITECTURAL REFLECTED CEILING PLAN AND CRANE LOCATION
- A-201 ARCHITECTURAL ELEVATIONS
- A-301 ARCHITECTURAL SECTIONS
- A-302 ARCHITECTURAL WALL SECTIONS & SECTION DETAILS
- A-401 ARCHITECTURAL EXTERIOR PLAN DETAILS
- A-402 ARCHITECTURAL PLAN DETAILS
- A-403 ARCHITECTURAL STAIR # 1 PLAN, SECTIONS & DETAILS
- A-404 ARCHITECTURAL SECTION DETAILS
- A-405 ARCHITECTURAL ROOF DETAILS
- A-406 ARCHITECTURAL ROOF DETAILS
- A-407 ARCHITECTURAL ROOF DETAILS
- A-408 ARCHITECTURAL ROOF DETAILS

- C-001 CIVIL PLOT PLAN
- C-101 CIVIL EXISTING CONDITIONS
- C-102 CIVIL PROPOSED SITE PLAN

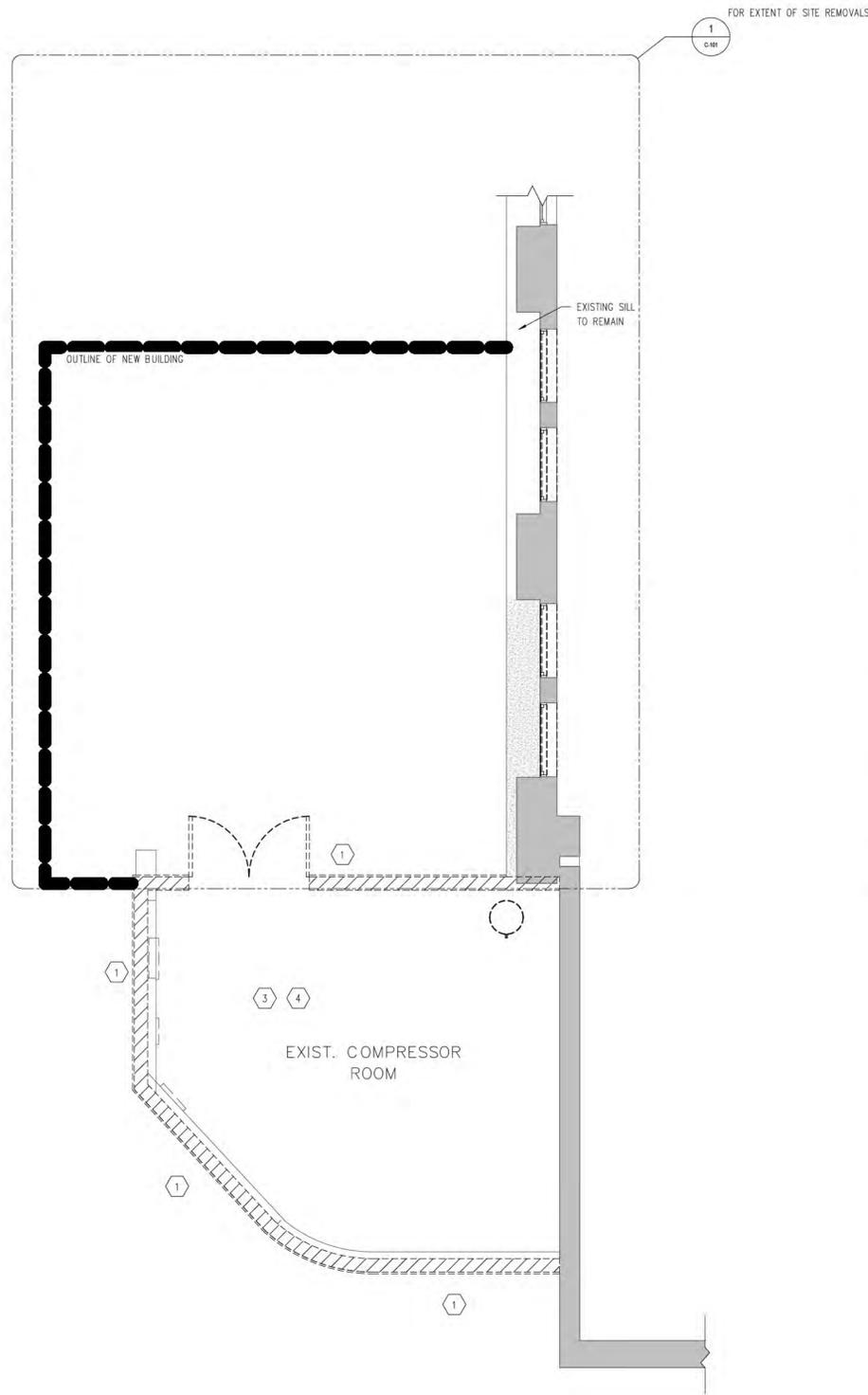
- E-101 ELECTRICAL LEGEND & NOTES
- E-102 ELECTRICAL EXISTING PARTIAL PLANS BASEMENT & LEVEL 1 DEMO
- E-103 ELECTRICAL NEW PARTIAL PLANS BASEMENT & LEVEL 1
- E-104 ELECTRICAL NEW PARTIAL PLANS ROOF
- E-105 ELECTRICAL PARTIAL PLANS LEVEL 1 LIGHTING
- E-106 ELECTRICAL PARTIAL PLANS LEVEL 1 AREA CLASSIFICATION
- E-107 ELECTRICAL DETAILS
- E-601 ELECTRICAL NOTES AND PANEL SCHEDULES
- E-602 ELECTRICAL SINGLE LINE DIAGRAMS BLOCK DIAGRAMS
- E-603 ELECTRICAL FIRE ALARM RISER

- M-101 MECHANICAL PARTIAL PLANS LEVEL 1 & ROOF EXISTING & DEMOLITION
- M-102 MECHANICAL PIPING PARTIAL PLANS LEVEL 1 & ROOF
- M-103 MECHANICAL HVAC PARTIAL PLANS LEVEL 1 & ROOF
- M-104 MECHANICAL PLUMBING PARTIAL PLANS LEVEL 1 & ROOF
- M-301 MECHANICAL HVAC SECTIONS
- M-401 MECHANICAL DETAILS
- M-601 MECHANICAL SCHEDULES
- M-602 MECHANICAL PIPING SCHEMATIC
- M-603 MECHANICAL AHU-1 CONTROL SCHEMATIC

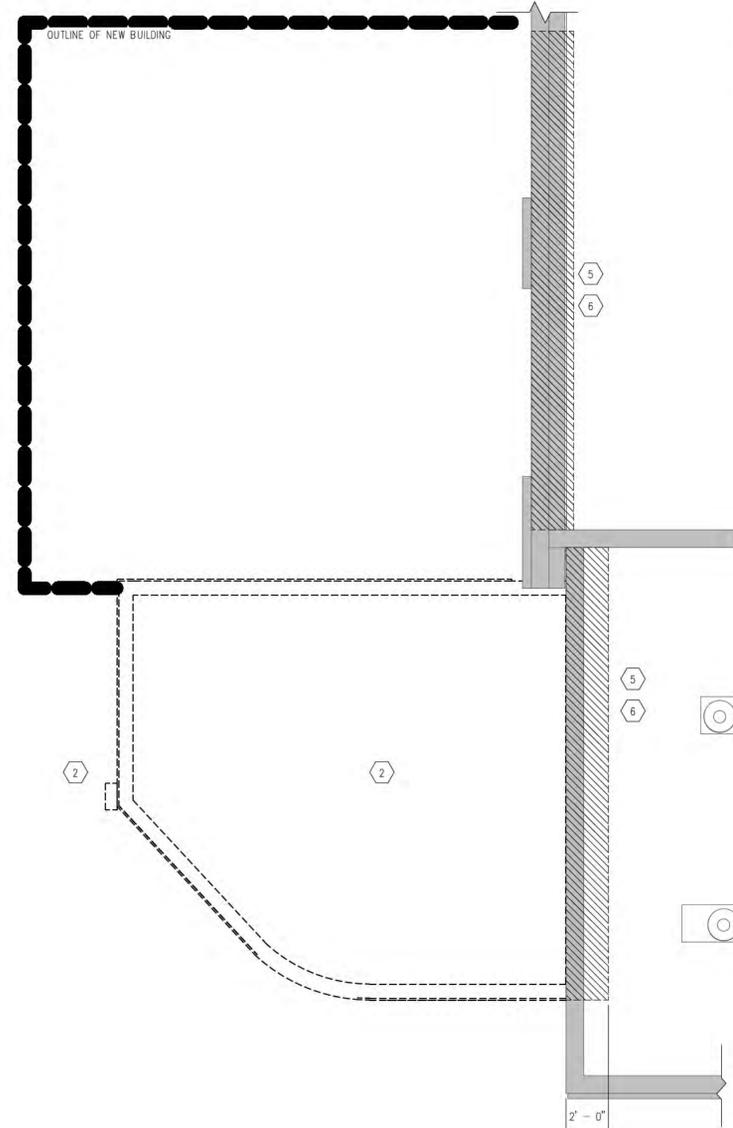
- S-001 STRUCTURAL NOTES
- S-101 STRUCTURAL FOUNDATION PLAN
- S-102 STRUCTURAL STEEL FRAMING PLANS
- S-201 STRUCTURAL STEEL FRAMING ELEVATIONS
- S-301 STRUCTURAL TYPICAL DETAILS
- S-302 STRUCTURAL FOUNDATION SECTION AND DETAILS
- S-303 STRUCTURAL WALL SECTIONS SHEET 1
- S-304 STRUCTURAL WALL SECTIONS SHEET 2

TITLE BLOCK 11 FULL SIZE 24 X 36
C:\hamp\pds\hamp\Documents\460010_Gas Atomizer_G' Building_Sexton_Campus\460010.dwg
15/06/22 10:47 AM J.S.

PROJECT NORTH



1 PARTIAL PLAN – LEVEL 1 DEMO
A-101 SCALE: 1/4" = 1'-0"



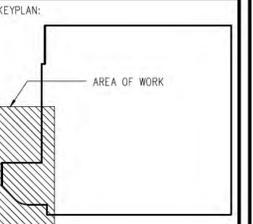
2 PARTIAL PLAN – ROOF DEMO
A-101 SCALE: 1/4" = 1'-0"

DEMOLITION GENERAL NOTES:

- A COORDINATE w/ CIVIL DWG'S FOR REMOVALS OF WOOD PLANTER, EXPOSED CONCRETE WING WALL, VEGETATION, PLANTS, SHRUBS, PATIO PAVERS, GUARDRAILS, CONC. WALKWAYS, ADJACENT CHAIN LINK FENCING, EXTERIOR STORAGE CABINET, BIKE RACKS, BOLLARDS & ANY OTHER CIVIL CONDITIONS & COMPONENTS THAT ARE ATTACHED TO & ADJACENT TO PERIMETER OF EXISTING BUILDING WHICH MAY IMPACT THE PROGRESS OF DEMOLITION & NEW CONSTRUCTION.
- B COORDINATE w/ STRUCTURAL DWG'S FOR REMOVALS ROOF STRUCTURE, ANGLES, BEAMS, MISCELLANEOUS STEEL & ANY OTHER STRUCTURAL CONDITIONS & COMPONENTS THAT ARE ATTACHED TO PERIMETER OF EXISTING BUILDING WHICH MAY IMPACT THE PROGRESS OF DEMOLITION & NEW CONSTRUCTION.
- C COORDINATE w/ MECHANICAL DWG'S FOR REMOVALS OF DUCT WORK, DUCT SUPPORT HANGERS, CLIPS, BRACKETS, CABINET HEATERS, COMPRESSED AIR TANK & ANCILLARY TANK COMPONENTS, PIPING, LOUVERS & ANY OTHER MECHANICAL CONDITIONS & COMPONENTS THAT ARE ATTACHED TO, ADJACENT TO & CONTAINED WITHIN EXTERIOR WALL & ROOF ASSEMBLIES.
- D COORDINATE w/ ELECTRICAL DWG'S FOR REMOVALS OF EXTERIOR & INTERIOR LIGHTING, POWER DISTRIBUTION, PANELS, ELECTRICAL PANELS, ELECTRICAL HEATERS, SWITCHES, OUTLETS, JUNCTION BOXES, CONDUITS, WIRING & ANY OTHER ELECTRICAL CONDITIONS THAT ARE ATTACHED TO, ADJACENT TO & CONTAINED WITHIN EXTERIOR WALL ASSEMBLY.

DEMOLITION KEY NOTES:

- 1 REMOVE & DISPOSE OF EXISTING EXTERIOR WALLS ALONG ENTIRE PERIMETER OF BUILDING DOWN TO TOP OF EXISTING SLAB AT COMPRESSOR ROOM FLOOR LEVEL, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING CONDITIONS, COMPONENTS & SYSTEMS:
REMOVE CLADDING, FASTENERS, CLIPS, Z-GIRTS, FLASHINGS, FLASHING CLEATS, CONC. BLOCK WALLS, AIR BARRIERS, RAIN WATER HOPPER, DOWNSPOUT, STRAPS, COMPRESSOR ROOM DOOR & LOUVERS, BUILDING SIGNAGE, INSULATION, SURFACE MOUNTED LIGHTING, CONDUITS & ANY OTHER CONDITIONS, COMPONENTS & SYSTEMS THAT ARE ATTACHED TO, ADJACENT TO & HIDDEN BEHIND THE EXTERIOR CLADDING.
- 2 REMOVE & DISPOSE OF EXISTING ROOF ASSEMBLY, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING CONDITIONS, COMPONENTS & SYSTEMS:
REMOVE ROOF MEMBRANES, FLASHINGS, FLASHING CLEATS, SEALANTS, REGLETS, TERMINATION BARS, ROOF CURBS, STEEL DECKING, ROOF FRAMING, PARAPET ASSEMBLIES, AIR BARRIERS, INSULATION, ROOF DECK SHEATHINGS, ROOF DRAINS, ROOF TOP EQUIPMENT & ANY OTHER CONDITIONS, HOPPER & DOWNSPOUT, COMPONENTS & SYSTEMS THAT ARE ATTACHED TO, ADJACENT TO & HIDDEN BETWEEN THE ROOF ASSEMBLY.
- 3 CONFIRM w/ OWNER FOR LOOSE LAID MATERIALS CONTAINED WITHIN THE COMPRESSOR ROOM TO DETERMINE IF ITEMS ARE TO BE REMOVED & DISPOSED OF OR TEMPORARILY REMOVED & TURNED OVER TO THE OWNER, INCLUDING BUT NOT LIMITED TO, THE FOLLOWING:
EQUIPMENT, TOOLS, LADDERS, TARPS, BARRELS, GARBAGE CANS, PAINT CANS, PAINT TRAYS, MISCELLANEOUS METALS & ANY OTHER LOOSE LAID MATERIALS TO ENSURE A CLEAN ENVIRONMENT EXPOSING THE ENTIRE SURFACE OF THE BARE CONCRETE SLAB.
- 4 REMOVE & DISPOSE OF ANY EXISTING DEBRIS CONTAINED WITHIN THE COMPRESSOR ROOM.
- 5 SWEEP EXISTING PEA GRAVEL BACK 36" TO ALLOW FOR GRAVEL STOP REMOVALS
- 6 REMOVE AND DISPOSE OF EXISTING GRAVEL STOP FLASHING, FLASHING CLEATS, FASTENERS & SEALANTS TO EXPOSE PLYWOOD GAP.



- LEGEND:
- EXISTING WALL TO REMAIN
 - DEMOLITION WALL
 - EXTENT OF ROOFING REMOVAL

Original Signed



CONSTRUCTION

NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
PARTIAL PLANS LEVEL 1 &
ROOF EXISTING & DEMO

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.O.
CAD W.O.#:	460010
SCALE:	1/4" = 1'-0"
DRAWN BY:	J.S.
DATE:	15/06/22

A-101



NEW CONSTRUCTION KEY NOTES:

- 1 1.5 HR FIRE RATED DOOR EQUIPPED WITH AUTOMATIC CLOSING DEVICE AND POSITIVE LATCHING MECHANISM
- 2 2 HR FIRE RATING ON COLUMNS WITH INTUMESCENT PAINT
- 3 EXPANSION JOINT
- 4 BOLLARDS
- 5 INFILL WINDOWS ON LEVELS 1, 2, & 3
- 6 EXISTING CONCRETE SILL
- 7 BASEMENT WALL BELOW
- 8 WALL MOUNTED FIRST AID STATION
- 9 INDOOR CHILLER (OWNER SUPPLIED EQUIPMENT)
- 10 EXPLOSION PROOF VACUUM (OWNER SUPPLIED EQUIPMENT)
- 11 WALL MOUNTED GROUNDING BAR OVER BENCH
- 12 MOBILE WORK BENCH
- 13 BOTTLES FOR SIEVE (OWNER SUPPLIED EQUIPMENT)
- 14 ACONITY 30 SIEVE (OWNER SUPPLIED EQUIPMENT)
- 15 FLAMMABLE STORAGE CABINET
- 16 REMOTE OPENING STATION (OWNER SUPPLIED EQUIPMENT)
- 17 COMPRESSED BOTTLE SKIDS PLACED UNDER PLATFORM (OWNER SUPPLIED EQUIPMENT)
- 18 ALL COLUMNS ALONG FR ASSEMBLY P1, PENETRATING THE FIRE-RATED WALL ASSEMBLY, TO BE C/W 2 LAYERS OF 5/8" TYPE X GWB AND 7/8" METAL FURRING CHANNELS. REFER TO DETAIL 2/A-406 FOR SIMILAR ENCASUREMENT.
- 19 CONDENSING UNIT (OWNER SUPPLIED EQUIPMENT)
- 20 CHAIR AND DESK
- 21 GUARD RAIL -
-2" DIA. GALVANIZED TOP & BOTTOM RAILS WITH VERTICAL RAILS, EQUAL SPACING, AT A MAX. SPACING OF 4'-0" CENTER TO CENTER OF POSTS.
-TOP OF GUARDRAIL TO BE 3'-6" ABOVE FINISHED GRADE.
-1/2" DIA. GALVANIZED ROUND BARS AT A MAX SPACING OF 4" CENTER TO CENTER OF BARS.
-1/5" OF BOTTOM RAIL TO BE 2" ABOVE TOP OF CONCRETE RETAINING WALL.
-EACH VERTICAL POST C/W 3" X 6" LONG GALVANIZED BASE PLATES C/W 2 HOLES TO SUIT 1/2" DIA. ANCHOR BOLTS. ANCHOR BOLTS C/W WASHERS. ISOLATE METAL COMPONENTS FROM CONCRETE W/ BITUMINOUS COATING, TYPICAL UNDER EACH BASE PLATE & AT EMBEDDED ANCHORS ENSURE 2" GAP BETWEEN FACE OF INSULATED WALL PANEL & FACE OF RAILING.
- 22 REPLACE EXISTING LADDER WITH NEW LADDER C/W SAFETY CAGE ANCHORED BACK TO EXISTING STRUCTURE. LADDER TO BE DESIGNED TO MEET PROVINCIAL SAFETY REQUIREMENTS. ALL MATERIAL TO BE GALVANIZED.
- 23 FLOOR FINISH TO EPOXY ELECTROSTATIC FLOORING

FIRE SEPARATION NOTES

FIRE RESISTANCE RATINGS FOR WALL ASSEMBLIES

USE LEGEND BELOW AND DRAWINGS TO IDENTIFY LOCATIONS OF FIRE SEPARATIONS.

120 MIN

NOTE: RATINGS SHOWN ARE THE MINIMUM REQUIRED

FIRE SEPARATION SCHEMATIC NOTES

- FIRE STOP ALL PENETRATIONS AND PROVIDE FIRE DAMPERS AS INDICATED - SEE MECHANICAL. HATCHED AREAS ONLY IDENTIFY THE REQUIREMENT FOR FLOOR AREAS TO RECEIVE SPRAY APPLIED FIRE PROOFING. FOR AREAS WITH STRUCTURAL CONC. FLOOR SLABS, CREATING A 2 HOUR FLOOR FIRE SEPARATION, ALL SUPPORTING STEEL BEAMS AND COLUMNS REQUIRE SPRAY APPLIED FIRE PROOFING.
- ALL EXPOSED STRUCTURAL MEMBERS/BEAMS SUPPORTING A RATED FLOOR ASSEMBLY ARE TO BE PROTECTED BY SPRAY APPLIED FIRE PROOFING, MUST BE USED ON THE EXPOSED CEILING.
- READ IN CONJUNCTION WITH ALL PROJECT DRAWINGS AND SPECIFICATIONS.
- FIRE STOP ALL PENETRATIONS, JOINTS AND EDGES AT VARYING MATERIALS IN EACH ASSEMBLY IDENTIFIED AS BEING A FIRE SEPARATION.
- PER SUBSECTION 3.2.3 OF THE NATIONAL BUILDING CODE OF CANADA, EXTERIOR WALLS REQUIRE A MINIMUM FIRE RESISTANCE RATING TO PROTECT THE ADJACENT PROPERTIES, BUILDINGS, AND STREETS. BASED ON THE DISTANCE TO THE CENTER OF THE STREETS SURROUNDING THE BUILDING AND THE FACT THAT IT IS NON-SPRINKLERED, EXTERIOR WALLS ARE PROVIDED WITH A 2-HOUR FIRE RATING. REFER TO CODE MATRIX FOR FULL CALCULATION DETAILS

STRUCTURAL REQUIREMENT:

FLOOR ASSEMBLIES:

FIRE SEPARATION: 120min, NON-COMBUSTIBLE CONSTRUCTION

FIRE RESISTANCE RATING OF SUPPORT MEMBERS/ASSEMBLY: 120min, NON-COMBUSTIBLE CONSTRUCTION

ROOF ASSEMBLIES:

FIRE SEPARATION: NON-COMBUSTIBLE CONSTRUCTION

FIRE RESISTANCE RATING OF SUPPORT MEMBERS/ASSEMBLY: NON-COMBUSTIBLE CONSTRUCTION

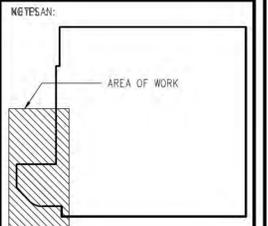
WIND LOAD SCHEDULE

LOW ROOF AREA 1		UPPER ROOF AREA 2 & 3	
WINDLOAD*	WINDLOAD*	WINDLOAD*	WINDLOAD*
CORNER	68 PSF (3.3 kPa)	CORNER	72 PSF (3.4 kPa)
EDGE	35 PSF (1.7 kPa)	EDGE	49 PSF (2.3 kPa)
FIELD	27 PSF (1.3 kPa)	FIELD	35 PSF (1.7 kPa)
END ZONE WIDTH (SEE ROOF PLAN)		END ZONE WIDTH (SEE ROOF PLAN)	

*CALCULATED AS PER NBCC 2015

WALL, PARTITION, & ROOF ASSEMBLIES

W1	W1 - INSULATED METAL PANEL (2 HOUR FIRE RATING CAN/ULC S101) -6" INSULATED METAL PANEL
P1	P1 - SHAFT WALL (2 HOUR FIRE RATING ULC U411) -5/8" TYPE X GWB -5/8" TYPE X GWB -8" STEEL STUD WITH MINERAL WOOL BATT INSULATION -5/8" TYPE X GWB -5/8" TYPE X GWB, INTERIOR FACE PAINTED
P2	P2 - WINDOW IN-FILLS -5/8" PLYWOOD -SELF ADHERING AIR BARRIER -2X4 STUDS @ 16" C/W BATT INSULATION -VAPOUR BARRIER -5/8" GYPSUM WALLBOARD
P3	P3 - EXISTING PORTION OF CURVED WALL (2 HOUR FIRE RATING ULC U411) -METAL CLADDING (PROFILE CLADDING ONLY) MECHANICALLY FASTENED C/W EXPOSED FASTENERS & SELF SEALING FULLY ADHERED RUBBER STRIPS AT EACH FASTENER -5/8" TYPE X GWB -5/8" TYPE X GWB -8" COLD ROLLED STRUCTURAL STEEL STUDS AT 16" C/C, C/W NON-COMBUSTIBLE INSULATION. TYPICAL ALONG CURVED PORTION OF EXTERIOR WALL BETWEEN HORIZONTAL STRUCTURAL GIRTS. SEE STRUCTURAL DWG'S FOR GIRT LOCATIONS -5/8" TYPE X GWB -5/8" TYPE X GWB -METAL CLADDING (PROFILE CLADDING ONLY) FULLY BONDED TO GYPSUM BOARD. ENSURE BONDING ADHESIVES ARE COMPATIBLE W/ BOTH CLADDING MATERIAL & GYPSUM BOARD.
R1	R1 - NEW ROOF - MODIFIED BITUMINOUS ROOFING -1/4" PROTECTION BOARD -4" TAPERED INSULATION -1/4" UNDERLAYMENT BOARD -1 1/2" ROOF DECKING



LEGEND:

	EXISTING WALL
	NEW WALL
	GUARD RAIL
	RISERS
	TREADS
	CRICKET



CONSTRUCTION

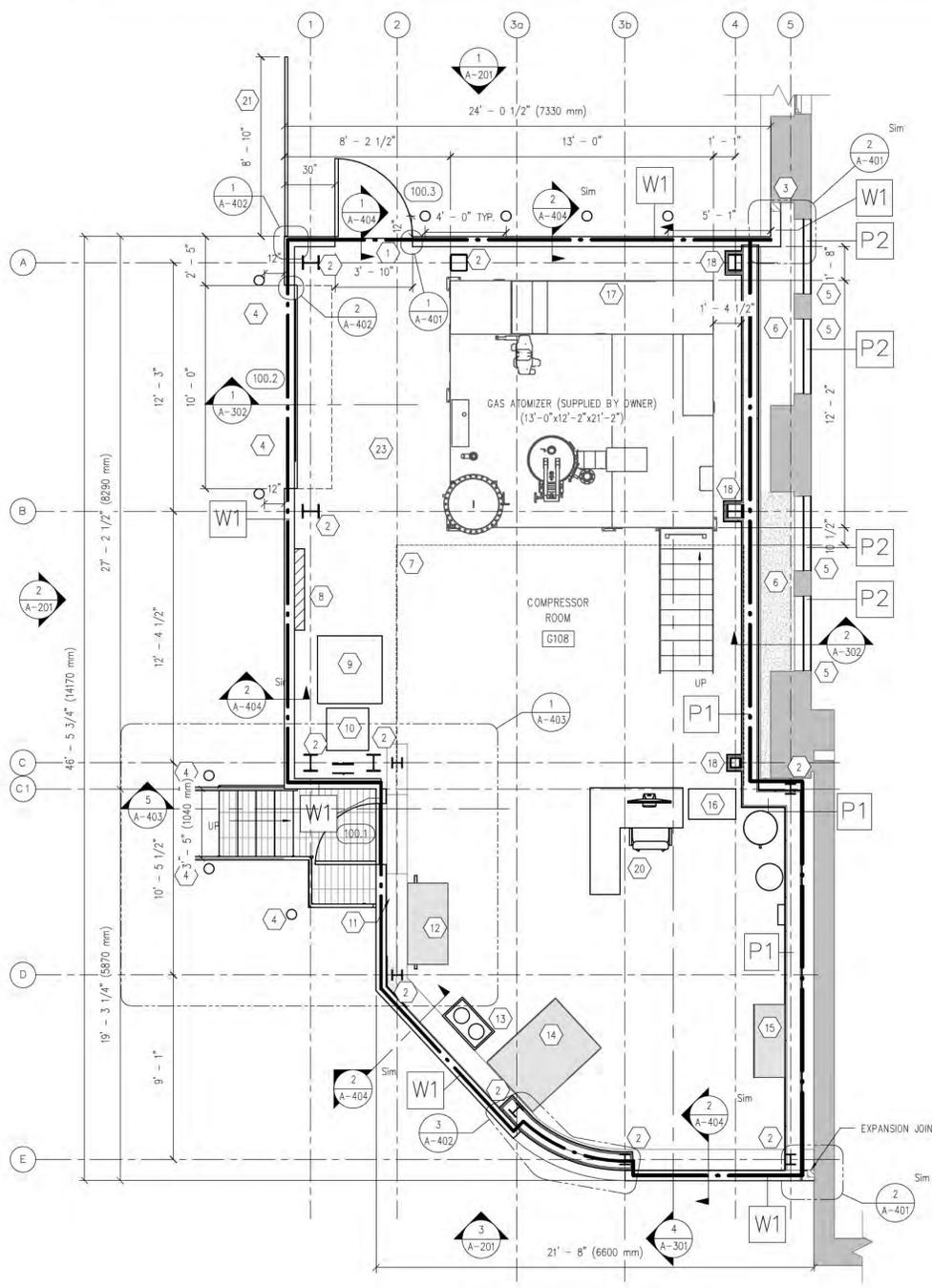
NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT:
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

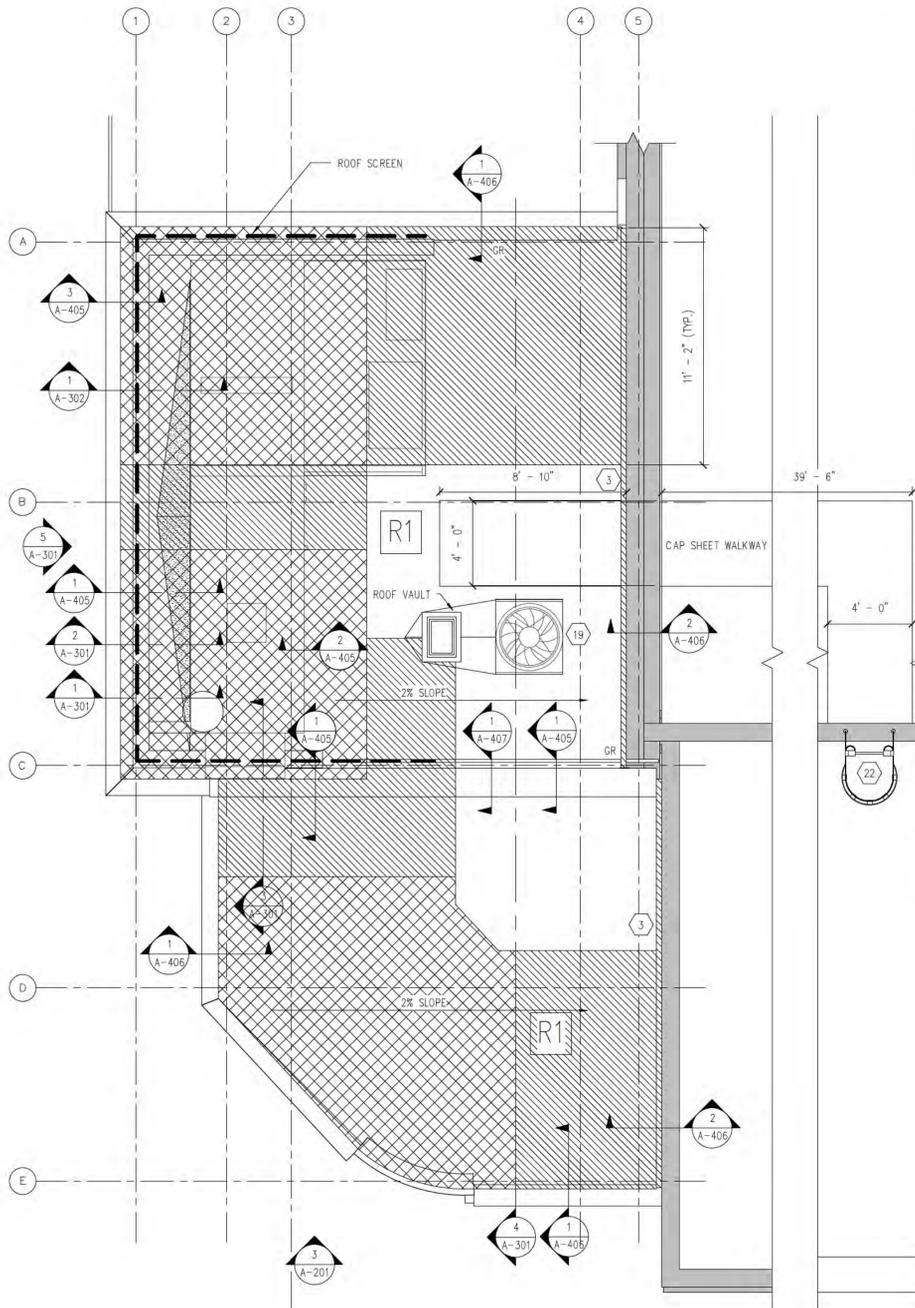
DRAWING TITLE:
ARCHITECTURAL
PARTIAL PLANS LEVEL 1 &
ROOF

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	As indicated
DRAWN BY:	J.S.
DATE:	15/06/22

A-102



1 PARTIAL PLAN - LEVEL 1 NEW CONSTRUCTION
A-102 SCALE: 1/4" = 1'-0"



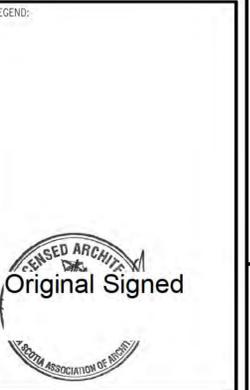
2 PARTIAL PLAN - ROOF NEW CONSTRUCTION
A-102 SCALE: 1/4" = 1'-0"



CEILING KEY NOTES:

- 1 STUD TO RUN ALONG TOP OF JOIST
- 2 CEILING HEIGHT VARIES. SEE A-103/1 FOR CEILING HEIGHT A.F.F.
- 3 CEILING HATCH

NOTES :



CONSTRUCTION

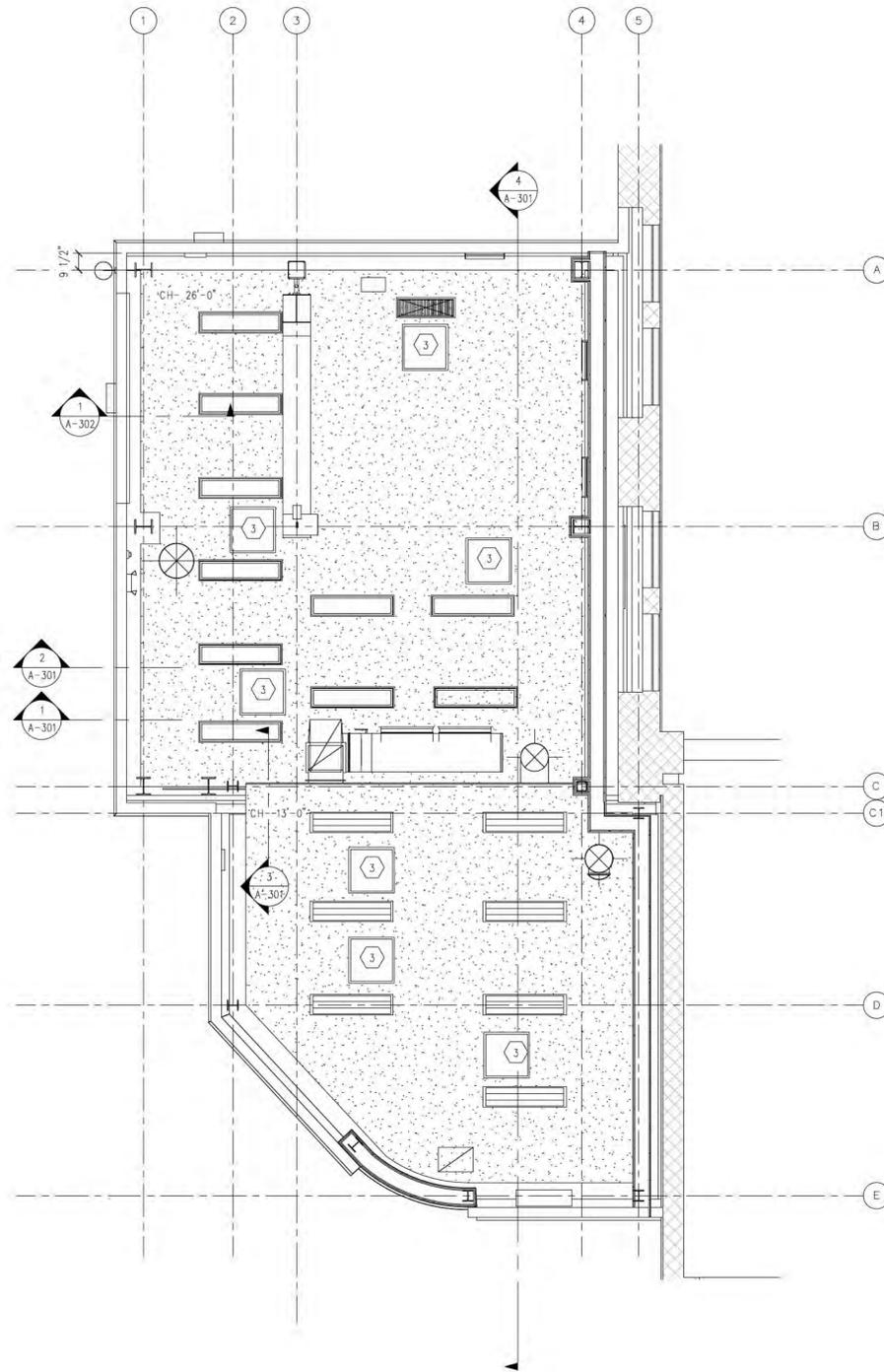
NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT : DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

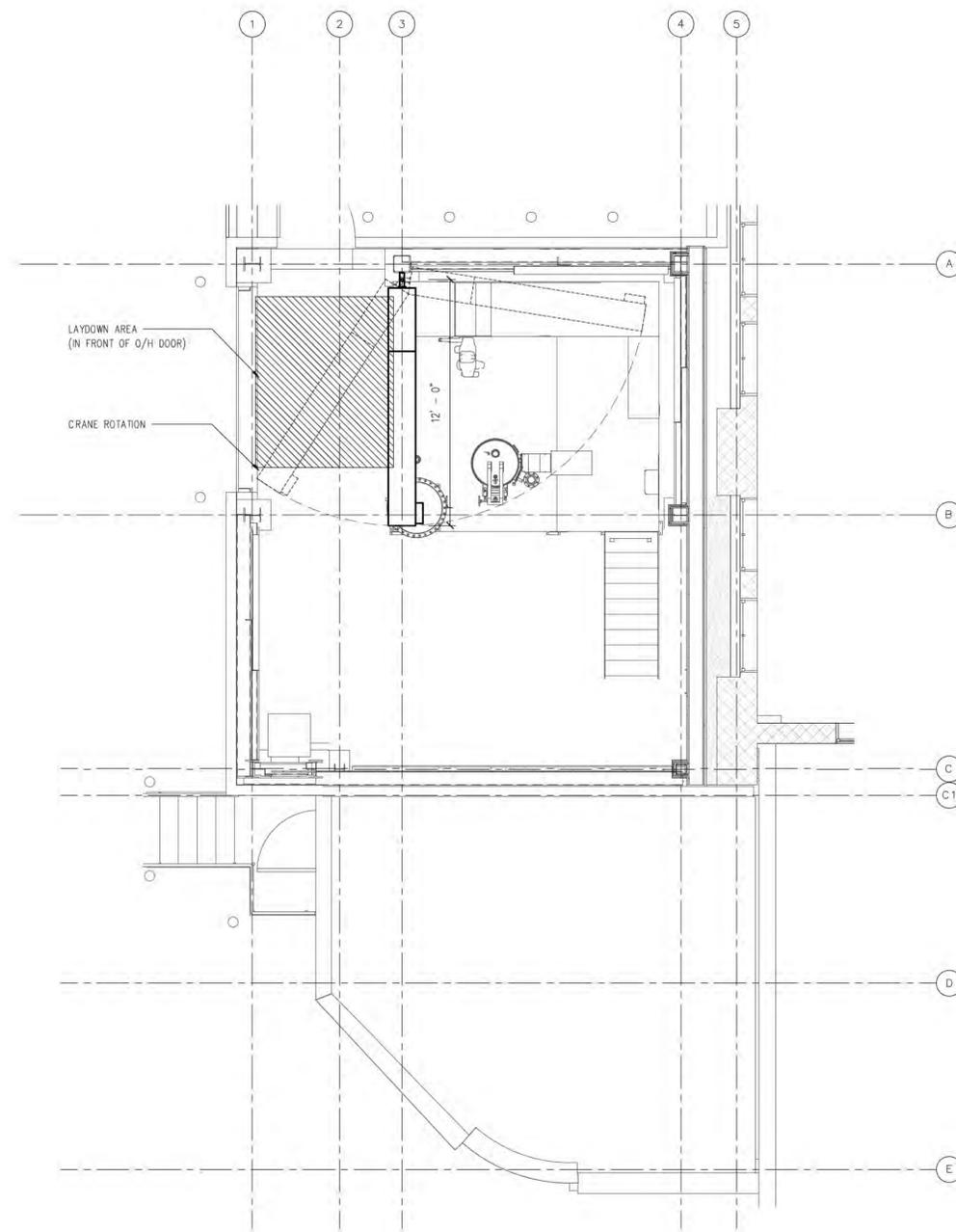
DRAWING TITLE :
ARCHITECTURAL
REFLECTED CEILING PLAN
AND CRANE LOCATION

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.O.
CAD W.O.#:	460010
SCALE:	As indicated
DRAWN BY:	J.S.
DATE:	15/06/22

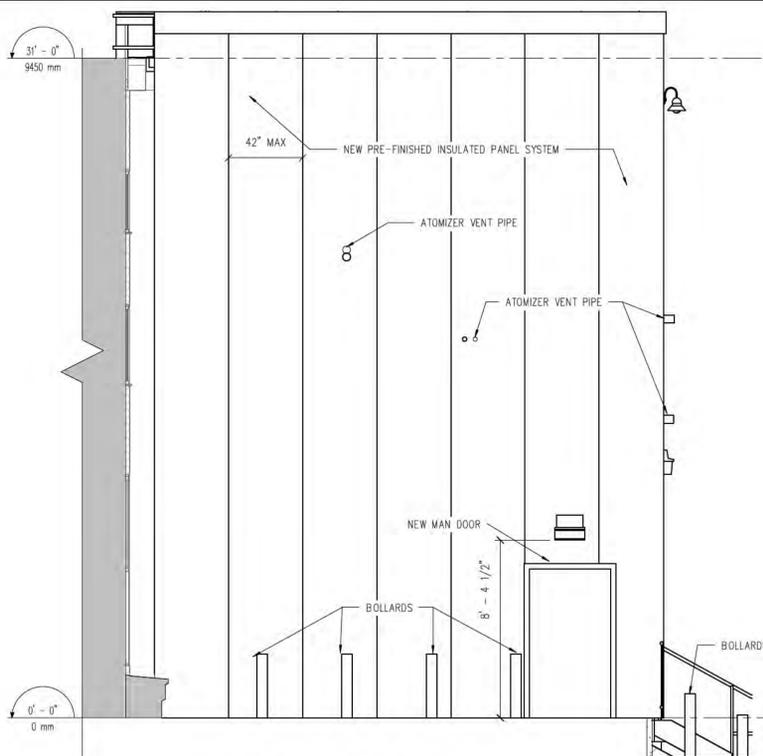
A-103



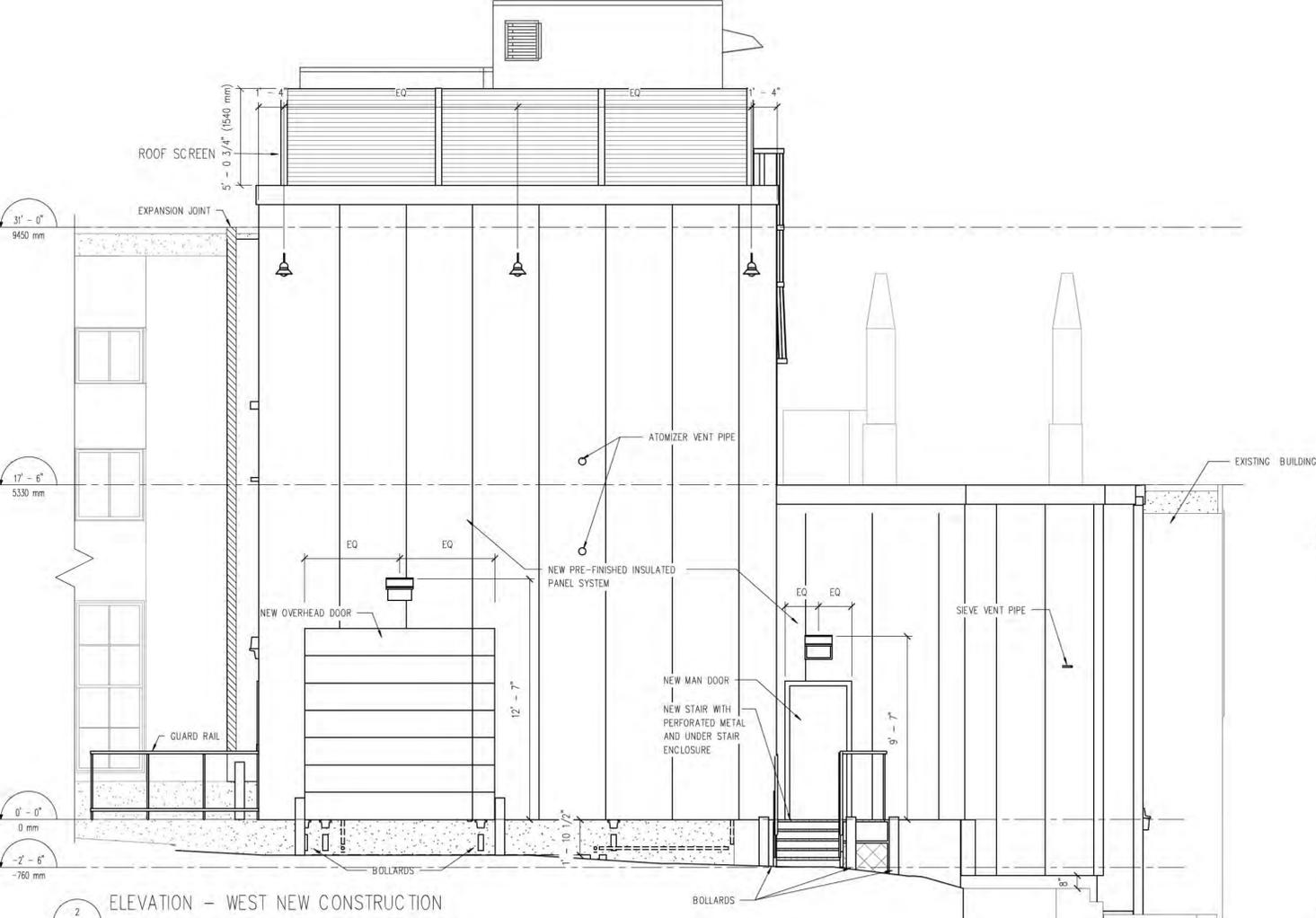
1 REFLECTED CEILING PLAN - NEW
A-201 SCALE: 1/4" = 1'-0"



2 PARTIAL PLAN - CRANE LOCATION
A-201 SCALE: 1/4" = 1'-0"



1 ELEVATION - NORTH NEW CONSTRUCTION
A-101 SCALE: 1/4" = 1'-0"

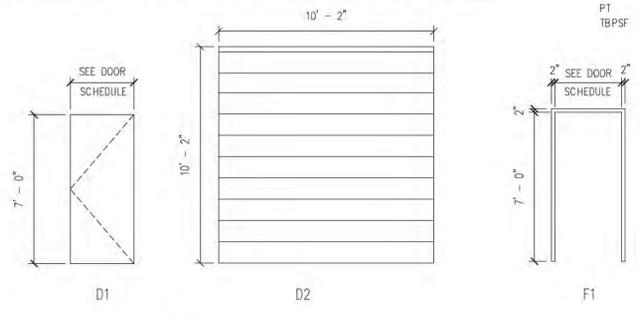


2 ELEVATION - WEST NEW CONSTRUCTION
A-101 SCALE: 1/4" = 1'-0"

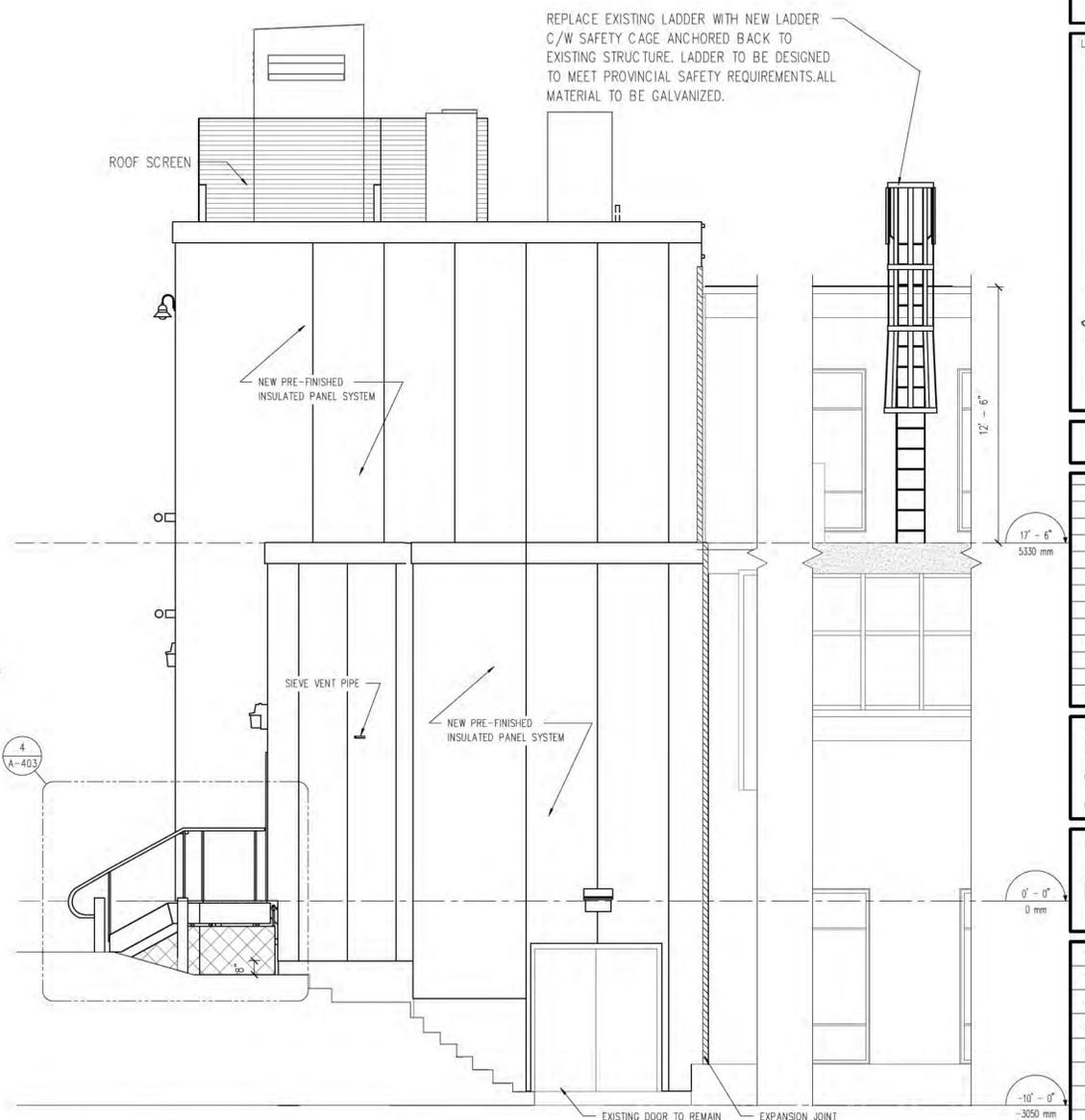
DOOR NO.	DOOR			FRAME			FIRE RATING		
	WIDTH	HEIGHT	MAT	TYPE	FIN	TYPE		MAT.	FIN
100.1	3' - 0"	7' - 0"	IM	D1	PT	F1	TBPSF	PT	90 MIN
100.2	10' - 0"	10' - 0"	IMS	D2	PRE	EG	GS	PRE	90 MIN
100.3	3' - 10"	7' - 0"	IM	D1	PT	F1	TBPSF	PT	90 MIN

DOOR / FRAME LEGEND

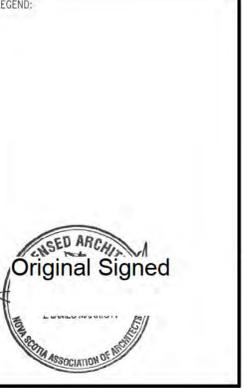
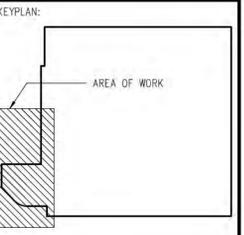
- EG E-TYPE GUIDE ASSEMBLY
- GS GALVANIZED STEEL
- IM INSULATED METAL
- IMS INSULATED METAL SLATS
- PRE PRE-FINISHED
- PT PAINTED
- TBPSF THERMALLY BROKEN PRESSED STEEL FRAME



DOOR & FRAME ELEVATIONS
SCALE: 1/4" = 1'-0"



3 ELEVATION - SOUTH NEW CONSTRUCTION
A-101 SCALE: 1/4" = 1'-0"



CONSTRUCTION

NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
ELEVATIONS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.O.
CAD W.O.#:	460010
SCALE:	1/4" = 1'-0"
DRAWN BY:	J.S.
DATE:	15/06/22

A-201

NOTES :

LEGEND:



CONSTRUCTION

NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT :
**DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER**

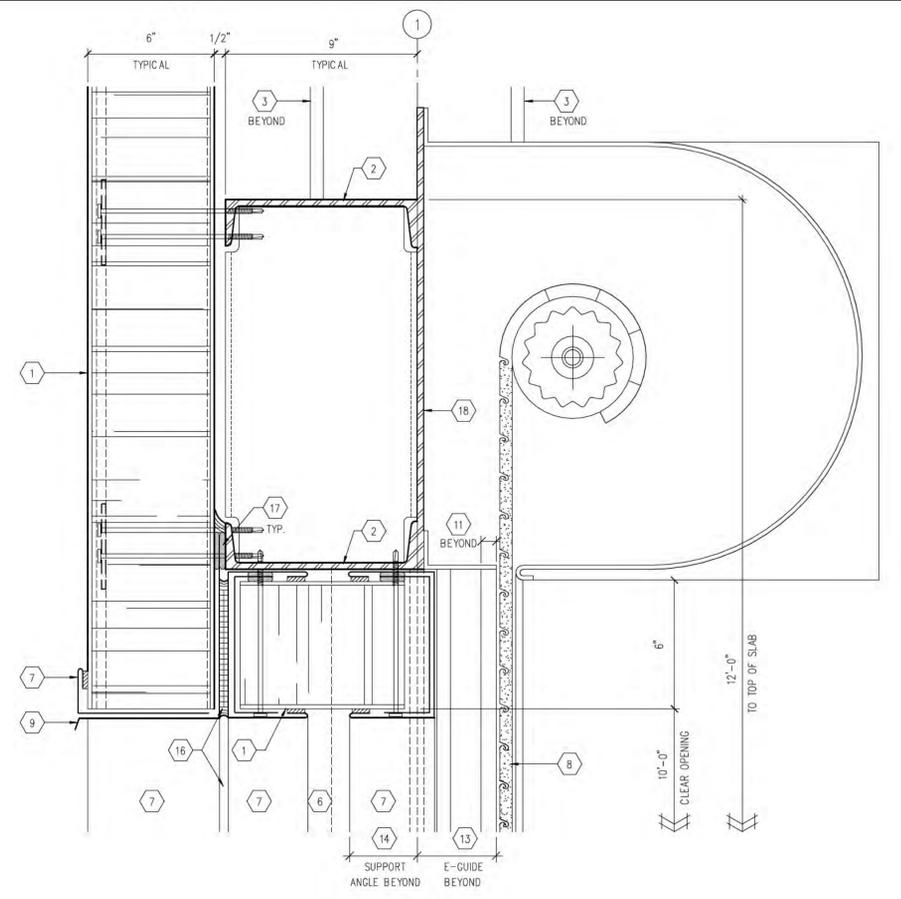
DRAWING TITLE :
**ARCHITECTURAL
WALL SECTIONS & SECTION
DETAILS**

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	AS NOTED
DRAWN BY:	B.D.
DATE:	15/06/22

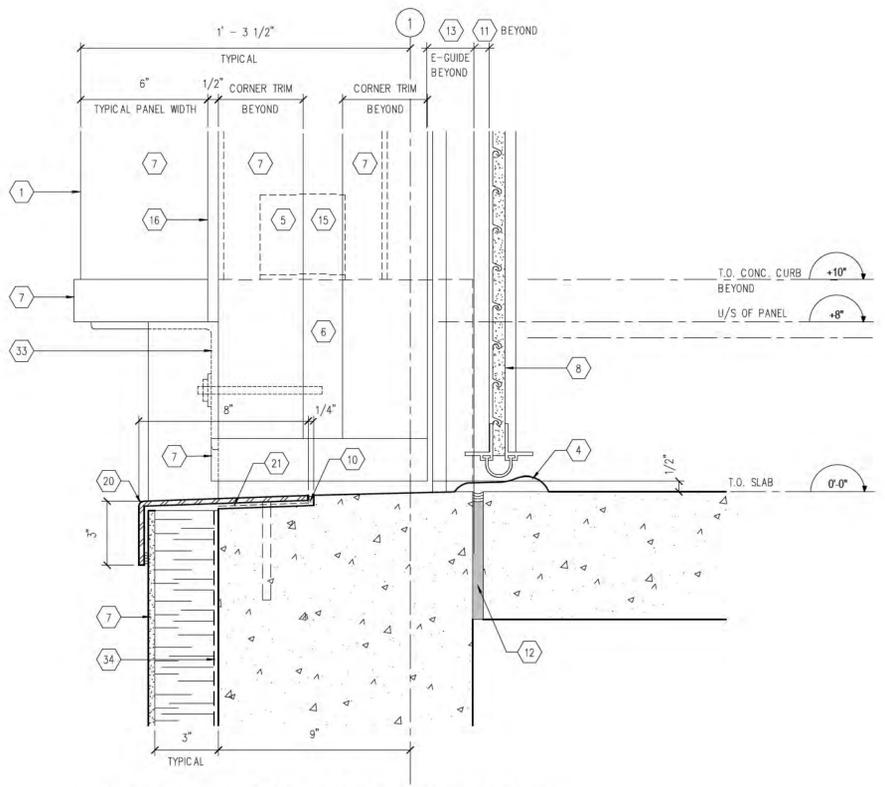
A-302

KEY NOTES:

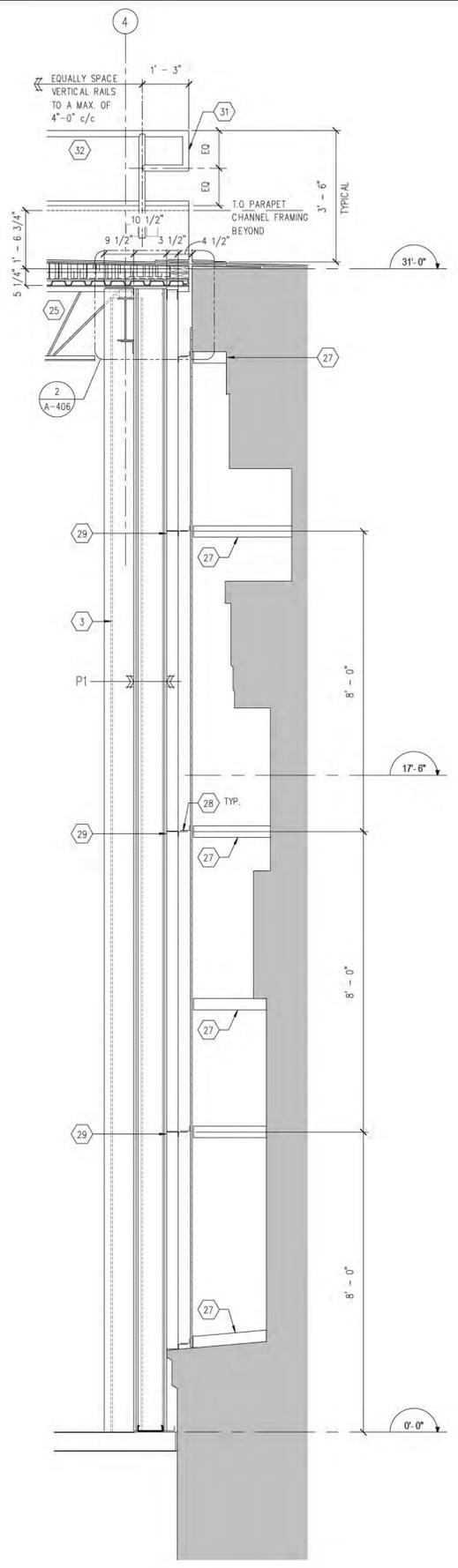
- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 STRUCTURAL GIRT, REFER TO STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 3 STEEL COLUMN BEYOND, REFER TO STRUCTURAL DWG'S FOR SIZE, BASE PLATES & ANCHOR BOLTS.
- 4 SOLID RUBBER THRESHOLD FULLY BONDED TO CONC. SURFACE.
- 5 LINES OF VERTICAL LEG OF CLIP ANGLE BEHIND INSULATED PANEL RETURN, TYPICAL AT BOTH SIDES OF JAMB.
- 6 INSULATED PANEL RETURNS AT JAMB BEYOND.
- 7 ENSURE INSULATED WALL PANELS ARE C/W BASE TRIM CLOSURES, END CLOSURES, INTERIOR & EXTERIOR CORNER CLOSURES & ANY OTHER ANCILLARY CLADDING COMPONENTS NECESSARY TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 8 2 HOUR FIRE RATED POWER OPERATED INSULATED COILING OVERHEAD DOOR C/W MOUNTING PLATES, CONTINUOUS WEATHERSTRIPPING & BOTTOM BULB SEAL, 3" GUIDE TRACKS & PRE-FINISHED HOOD ENCLOSURE.
- 9 CONTINUOUS PRE-FINISHED ALUM. FLASHING C/W 1/2" DRIP EDGE TYPICAL ALONG ENTIRE LENGTH OF OPENINGS AT EACH DOOR LOCATION.
- 10 CONTINUOUS EXTERIOR GRADE SEALANT, TYPICAL ALONG ENTIRE LENGTH OF DOOR OPENING.
- 11 CONTINUOUS WEATHER-STRIPPING BEYOND, TYPICAL ALONG THE ENTIRE PERIMETER OF COILING DOOR.
- 12 CONTINUOUS ISOLATION JOINT, TYPICAL ALONG ENTIRE EDGE OF SLAB. COORDINATE w/ STRUCTURAL DWG'S JOINT TYPES & THICKNESS.
- 13 E-TYPE ASSEMBLY GUIDES, TYPICAL EACH SIDE OF DOOR OPENING. REFER TO COILING DOOR MANUFACTURER'S SHOP DWG'S FOR ANGLE SIZES, TOLERANCES & OFFSETS.
- 14 4" x 6" x 3/8" GALVANIZED SUPPORT ANGLE C/W BOLTED CONNECTIONS. TYPICAL EACH SIDE OF DOOR OPENING.
- 15 4" x 4" x 1/4" GALVANIZED CLIP ANGLE C/W BOLTED CONNECTIONS, NEOPRENE SILL GASKET SANDWICHED BETWEEN CONC. & ANGLES w/ 3/8" ANCHOR BOLTS. TYPICAL AT EACH SIDE OF DOOR OPENINGS ALONG PERIMETER OF INSULATED METAL PANELS. COORDINATE w/ STRUCTURAL DWG'S FOR EMBEDMENT LENGTH.
- 16 COMPRESSED MINERAL FIBER JOINTS C/W FIRESTOP SILICONE SEALANT. TYPICAL AT PANEL TO PANEL CONNECTIONS UNLESS NOTED OTHERWISE.
- 17 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT. TYPICAL UNLESS NOTED OTHERWISE.
- 18 MOUNTING PLATES, SIZED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF NOVA SCOTIA. ATTACH PLATES TO STRUCTURAL GIRTS & SPACE AS PER COILING DOOR MANUFACTURER'S SHOP DRAWINGS.
- 19 CONTINUOUS SEALANT, TYPICAL ALONG ENTIRE PERIMETER OF INSULATED WALL PANELS.
- 20 1/4" THK. BENT STAINLESS STEEL CHECKER PLATE C/W 3/8" Ø EMBEDDED RODS SPACED AT A MAX. OF 24" c/c WITH EMBED RODS LENGTHS AT A MIN. DEPTH OF 4". ENSURE TOP OF CHECKER PLATE IS FLUSH w/ TOP OF SURROUNDING CONCRETE.
- 21 ISOLATION PROTECTION, TYPICAL BETWEEN DISSIMILAR METALS, CONC. & CEMENTITIOUS BUILDING MATERIALS.
- 22 OUTSIDE FACE OF CONC. FOUNDATION WALL BELOW.
- 23 CEMENTITIOUS BOARD INSULATION C/W NOMINAL 3" RIGID INSULATION & 1" THK. CONCRETE FACED PANELS.
- 24 STEEL BEAM, REFER TO STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 25 OWSJ BEYOND, REFER TO STRUCTURAL DWG'S FOR OWSJ DEPTH, SHOE DEPTH & OWSJ SPACING.
- 26 BOLLARD, REFER TO CIVIL DWG'S FOR TYPES, SIZES & DETAILS.
- 27 3 5/8" STEEL STUD FRAMING AT 16" c/c, C/W TRACK STUDS SECURED TO PERIMETER OF EXISTING MASONRY WALLS & PLYWOOD SHEATHING.
- 28 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0", TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION.
- 29 3 5/8" STEEL STUD FRAMING AT 16" c/c, C/W TOP & BOTTOM TRACK STUDS. SECURE TRACK STUDS THRU PLYWOOD SHEATHING & INTO VERTICAL LEGS OF ADJUSTABLE Z-GIRTS.
- 30 PRE-FINISHED ROOF SCREEN, REFER TO ROOF PLAN FOR EXTENT.
- 31 ALIGN EDGE GUARDRAIL RETURN w/ EDGE OF PARAPET.
- 32 REFER TO ROOF PLAN FOR EXTENTS OF GUARDRAILS ALONG ROOF EDGES.
- 33 6" x 6" x 3/8" GALVANIZED SUPPORT ANGLE C/W EMBEDDED ANCHORS. TYPICAL ALONG U/S OF INSULATED METAL PANELS. COORDINATE w/ STRUCTURAL DWG'S FOR EMBEDMENT LENGTH.
- 34 LINE OF CONTINUOUS DAMPROOFING, TYPICAL ALONG FACE OF NEW CONC. FOUNDATION WALLS.



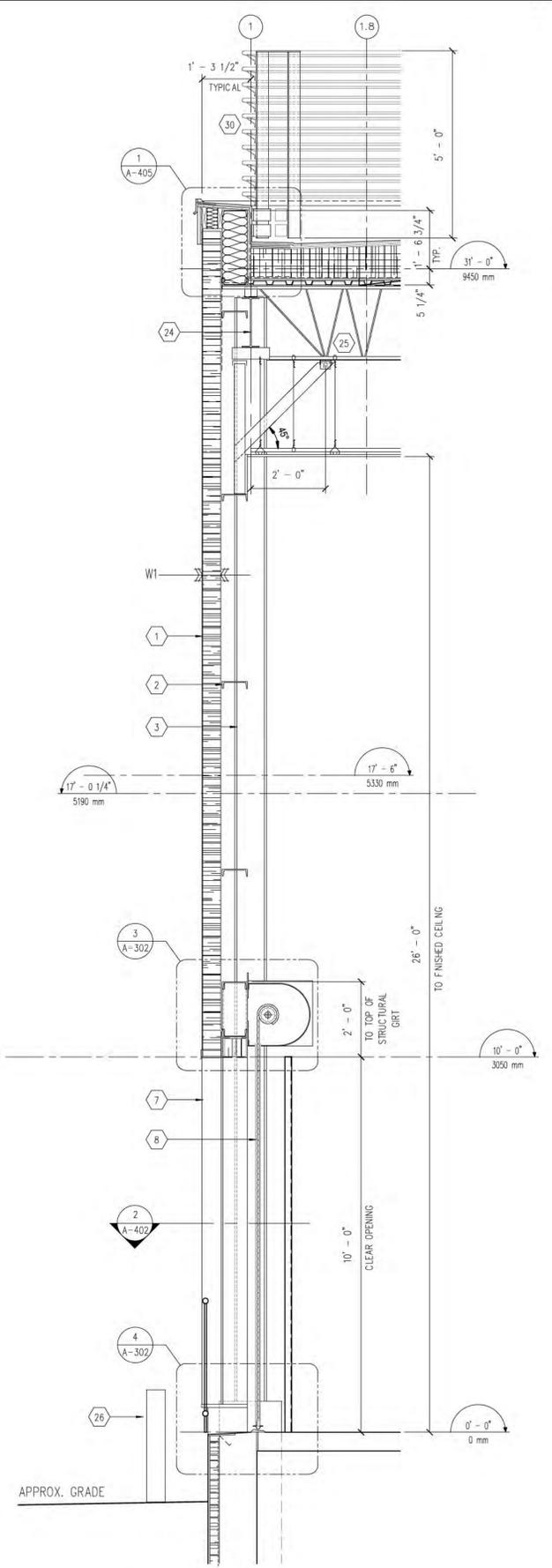
3 SECTION - AT HEAD OF OVERHEAD DOOR
SCALE: 3" = 1'-0"



4 SECTION - AT THRESHOLD OF OVERHEAD DOOR
SCALE: 3" = 1'-0"



2 WALL SECTION - AT P1 PARTITION
SCALE: 1/2" = 1'-0"



1 SECTION - AT COILING OVERHEAD DOOR
SCALE: 1/2" = 1'-0"

NOTES:

LEGEND:



CONSTRUCTION

NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT: DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

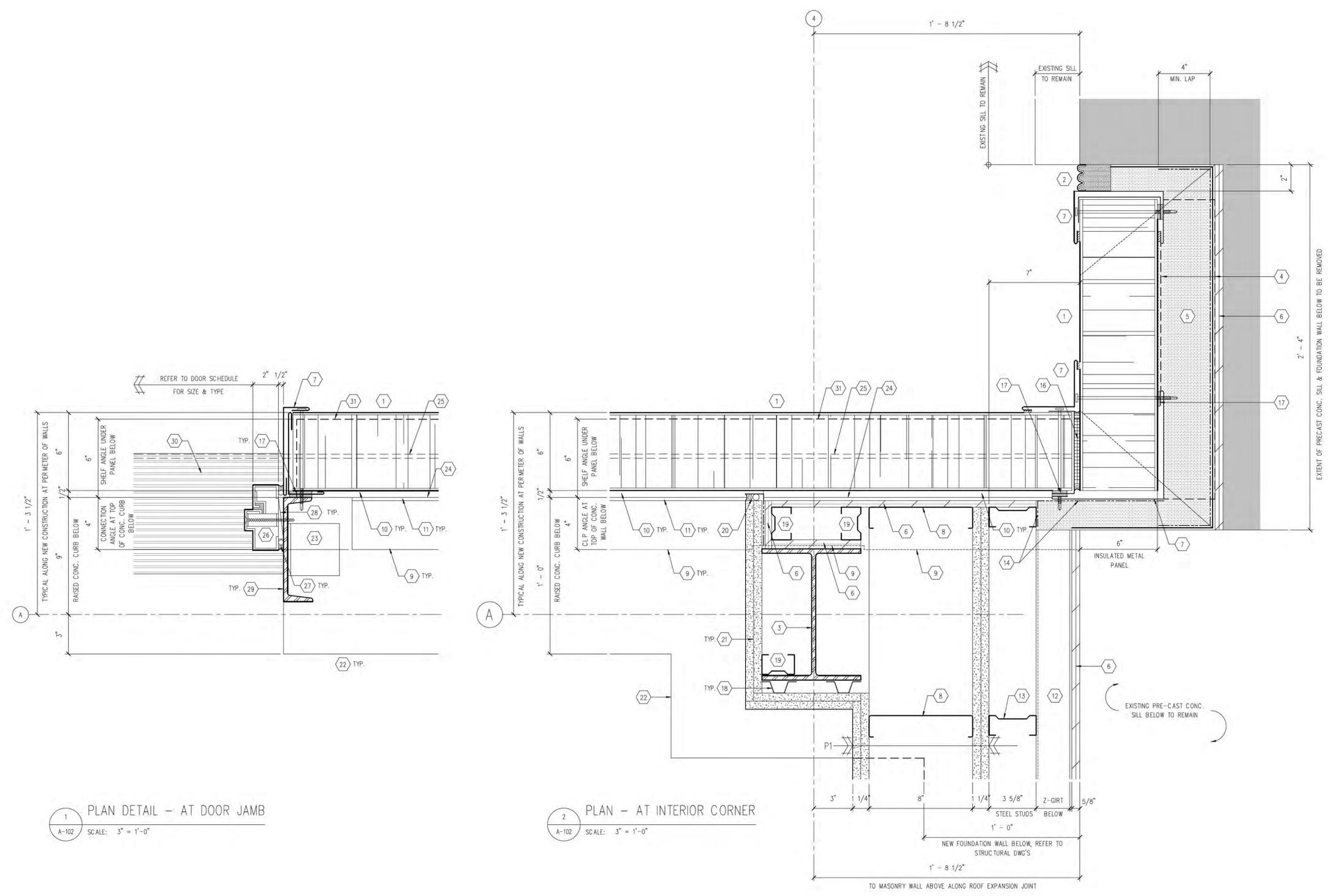
DRAWING TITLE: ARCHITECTURAL EXTERIOR PLAN DETAILS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3" = 1'-0"
DRAWN BY:	B.D.
DATE:	15/06/22

A-401

KEY NOTES:

- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 CONTINUOUS 2 HR. WATER TIGHT FIRE RATED EXPANSION JOINT. TYPICAL BETWEEN THE ENTIRE LENGTH OF EXISTING & NEW CONSTRUCTION ALONG WALL & ROOF ASSEMBLIES
- 3 STEEL COLUMN BEYOND, REFER TO STRUCTURAL DWG'S FOR SIZE, BASE PLATES & ANCHOR BOLTS.
- 4 GALVANIZED CLIP ANGLE AT BASE OF INSULATED METAL PANEL BELOW.
- 5 TOP OF SELF ADHERING FLEXIBLE THRU-WALL FLASHING, ABOVE SLOPED INSULATION, C/W VERTICAL LEGS OF MEMBRANE EXTENDING UPWARD FOR A MIN. OF 8", TYPICAL ALONG REMAINING PERIMETER OF EXISTING EXTERIOR CONDITIONS.
- 6 5/8" EXTERIOR GRADE PLYWOOD SHEATHING, REFER TO WALL SECTION 2/A-302 FOR EXTENT.
- 7 ENSURE INSULATED WALL PANELS ARE C/W BASE TRIM CLOSURES, END CLOSURES, INTERIOR & EXTERIOR CORNER CLOSURES & ANY OTHER ANCILLARY CLADDING COMPONENTS NECESSARY TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 8 8" COLD ROLLED STRUCTURAL STEEL STUDS, TYPICAL AT P1 ASSEMBLY.
- 9 LINE OF HORIZONTAL LEG OF GALVANIZED CLIP ANGLE BELOW. COPE BASE CONNECTION ANGLES AROUND PERIMETERS OF STEEL COLUMNS TO AVOID ANY ON-SITE CONFLICTS.
- 10 TOP OF CONTINUOUS SEALANT BETWEEN INSULATED PANELS & VERTICAL LEGS OF GALVANIZED CLIP ANGLES BELOW. TYPICAL ALONG ENTIRE PERIMETER OF INSULATED WALL PANELS.
- 11 VERTICAL LEG OF GALVANIZED CONNECTION CLIP ANGLES BELOW. TYPICAL ALONG ENTIRE PERIMETER OF INSULATED WALL PANELS.
- 12 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0" c/c, TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION, REFER TO WALL SECTION 2/A-302 FOR EXTENT.
- 13 3/8" STEEL STUD FRAMING AT 16" c/c, C/W TOP & BOTTOM TRACK STUDS. SECURE TRACK STUDS THRU PLYWOOD SHEATHING & INTO VERTICAL LEGS OF ADJUSTABLE Z-GIRTS.
- 14 LAP FLAPS OF SELF ADHERING AIR BARRIER TO INSULATED PANEL CLOSURES & SEAL OPPOSITE END TO ADJACENT STEEL STUD.
- 15 LAP FLAPS OF SELF ADHERING AIR BARRIER TO PLYWOOD & SEAL OPPOSITE ENDS TO INSULATED PANEL USE CAUTION WHEN REMOVING ANY EXCESS MATERIALS, FROM FLAPS, TO AVOID ANY DAMAGES INSULATED PANELS. ENSURE FLAPS ARE CONCEALED BEHIND CONTINUOUS FIRESTOP JOINT SEALANT.
- 16 COMPRESSED MINERAL FIBER JOINTS C/W FIRESTOP SILICONE SEALANT. TYPICAL AT PANEL TO PANEL CONNECTIONS UNLESS NOTED OTHERWISE.
- 17 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT. TYPICAL UNLESS NOTED OTHERWISE.
- 18 7/8" CONTINUOUS METAL FURRING CHANNELS, TYPICAL AT COLUMN ENCASEMENTS.
- 19 2 1/2" CONTINUOUS STEEL STUDS, TYPICAL AT COLUMNS TO ENSURE SECUREMENT OF 2 HOUR FIRE RATED TYPE "X" GYPSUM BOARD & PLYWOOD SHEATHING.
- 20 CONTINUOUS FIRESTOP JOINT SEALANT & BACKER ROD.
- 21 2 LAYERS OF 5/8" GYPSUM BD. TYPE "X", TYPICAL ALONG PERIMETERS OF COLUMN ENCASEMENTS.
- 22 LINE OF RAISED CONCRETE CURB BELOW, COORDINATE w/ STRUCTURAL DWG'S FOR EXTENT, DETAILS, CURB HEIGHT & REINFORCING.
- 23 4" x 4" x 1/4" GALVANIZED CLIP ANGLE C/W BOLTED CONNECTIONS, NEOPRENE SILL GASKET SANDWICHED BETWEEN CONC. & ANGLES w/ 3/8" ANCHOR BOLTS. TYPICAL AT EACH SIDE OF DOOR OPENINGS ALONG PERIMETER OF INSULATED METAL PANELS. COORDINATE w/ STRUCTURAL DWG'S FOR EMBEDMENT LENGTH.
- 24 OUTSIDE FACE OF CONC. FOUNDATION WALL BELOW.
- 25 LINES OF CEMENTITIOUS BOARD INSULATION BELOW.
- 26 DOOR FRAMES C/W STEEL STUD ANCHORS & FASTENERS.
- 27 CONTINUOUS FIRESTOP JOINT SEALANT & BACKER RODS, TYPICAL ALONG ENTIRE PERIMETER MAN DOORS, BOTH SIDES OF FRAMES.
- 28 PLASTIC WEDGE SHIMS C/W EXPANDED SPRAY FOAM INSULATION BETWEEN SHIMS. EQUALLY SPACE SHIMS ALONG OF HEADS & JAMBS OF MAN DOOR OPENINGS, TYPICAL AT EACH DOOR.
- 29 STRUCTURAL GIRT, REFER TO STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 30 LOW PROFILE EXTRUDED ALUM. THRESHOLD BELOW, ALIGN EXTERIOR EDGE OF THRESHOLD w/ EDGE OF GALVANIZED SUPPORT ANGLE BELOW.
- 31 LINE OF 6" x 6" x 3/8" THK. GALVANIZED SUPPORT ANGLE AT U/S OF INSULATED METAL PANELS BELOW.



NOTES :

LEGEND:



CONSTRUCTION

NO.	REVISIONS	DD/MM/YY
1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21

PROJECT:
**DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER**

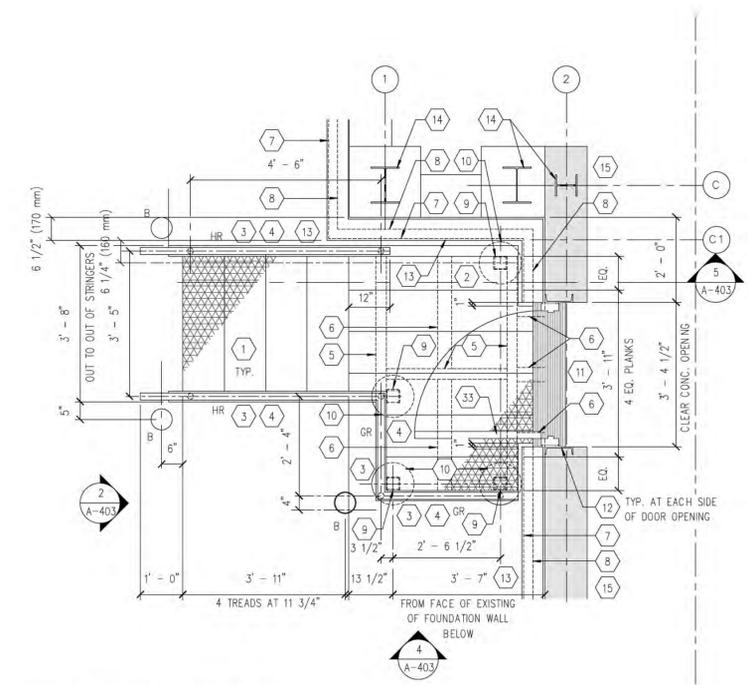
DRAWING TITLE:
**ARCHITECTURAL
STAIR # 1
PLAN, SECTIONS & DETAILS**

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	AS NOTED
DRAWN BY:	B.D.
DATE:	15/06/22

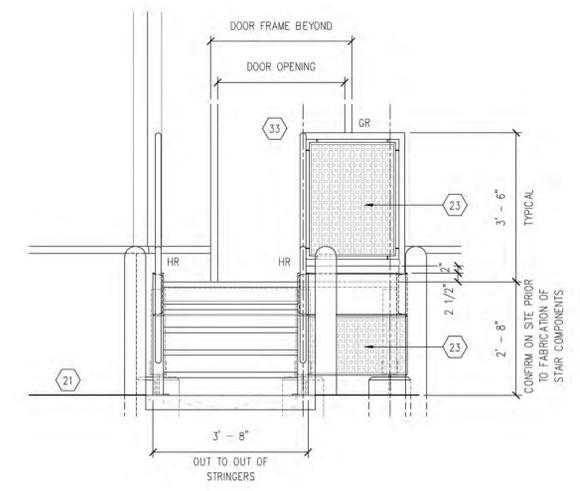
A-403

STAIR ASSEMBLY KEY NOTES:

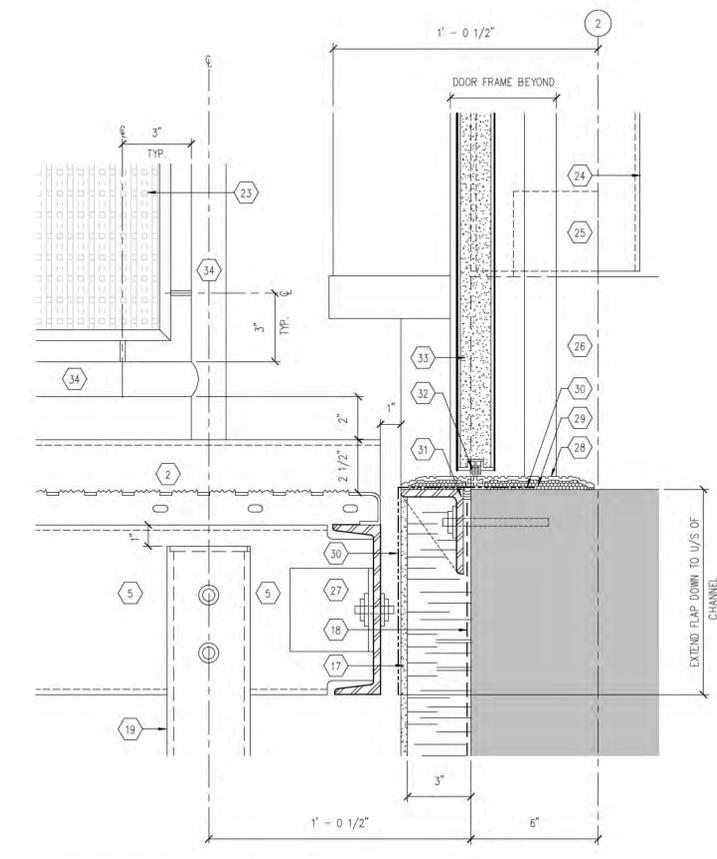
- 1 TREADS: 11 3/4" WIDE PRE-FABRICATED DIAMOND SHAPED SERRATED PUNCHED TREADS, BOLTED TO STRINGERS, C/W SERRATED PUNCHED PLANK GRATINGS AT LANDINGS.
- 2 LANDINGS: 11 3/4" WIDE PRE-FABRICATED DIAMOND SHAPED SERRATED PUNCHED PLANK GRATINGS w/ AN EQUAL / EQUAL CONDITION AT EACH SIDE OF LANDINGS.
- 3 CRANKED STRINGERS & PERIMETER FRAMING AT LANDING: ALUM. STRINGERS TO BE A MIN. SIZE EQUAL TO A C12 x 20.7, C/W PENETRATIONS TO SUIT INSTALLATION OF SERRATED PUNCHED TREADS & LANDING PLANKING.
- 4 HAND & GUARDRAILS: ALUM. RAILINGS TO BE 1 3/4" Ø w/ A MIN. HEIGHT OF 3'-6" FROM TOPS OF TREADS & LANDINGS. WELD VERTICAL RAILS CENTERED ON STRINGER TOES. GRIND SMOOTH ALL WELDS & TOUCH UP ALL AREAS DUE TO GRINDING.
- 5 SUPPORT CHANNELS: ALUM. CHANNELS TO BE A MIN. SIZE EQUAL TO A C8 x 11.5, TYPICAL AT LEADING EDGE OF LANDINGS.
- 6 SUPPORT ANGLES: ALUM. ANGLES TO BE 4" x 4" x 1/4" THK.
- 7 LINE OF 6" x 6" x 3/8" THK. GALVANIZED SUPPORT ANGLES, TYPICAL AT U/S OF INSULATED METAL PANELS ALONG PERIMETER OF NEW & EXISTING FOUNDATION WALLS.
- 8 LINE OF CEMENTITIOUS BOARD INSULATION BELOW.
- 9 COLUMN SUPPORTS: ALUM. HSS TO BE 4" x 4" x 1/4" THICK C/W ALUM. SADDLES SIZED TO SUIT, DRAINAGE WEEPS AT OPEN ENDS OF SADDLES & EMBEDDED RODS. ENSURE ISOLATION PROTECTION BETWEEN DISSIMILAR METALS, CONCRETE & CEMENTITIOUS BUILDING MATERIALS.
- 10 COORDINATE w/ STRUCTURAL DWG'S FOR CONC. FILLED SONO TUBES, REBAR, SADDLE ROD EMBEDMENT LENGTH & FOOTINGS.
- 11 EXTRUDED ALUM. THRESHOLD, ALIGN EXTERIOR EDGE OF THRESHOLD w/ EDGE OF 3" x 4" LLV x 1/4" THICK GALV. STEEL SUPPORT ANGLE BELOW. LENGTH OF SUPPORT ANGLE TO MATCH CLEAR CONC. OPENING AS DIMENSIONED ON 1/A-403.
- 12 COORDINATE w/ STRUCTURAL DWG'S FOR VERTICAL SUPPORT CHANNELS AT EACH DOOR LOCATION.
- 13 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 14 COORDINATE w/ STRUCTURAL DWG'S FOR STEEL COLUMNS & BASE PLATES.
- 15 TOP OF EXISTING FOUNDATION WALL BELOW.
- 16 ENSURE A MIN. OF 2-1/4" Ø WEEP HOLES PER SADDLE TO ALLOW FOR DRAINAGE OF ANY CONDENSATION BUILD-UP.
- 17 PRE-MANUFACTURED CONC. FACED INSULATED PANELS, EXTEND INSULATION DOWN TO TOP OF FOOTING & EXTEND CONC. FACED SHEATHING DOWN 24" FROM TOP OF GRADE.
- 18 CONTINUOUS DAMPPROOFING, TYPICAL ALONG ENTIRE PERIMETER OF POURED CONC. FOUNDATION WALLS.
- 19 4" x 4" x 1/4" THK. GALVANIZED HSS POST C/W EMBEDDED SADDLES, REFER TO STAIR PLAN FOR LOCATIONS.
- 20 4" x 4" x 1/4" THK. GALVANIZED SADDLE C/W 1/2" EMBEDDED DOWELS, TYPICAL AT EACH HSS POST. ENSURE ISOLATION PROTECTION IS APPLIED TO EACH DOWEL PRIOR TO INSERTION INTO CONC. FILLED SONO TUBES. REFER TO STRUCTURAL DWG'S FOR SIZE OF SONO TUBES & REBAR.
- 21 REFER TO CIVIL DWG'S FOR FINISHED GRADES ALONG PERIMETER OF BUILDING.
- 22 4" x 4" x 1/4" THK. GALVANIZED CLIP ANGLE, TYPICAL AT LANDING.
- 23 PRE-FINISHED PERFORATED METAL SCREEN C/W 1/2" U-SHAPED FRAMES w/ MITERED CORNERS. TYPICAL BETWEEN GUARDRAILS, HANDRAILS, LANDING & GRADE.
- 24 LINE OF VERTICAL CHANNEL SUPPORT AT JAMB BEYOND. REFER TO STRUCTURAL DWG'S FOR CHANNEL SIZES.
- 25 4" x 4" x 1/4" GALVANIZED CLIP ANGLE BEYOND C/W BOLTED CONNECTIONS, NEOPRENE SILL GASKET SANDWICHED BETWEEN CONC. & ANGLES w/ 3/8" Ø ANCHOR BOLTS. TYPICAL AT EACH SIDE OF DOOR OPENINGS ALONG PERIMETER OF INSULATED METAL PANELS. COORDINATE w/ STRUCTURAL DWG'S FOR EMBEDMENT LENGTH.
- 26 EXISTING CONCRETE CURB AT CURB CUT BEYOND.
- 27 4" x 4" x 1/4" THK. GALVANIZED CLIP ANGLE, TYPICAL AT LANDING.
- 28 THERMALLY BROKEN EXTRUDED LOW PROFILE ALUM. THRESHOLD C/W CONTINUOUS AIR SEAL GASKET. FULLY ADHERED GASKET TO CONC. SLAB, TYPICAL ALONG ENTIRE LENGTHS OF MAN DOOR OPENINGS.
- 29 FULLY ADHERED CONTINUOUS AIR SEAL GASKET.
- 30 FULLY ADHERED FLAP OF SELF ADHERING AIR BARRIER TO TOP OF SLAB & SEAL OPPOSITE ENDS DOWN AS INDICATED.
- 31 CONTINUOUS 3" x 4" LLV x 1/4" THK. GALVANIZED STEEL SUPPORT ANGLES C/W EMBEDDED THREADED EPOXY ANCHORS & 1/4" THK. GUSSET PLATES.
- 32 CONTINUOUS DOOR SWEEP, TYPICAL AT EACH MAN DOOR.
- 33 PRE-FINISHED INSULATED DOOR, COORDINATE w/ DOOR, FRAME & HARDWARE SCHEDULE FOR SIZES.
- 34 1 3/4" Ø GALVANIZED VERTICAL PIPE RAILS C/W 2-1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS, 3/8" Ø THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 35 LINE OF EXISTING FOUNDATION WALL.



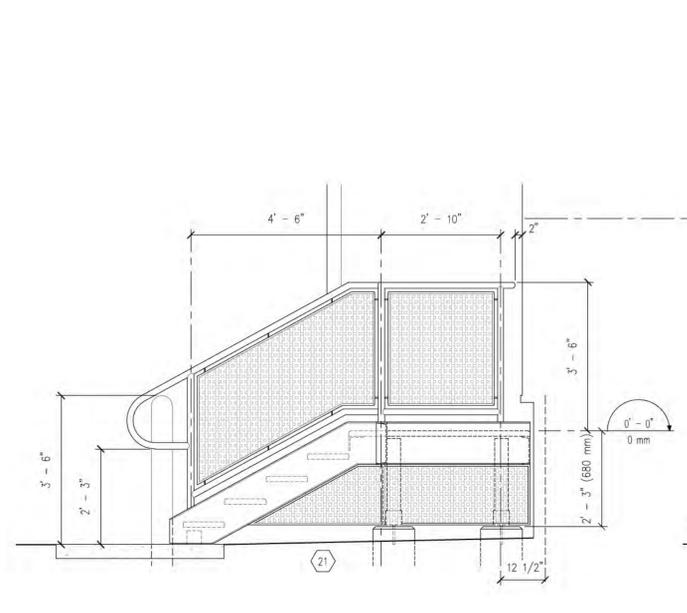
1 PLAN - AT STAIR #1
A-102 SCALE: 1/2" = 1'-0"



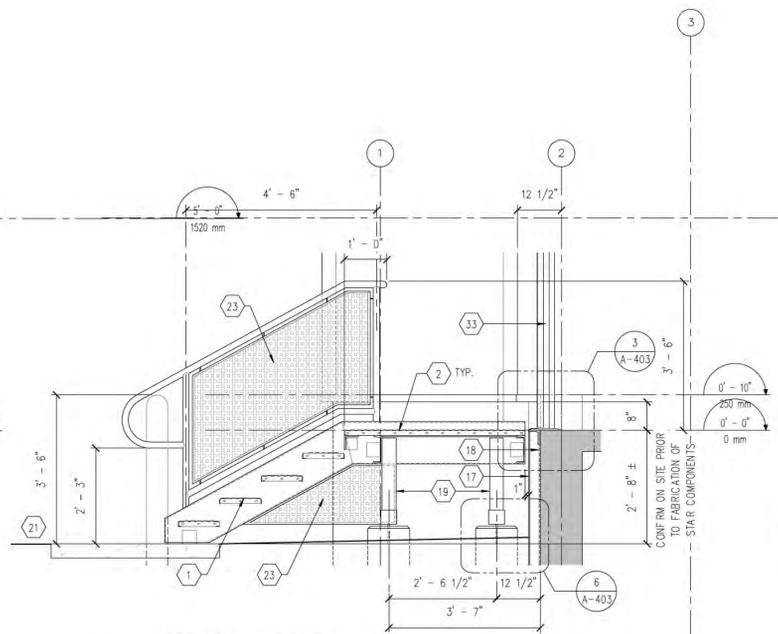
2 FRONT ELEVATION - STAIR #1
A-403 SCALE: 1/2" = 1'-0"



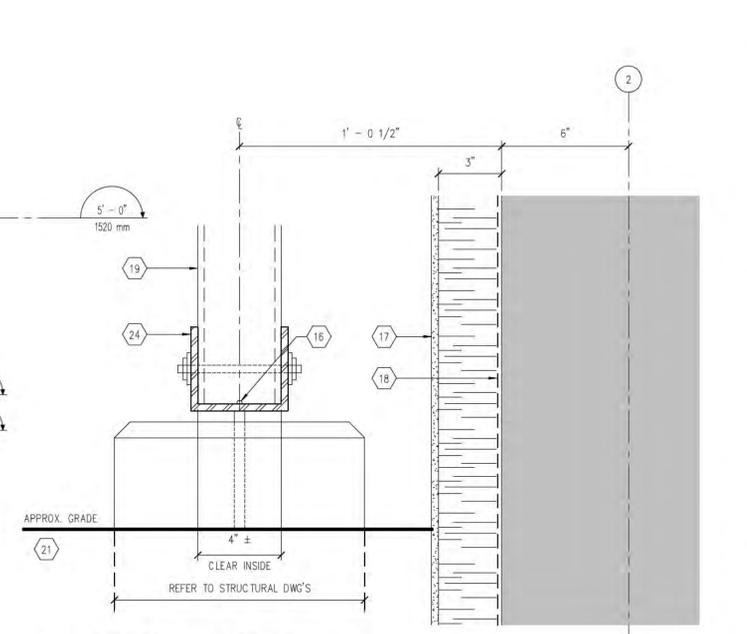
3 SECTION - AT LANDING
A-403 SCALE: 3" = 1'-0"



4 SIDE ELEVATION - STAIR #1
A-403 SCALE: 1/2" = 1'-0"



5 SECTION - STAIR #1
A-403 SCALE: 1/2" = 1'-0"



6 SECTION - AT GRADE
A-403 SCALE: 3" = 1'-0"

NOTES :

LEGEND:

CONSTRUCTION

1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21
NO.	REVISIONS	DD/MM/YY

PROJECT :
**DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER**

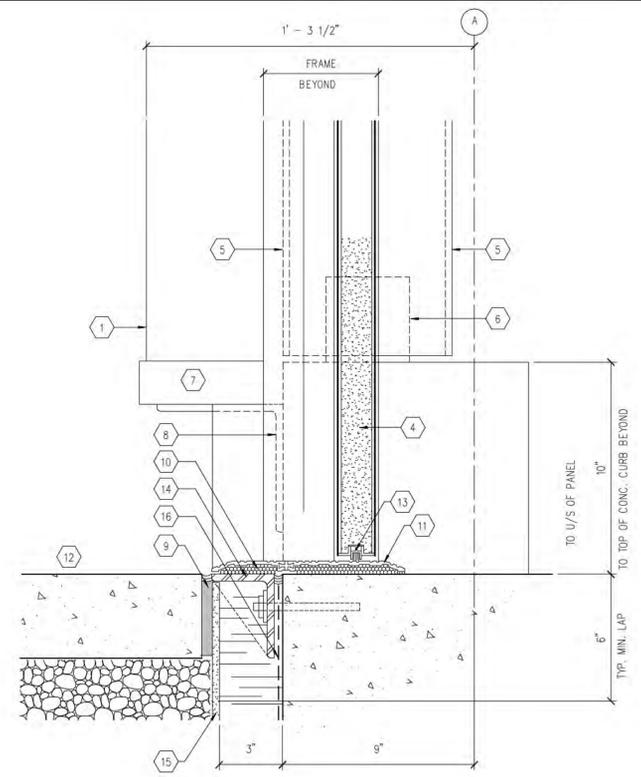
DRAWING TITLE :
**ARCHITECTURAL
SECTION DETAILS**

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3"=1'-0"
DRAWN BY:	B.D.
DATE:	15/06/22

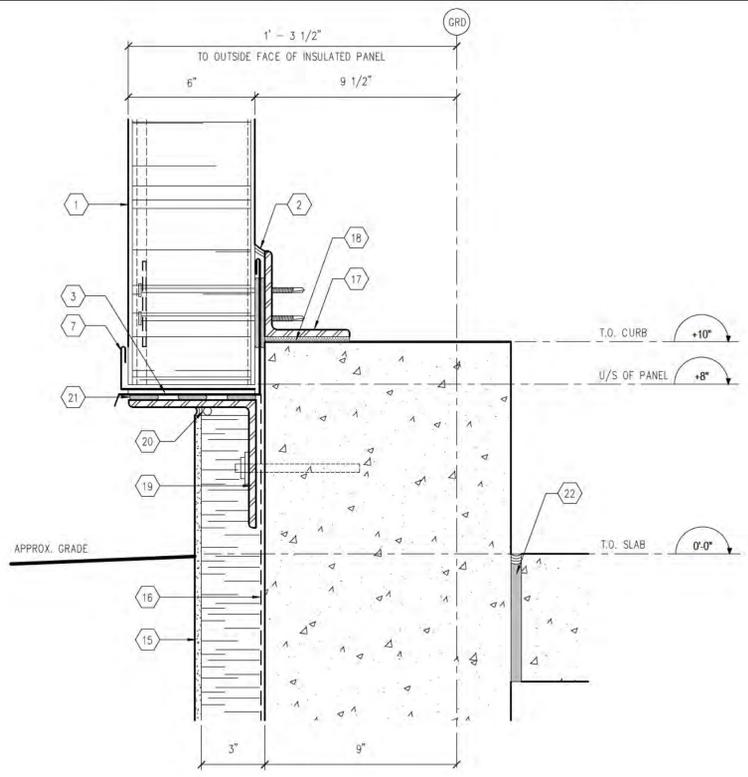
A-404

KEY NOTES:

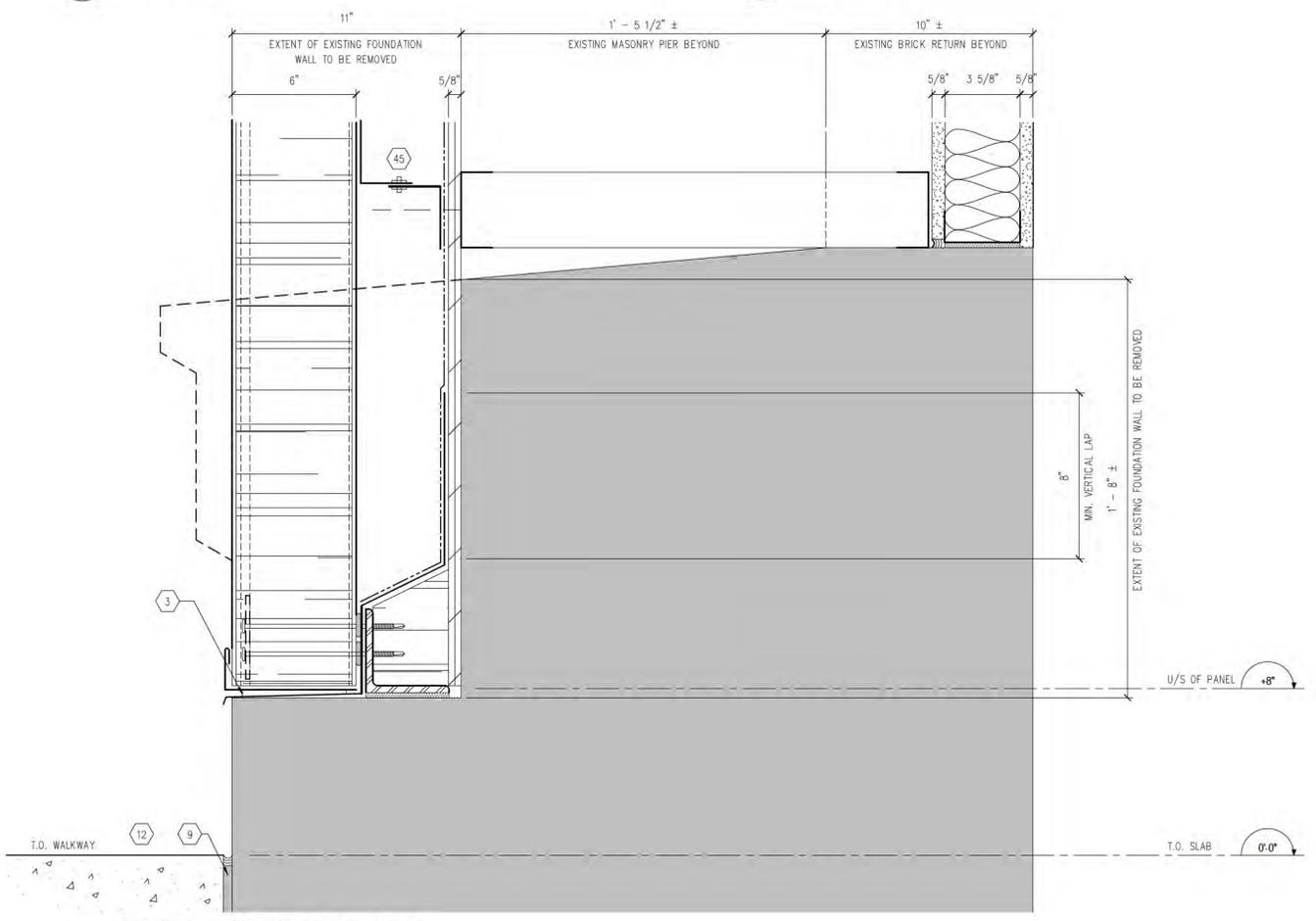
- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS c/w MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 TOP OF CONTINUOUS SEALANT BETWEEN INSULATED PANELS & VERTICAL LEGS OF GALVANIZED CONNECTION CLIP ANGLES BELOW. TYPICAL ALONG ENTIRE PERIMETER OF INSULATED WALL PANELS.
- 3 6" x 6" x 1/4" THK. STAINLESS STEEL SHIMS, ENSURE A MIN. OF TWO SHIMS PER PANEL TO ALLOW FOR DRAINAGE. TYPICAL AT U/S OF INSULATED PANELS ALONG ENTIRE PERIMETER OF NEW & EXIST. FOUNDATION WALLS.
- 4 PRE-FINISHED INSULATED METAL DOOR c/w THERMALLY BROKEN PRESSED STEEL DOOR FRAMES & LOW PROFILE THERMALLY BROKEN EXTRUDED ALUM. THRESHOLD.
- 5 VERTICAL CHANNEL SUPPORT BEYOND, REFER TO STRUCTURAL DWG'S FOR CHANNEL SIZES.
- 6 LINES OF VERTICAL LEG OF CLIP ANGLE BEHIND INSULATED PANEL RETURN, TYPICAL AT BOTH SIDES OF JAMB, ENSURE 4" x 4" x 1/4" GALVANIZED CLIP ANGLES ARE c/w BOLTED CONNECTIONS, NEOPRENE SILL GASKET SANDWICHED BETWEEN CONC. & ANGLES WITH 3/8" Ø ANCHOR BOLTS. COORDINATE w/ STRUCTURAL DWG'S FOR EMBEDMENT LENGTH.
- 7 2 PIECE BASE CLOSURE, TYPICAL ALONG PERIMETER OF PANELS. ENSURE PANELS ARE c/w BASE TRIM CLOSURES, END CLOSURES, INTERIOR & EXTERIOR CORNER CLOSURES NECESSARY TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE INFILTRATION & CONDENSATION.
- 8 6" x 6" x 3/8" THK. GALVANIZED SUPPORT ANGLE BEYOND. TYPICAL ALONG U/S OF INSULATED METAL PANELS.
- 9 CONTINUOUS ISOLATION JOINT c/w SEALANT, TYPICAL BETWEEN WALKWAYS & CEMENTITIOUS PROTECTION BOARD.
- 10 CONTINUOUS AIR SEAL GASKET, FULLY ADHERED GASKET TO CONCRETE SLAB. TYPICAL ALONG ENTIRE LENGTH OF DOOR OPENING.
- 11 THERMALLY BROKEN EXTRUDED LOW PROFILE ALUM. THRESHOLD c/w CONTINUOUS AIR SEAL GASKET.
- 12 REINFORCED CONC. WALKWAY, COORDINATE w/ CIVIL DWG'S FOR EXTENT, THICKNESS, SLOPES & FINISHED GRADES ALONG BUILDING.
- 13 CONTINUOUS DOOR SWEEP, TYPICAL AT EACH MAN DOOR.
- 14 CONTINUOUS 3" x 4" LLV x 1/4" THK. GALVANIZED STEEL SUPPORT ANGLES c/w EMBEDDED THREADED EPOXY ANCHORS & 1/4" THK. GUSSET PLATES.
- 15 PRE-MANUFACTURED CONCRETE FACED INSULATED PANELS. EXTEND INSULATION DOWN TO TOP OF FOOTING & EXTEND CONC. FACED SHEATHING DOWN 24" FROM TOP OF GRADE.
- 16 LINE OF CONTINUOUS DAMPPROOFING, TYPICAL ALONG FACE OF NEW CONCRETE FOUNDATION WALLS.
- 17 4" x 4" x 1/4" THK. GALVANIZED CONNECTION CLIP ANGLES c/w 3/8" Ø ANCHOR BOLTS AT 24" c/c w/ 6" EMBEDMENT. TYPICAL ALONG ENTIRE PERIMETER OF INSULATED WALL PANELS.
- 18 CONTINUOUS NEOPRENE SILL GASKET SANDWICHED BETWEEN TOP OF CONCRETE & U/S OF PERIMETER CLIP ANGLES.
- 19 6" x 6" x 3/8" THK. GALVANIZED SUPPORT ANGLE c/w 3/8" Ø ANCHOR BOLTS AT 18" c/c w/ 6" EMBEDMENT, TYPICAL AT U/S OF INSULATED METAL PANELS.
- 20 CONTINUOUS EXTERIOR SEALANT & FOAM BACKER ROD.
- 21 CONTINUOUS MASTIC SEALANT, TYPICAL ALONG ENTIRE OF SUPPORT ANGLES.
- 22 CONTINUOUS ISOLATION JOINT c/w SEALANT, TYPICAL EDGE OF SLAB & FOUNDATION WALLS.
- 23 EDGE DRIP BEYOND.



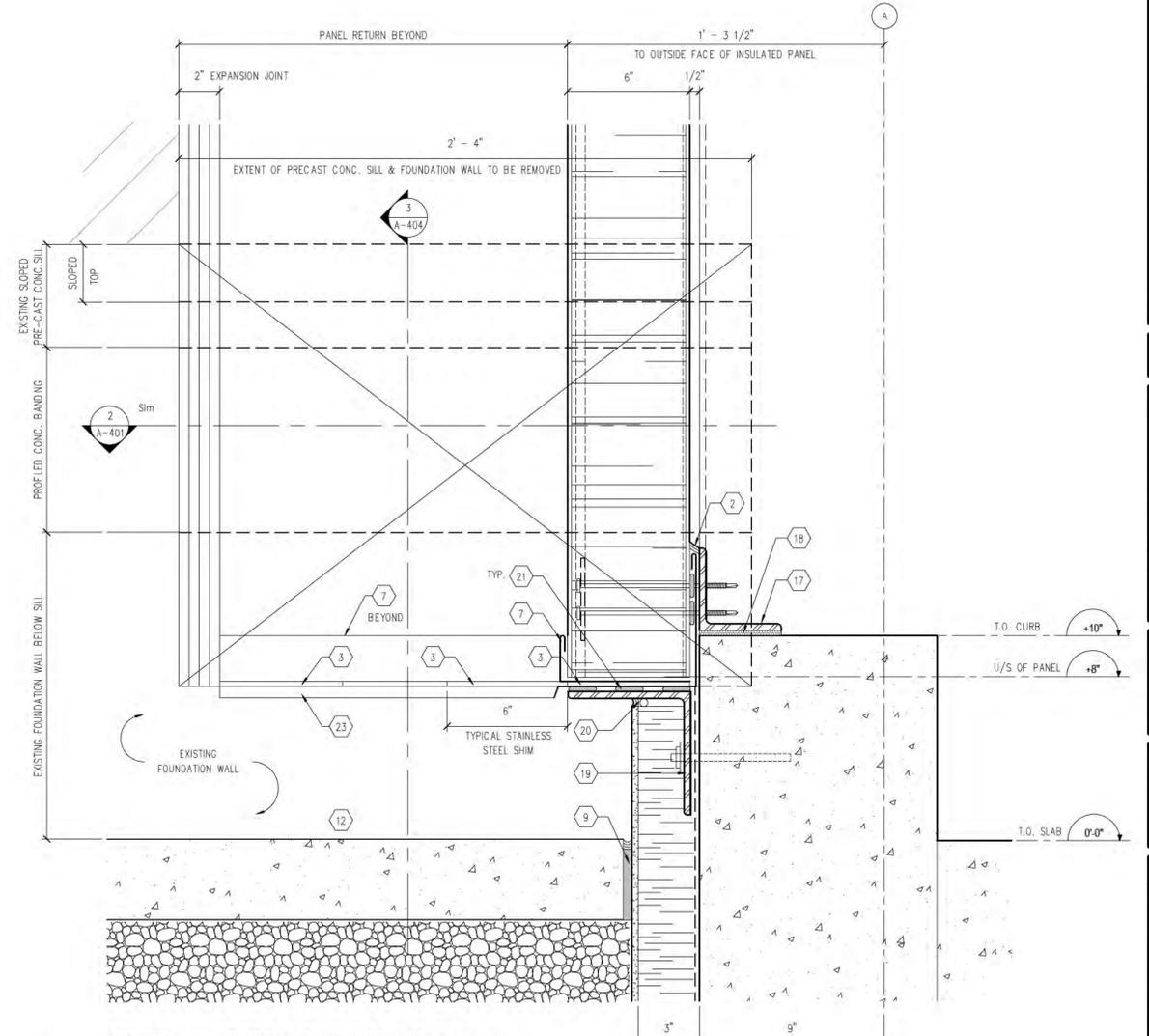
1 SECTION - AT THRESHOLD
A-102 SCALE: 3" = 1'-0"



2 SECTION - AT TOP OF CONC. WALL
A-102 SCALE: 3" = 1'-0"



3 SECTION - AT EXPANSION JOINT
A-404 SCALE: 3" = 1'-0"



4 SECTION - AT TOP OF NEW FOUNDATION WALL
A-102 SCALE: 3" = 1'-0"

ASSEMBLIES SCHEDULE:

ROOF ASSEMBLY: R1 (FULLY ADHERED SYSTEM)

FULLY ADHERED 2 PLY MODIFIED BITUMINOUS ROOFING SYSTEM C/W BASE SHEETS, NON-WOVEN REINFORCED MEMBRANES, CAP SHEETS, BONDING ADHESIVES & ANY OTHER ANCILLARY ROOFING COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE INFILTRATIONS & CONDENSATION.

1/4" THK. GYPSUM BASED PROTECTION BOARD
TAPERED RIGID INSULATION AT MAIN ROOF AREAS, CRICKETS & BACK SLOPES C/W A MIN. SLOPE OF 2%. ENSURE LOW POINTS, ADJACENT TO ROOF EXPANSION JOINT, ARE AT A MIN. OF 4" W/ HIGH POINTS, ALONG RAISED PARAPETS, ARE AT A MAX. OF 10"±

CONTINUOUS SELF ADHERING VAPOUR RETARDER, TYPICAL ALONG ENTIRE SURFACE OF DECK SHEATHING. CONTRACTOR TO INSPECT ENTIRE SURFACE FOR ANY PERFORATIONS CAUSED DURING CONSTRUCTION. PATCH & REPAIR CONDITIONS PRIOR TO INSTALLATION OF TAPERED INSULATION

1/2" THK. GYPSUM BASED DECK SHEATHING

STEEL DECKING, REFER TO STRUCTURAL DWG'S FOR PROFILE DEPTH, DECK CLOSURES & FRAMING FOR ROOF PENETRATIONS

STEEL ROOF STRUCTURE, REFER TO STRUCTURAL DWG'S FOR BEAM SIZES, JOIST DEPTH, JOIST SPACING & SHOE DEPTH

CURB ASSEMBLY: CB1

CARRY ROOFING MEMBRANES UP CURBS, REVERSE LAPPING OF ROOFING IS NOT PERMITTED
1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

2" x 6" PRESSURE TREATED WOOD FRAMING AT 16" c/c, C/W TOP & BOTTOM PLATES. BOTTOM PLATES C/W 3/8"Ø THREADED THRU-BOLT CONNECTORS, NUTS, WASHERS & HOOKED ENDS.

CONTINUOUS VAPOUR RETARDER C/W TAPE SEALANT ALONG ENDS, JOINTS & LAPS. SEAL ENDS TO TOP PLATES & SEAL OPPOSITE ENDS TO ROOF VAPOUR RETARDER.

1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

ROOF ASSEMBLY KEY NOTES:

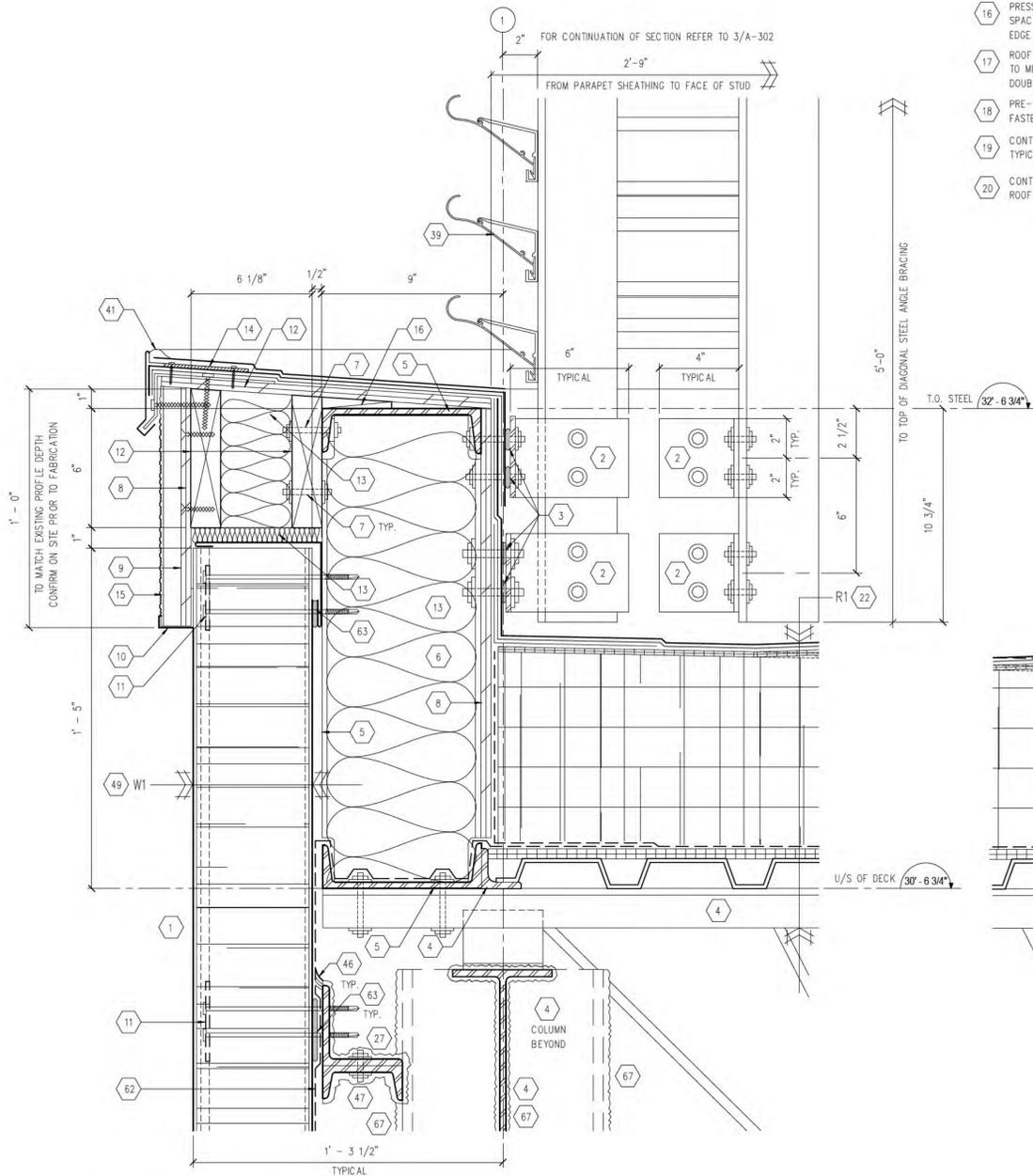
- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 4" x 6" x 4" x 1/2" THK. GALVANIZED CUP ANGLES C/W 3/8"Ø GALVANIZED THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS. TYPICAL AT EACH VERTICAL SUPPORT MEMBER ALONG THE ENTIRE LENGTH OF THE ROOF SCREEN & GUARDRAILS.
- 3 LIQUID ACRYLIC MEMBRANE FLASHING SANDWICHED BETWEEN VERTICAL FACE OF ROOFING & GALVANIZED CUP ANGLE, TYPICAL AT EACH THRU-BOLT LOCATION.
- 4 TOP FLANGE OF BEAM, COORDINATE w/ STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 5 C8 x 11.5 GALVANIZED PARAPET FRAMING AT 24" c/c, C/W CONTINUOUS TOP & BASE CHANNELS w/ 3/8"Ø GALVANIZED THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS. TYPICAL ALONG ENTIRE LENGTH OF ROOF SCREEN, REFER TO ROOF PLAN FOR EXTENT.
- 6 IN-FILL ENTIRE VOID SPACE w/ BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS. REFER TO ROOF PLAN FOR EXTENT.
- 7 3/8"Ø GALVANIZED THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. TYPICAL AT VARIOUS LOCATIONS THROUGHOUT UPPER & LOWER ROOF AREAS. SEAL WITH ACRYLIC LIQUID MEMBRANE
- 8 1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG SLOPED, HORIZONTAL & VERTICAL CONDITIONS.

- 9 DO NOT ATTACH BOTTOM OF PLYWOOD & J-TRIM TO FACE OF INSULATED PANELS TO ENSURE FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 10 CONTINUOUS STAINLESS STEEL J-TRIM, TYPICAL ALONG ENTIRE LENGTH OF FIBER REINFORCED PANELS.
- 11 CONCEALED PANEL CONNECTORS, COORDINATE w/ INSULATED PANEL MANUFACTURER'S SHOP DWG'S FOR LOCATIONS & PANEL COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT ASSEMBLY FREE FROM ANY MOISTURE INFILTRATION & CONDENSATION.
- 12 PRESSURE TREATED 2"x 8" LADDER FRAMING AT 16" c/c, C/W TAPERED TOPS & CONTINUOUS 2"x 8" PRESSURE TREATED NAILERS SIZED TO SUIT, TYPICAL ALONG PERIMETER OF ROOF AREAS.
- 13 IN-FILL ENTIRE VOID SPACE w/ NON-COMBUSTIBLE BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS.
- 14 PRE-FINISHED ALUM. GRAVEL STOP FLASHING C/W CONTINUOUS FLASHING CLEATS, FASTENERS & CONTINUOUS BONDING AGENTS SANDWICHED BETWEEN ROOFING & U/S OF GRAVEL STOP. ENSURE COMPONENTS ARE COMPATIBLE w/ ROOFING MANUFACTURER'S SYSTEM. PROFILE DEPTH OF FLASHING TO MATCH EXISTING ADJACENT FLASHING. CONFIRM FLASHING DEPTH ON SITE PRIOR TO FABRICATION.
- 15 1" THK. FIBER REINFORCED PANELS C/W PEBBLED FINISH. TYPICAL ALONG UPPER & LOWER ROOF EDGE CONDITIONS. PROFILE DEPTH & COLOUR TO MATCH EXISTING ROOF TOP BANDING. CONFIRM DEPTH ON SITE PRIOR TO FABRICATION.
- 16 PRESSURE TREATED WOOD SHIMS SIZED TO SUIT & EQUALLY SPACED. TYPICAL ALONG PERIMETERS OF PARAPETS & ROOF EDGE CONDITIONS.
- 17 ROOF TOP UNIT C/W INTEGRAL FLASHING ASSEMBLY, REFER TO MECH. DWG'S FOR UNIT TYPE & SIZE, ANCHOR RTU TO DOUBLE TOP PLATE.
- 18 PRE-FINISHED METAL FLASHING C/W FLASHING CLEATS & FASTENERS.
- 19 CONTINUOUS TERMINATION BAR C/W MASTIC SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 20 CONTINUOUS SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.

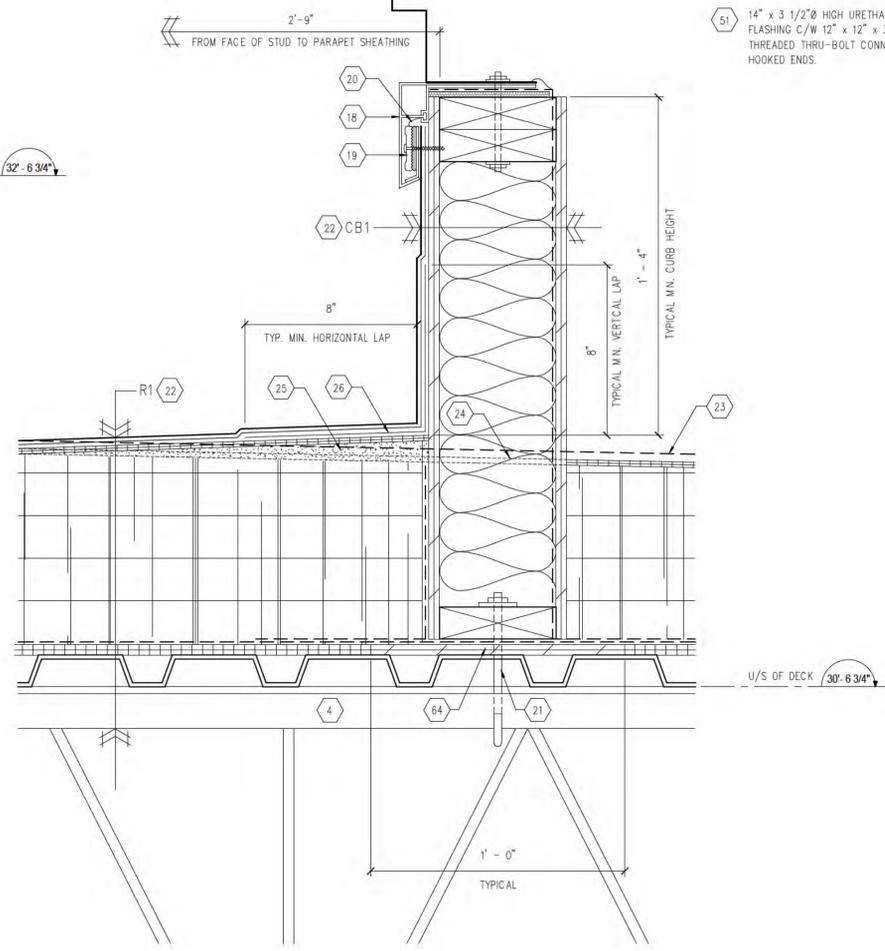
- 21 WELD ROOF SUPPORT PLATES TO TOP OF BEAMS.
- 22 REFER TO "ASSEMBLIES SCHEDULE", LOCATED ON THIS SHEET, FOR R1 & CB1 CONSTRUCTION ASSEMBLY NOTES.
- 23 TOP OF MODIFIED BITUMINOUS ROOFING BEYOND CRICKET.
- 24 LINE OF 1/4" THK. PROTECTION BOARD SHEATHING BEYOND CRICKET.
- 25 FORM CRICKETS & BACK SLOPES w/ TAPERED INSULATION. REFER TO ROOF PLAN FOR LOCATIONS.
- 26 FLAP OF NON-WOVEN REINFORCING MEMBRANE, TYPICAL AT EACH VERTICAL TRANSITIONS ALONG PARAPETS & CURBS.
- 27 CONTINUOUS 4" x 4" x 1/4" THK. SLOTTED CONNECTION ANGLE, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES.
- 28 CONTINUOUS EXPANSION JOINT COVER, FULLY BOND COVER TO ROOFING MEMBRANES, ENSURE INSTALLATION IS WEATHER TIGHT & FREE FROM ANY MOISTURE INFILTRATION. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 29 INTERMEDIATE MEMBRANE SHEET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 30 FULLY ADHERE ROOFING OVER EXISTING REMAINING MEMBRANES. RE-INSTATE EXISTING PEA GRAVEL TO ROOF EDGE AS INDICATED, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 31 8" COLD ROLLED STRUCTURAL STUDS AT 24" c/c, C/W TOP & BOTTOM COLD ROLLED TRACKS w/ TOP TRACKS C/W 3/8"Ø THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS.
- 32 RELOCATE 24" WIDE STRIP OF EXISTING PEA GRAVEL BALLAST FROM ROOF EDGE BACK. REMOVE PORTIONS OF EXISTING ROOFING MEMBRANES ALONG ENTIRE LENGTH OF NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: FASTENERS, SEALANTS, PROTECTION BOARDS, CAP FLASHINGS, GRAVEL STOP FLASHING & ANY OTHER CONCEALED COMPONENTS TO EXPOSE EXISTING EDGE OF ROOF.
- 33 CONTINUOUS 2 HOUR FIRE RATED EXPANSION JOINT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 34 IN-FILL ENTIRE VOID SPACES AT DEFLECTION TRACKS, DECK FLUTES & AT TOP TRACKS OF COLD ROLLED STUDS. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 35 REMOVED PORTION OF EXIST. FLASHING & PARAPET BANDING.

- 36 ONLY SECURE INNER LAYER OF GYPSUM BD. INTO LONG LEG DEFLECTION TRACKS, TYPICAL.
- 37 10" LH x 3 1/2" METAL DECK FLUTE CLOSURE SECURED TO U/S OF STEEL DECK ONLY. DO NOT ATTACH VERTICAL LEG OF CLOSURE TO GYPSUM BD. TO ALLOW FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 38 DIAGONAL STEEL ANGLE BRACING, SIZE & MATERIALS TO MATCH VERTICAL ANGLE SCREEN POSTS. TYPICAL AT EACH EXTERIOR CORNER.
- 39 PRE-FINISHED ROOF SCREEN C/W BLADES, BLADE BRACES VERTICAL SUPPORTS & ANY OTHER ANCILLARY SCREEN COMPONENTS TO ENSURE A COMPLETE INSTALLATION. REFER TO ROOF PLAN FOR EXTENT.
- 40 SET FLANGES OF ROOF COVER & EDGES OF BASE SHEETS IN COMPATIBLE CONTINUOUS BEDS OF BONDING ADHESIVE. TYPICAL AT BOTH EDGES OF COMPONENTS ALONG THE ENTIRE LENGTH OF NEW CONSTRUCTION.
- 41 CONTINUOUS EDGE SEALANT, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES & ROOF PENETRATIONS.
- 42 3-2" x 4" PRESSURE TREATED BUILT-UP WOOD CURB C/W COUNTERSUNK 3/8"Ø GALVANIZED THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS.
- 43 NOTCH NAILER TO ACCOMMODATE PERIMETER DECK CLOSURE.
- 44 REFER TO DWG A-102 FOR P1 CONSTRUCTION.
- 45 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0", TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION.
- 46 CONTINUOUS SEALANT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 47 STRUCTURAL GIRT, COORDINATE w/ STRUCTURAL FRAMING ELEVATIONS ON DWG S-201 FOR SIZE, SPACING & LOCATIONS.
- 48 CONTINUOUS CLOSED CELL AIR SEAL GASKET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 49 REFER TO DWG A-102 FOR WALL ASSEMBLY W1 & PARTITION ASSEMBLIES P1 & P2.
- 50 PRE-FINISHED ALUM. FLASHING C/W 1/2" DRIP EDGE. CARRY VERTICAL LEG OF FLASHING UP BETWEEN WALL PANEL & ROOF MEMBRANES. SANDWICH MASTIC SEAL BETWEEN FLASHING & WALL PANEL. SEAL AT TOP OF ANGLE w/ CONTINUOUS SEALANT AS INDICATED.
- 51 14" x 3 1/2" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING C/W 12" x 12" x 3/8" THK. BASE PLATE, 3/8"Ø THREADED THRU-BOLT CONNECTORS w/ NUTS, WASHERS & HOOKED ENDS.

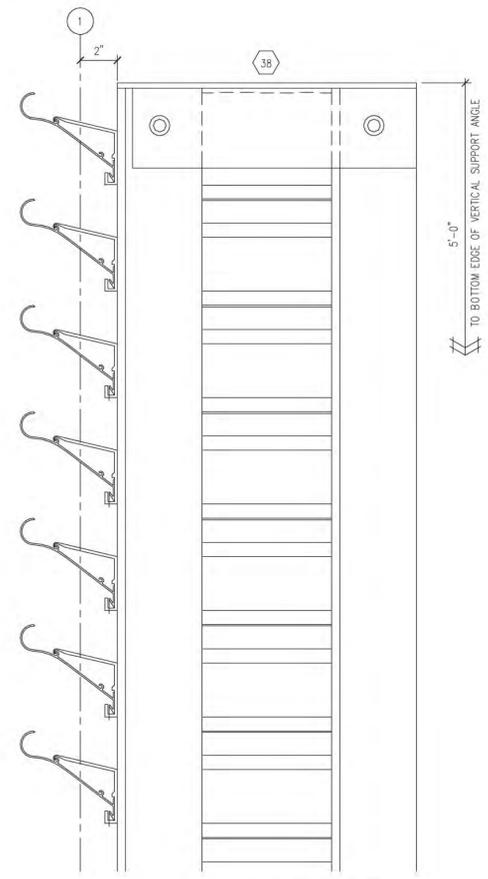
- 52 ENSURE WEEP HOLES AT BASE OF COLUMN SUPPORTS, 1 PER SIDE AT EACH COLUMN SUPPORT, TO ALLOW FOR CONDENSATION DRAINAGE.
- 53 4" Dp. PROFILE ALUM. FLASHING BY JACK STACK FLASHING MANUFACTURER, TYPICAL AT EACH HSS SUPPORT.
- 54 4" HSS COLUMN SUPPORTS C/W 12" x 12" x 3/8" THK. TOP PLATE w/ 3/8"Ø THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. REFER TO STAIR PLAN FOR HSS LOCATIONS & COORDINATE w/ STRUCTURAL DWG'S FOR ROOF FRAMING SUPPORTS
- 55 C12 x 20.7 GALVANIZED CHANNEL FRAMING, TYPICAL AT PERIMETER OF LANDING.
- 56 1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS C/W 3/8"Ø THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 57 1/4" THK. GALVANIZED CAP FLUSH w/ TOP OF STEEL, TYPICAL AT EACH HSS POST.
- 58 1 1/2" DIAMOND SHAPED PUNCHED SERRATED GRATINGS, TYPICAL AT LANDING & TREADS.
- 59 1 3/4" GALVANIZED VERTICAL PIPE RAILS C/W 2-1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS, 3/8"Ø THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 60 18" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING VENT STACK C/W REMOVABLE CAP & EPDM BASE SEAL BONDED TO METAL SLEEVE. SET FLANGES INTO COMPATIBLE BEDS OF BONDING ADHESIVE TO ENSURE A WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 61 GUARDRAILS: ALUM. RAILINGS TO BE 1 3/4"Ø w/ A MIN. HEIGHT OF 3'-6" FROM TOP OF ROOF MEMBRANE.
- 62 EXTEND VERTICAL FLAP OF VAPOUR RETARDER 6" PAST U/S OF BEAM FLANGE & SEAL TO INSULATED WALL PANEL.
- 63 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT.
- 64 1/2" THK. x 1'-0" CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD. TYPICAL AT WOOD CURBS ALONG UPPER & LOWER ROOF AREAS.
- 65 2" x 4" PRESSURE TREATED INSULATION STOP C/W 1/2" THK. CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD. TYPICAL AT INSULATION STOPS ALONG UPPER & LOWER ROOF AREAS.
- 66 3 5/8" STEEL STUD FRAMING AT 16" c/c, C/W PERIMETER TRACK STUDS ATTACHED TO SURROUNDING EXISTING MASONRY WALLS.
- 67 LINES OF APPLIED FIREPROOFING SYSTEM.



1 SECTION - AT RAISED PARAPET
SCALE: 3" = 1'-0"



2 SECTION - AT ROOF CURB
SCALE: 3" = 1'-0"



3 SECTION - AT TOP OF ROOF SCREEN
SCALE: 3" = 1'-0"



NOTES :

LEGEND:



CONSTRUCTION

1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21
NO.	REVISIONS	DD/MM/YY

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
ROOF DETAILS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3"=1'-0"
DRAWN BY:	B.D.
DATE:	15/06/22

A-405

ASSEMBLIES SCHEDULE:

ROOF ASSEMBLY: R1 (FULLY ADHERED SYSTEM)

FULLY ADHERED 2 PLY MODIFIED BITUMINOUS ROOFING SYSTEM C/W BASE SHEETS, NON-WOVEN REINFORCED MEMBRANES, CAP SHEETS, BONDING ADHESIVES & ANY OTHER ANCILLARY ROOFING COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE INFILTRATIONS & CONDENSATION.

1/4" THK. GYPSUM BASED PROTECTION BOARD

TAPERED RIGID INSULATION AT MAIN ROOF AREAS, CRICKETS & BACK SLOPES C/W A MIN. SLOPE OF 2%. ENSURE LOW POINTS, ADJACENT TO ROOF EXPANSION JOINT, ARE AT A MIN. OF 4" W/ HIGH POINTS, ALONG RAISED PARAPETS, ARE AT A MAX. OF 10"±

CONTINUOUS SELF ADHERING VAPOUR RETARDER, TYPICAL ALONG ENTIRE SURFACE OF DECK SHEATHING. CONTRACTOR TO INSPECT ENTIRE SURFACE FOR ANY PERFORATIONS CAUSED DURING CONSTRUCTION. PATCH & REPAIR CONDITIONS PRIOR TO INSTALLATION OF TAPERED INSULATION

1/2" THK. GYPSUM BASED DECK SHEATHING

STEEL DECKING, REFER TO STRUCTURAL DWG'S FOR PROFILE DEPTH, DECK CLOSURES & FRAMING FOR ROOF PENETRATIONS

STEEL ROOF STRUCTURE, REFER TO STRUCTURAL DWG'S FOR BEAM SIZES, JOIST DEPTH, JOIST SPACING & SHOE DEPTH

CURB ASSEMBLY: CB1

CARRY ROOFING MEMBRANES UP CURBS, REVERSE LAPPING OF ROOFING IS NOT PERMITTED

1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

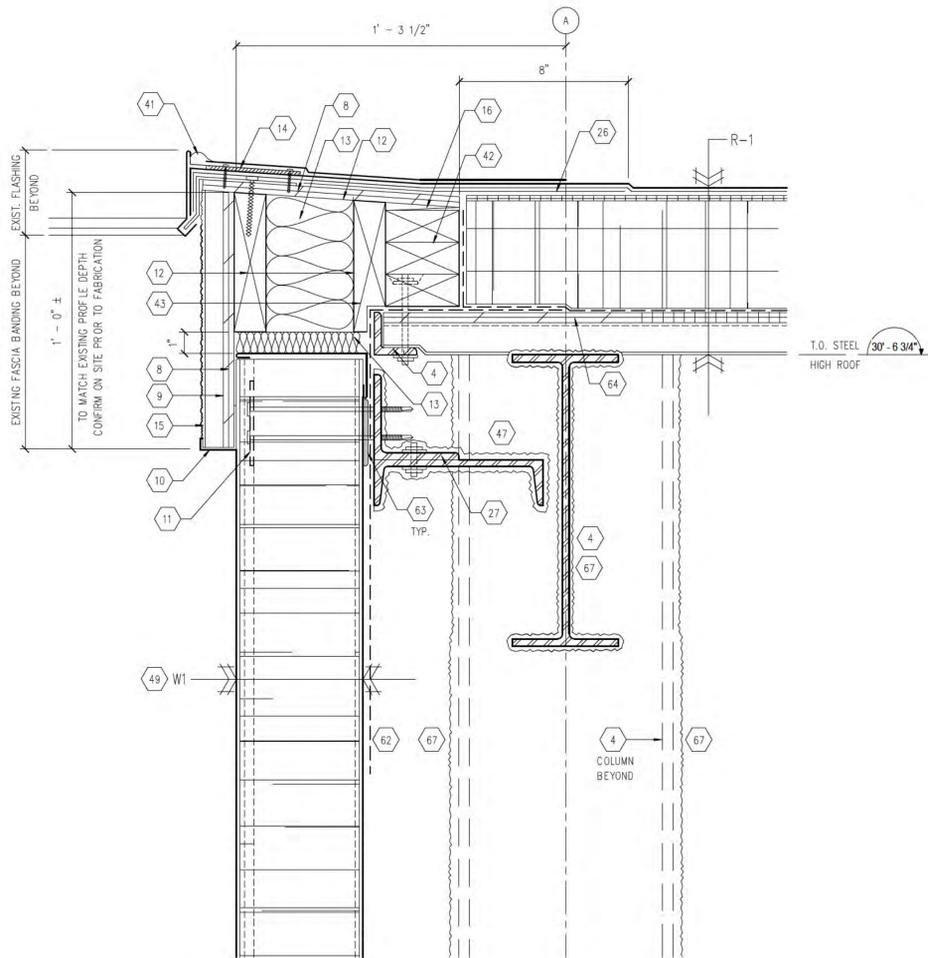
2" x 6" PRESSURE TREATED WOOD FRAMING AT 16" c/c. C/W TOP & BOTTOM PLATES. BOTTOM PLATES C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS, WASHERS & HOOKED ENDS.

CONTINUOUS VAPOUR RETARDER C/W TAPE SEALANT ALONG ENDS, JOINTS & LAPS. SEAL ENDS TO TOP PLATES & SEAL OPPOSITE ENDS TO ROOF VAPOUR RETARDER.

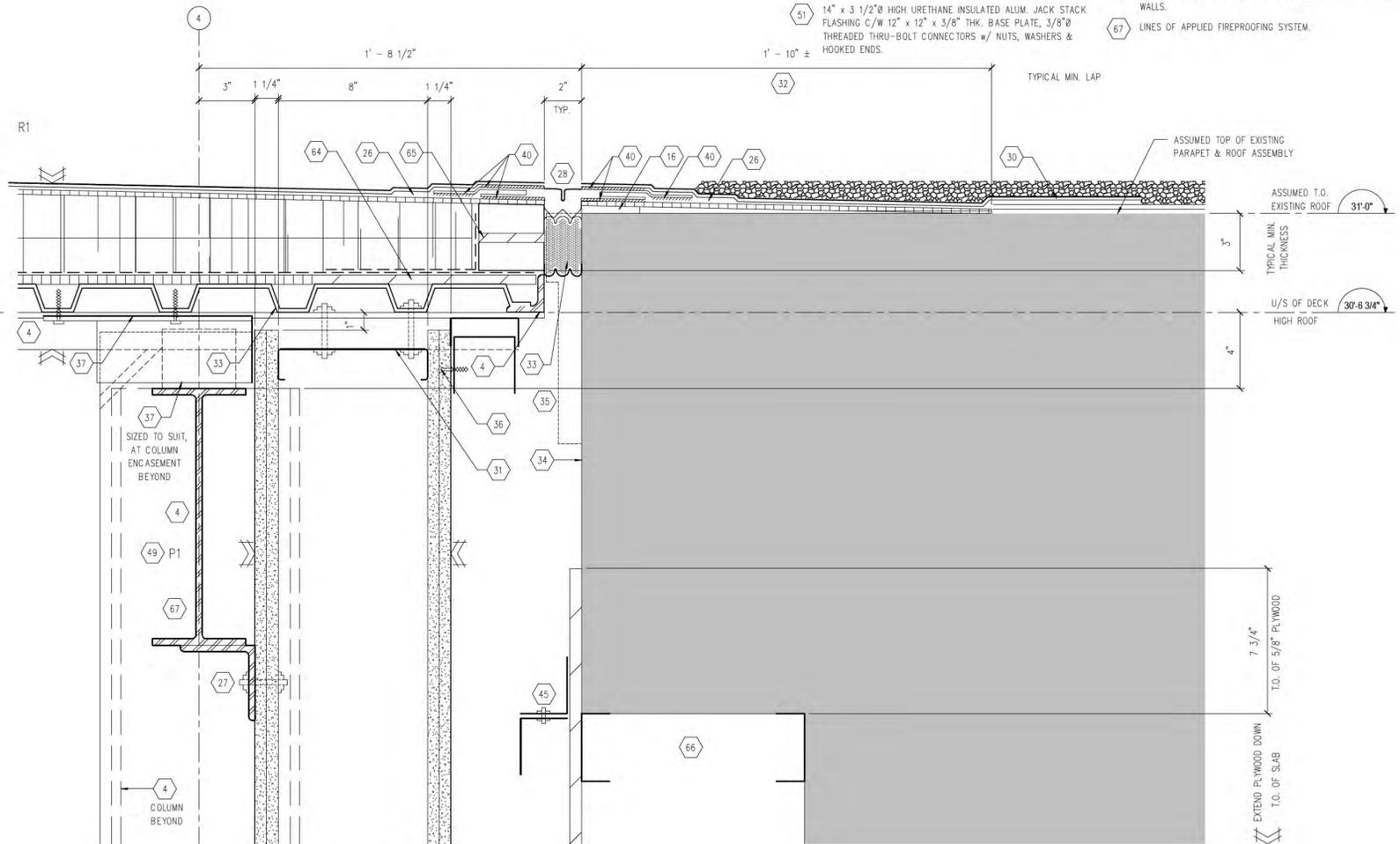
1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

ROOF ASSEMBLY KEY NOTES:

- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 4" x 6" x 4" x 1/2" THK. GALVANIZED CLIP ANGLES C/W 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS. TYPICAL AT EACH VERTICAL SUPPORT MEMBER ALONG THE ENTIRE LENGTH OF THE ROOF SCREEN & GUARDRAILS.
- 3 LIQUID ACRYLIC MEMBRANE FLASHING SANDWICHED BETWEEN VERTICAL FACE OF ROOFING & GALVANIZED CLIP ANGLE. TYPICAL AT EACH THRU-BOLT LOCATION.
- 4 TOP FLANGE OF BEAM, COORDINATE w/ STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 5 C8 x 11.5 GALVANIZED PARAPET FRAMING AT 24" c/c. C/W CONTINUOUS TOP & BASE CHANNELS w/ 3/8" THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS. TYPICAL ALONG ENTIRE LENGTH OF ROOF SCREEN, REFER TO ROOF PLAN FOR EXTENT.
- 6 IN-FILL ENTIRE VOID SPACE w/ BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS. REFER TO ROOF PLAN FOR EXTENT.
- 7 3/8" THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. TYPICAL AT VARIOUS LOCATIONS THROUGHOUT UPPER & LOWER ROOF AREAS. SEAL WITH ACRYLIC LIQUID MEMBRANE.
- 8 1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG SLOPED, HORIZONTAL & VERTICAL CONDITIONS.
- 9 DO NOT ATTACH BOTTOM OF PLYWOOD & J-TRIM TO FACE OF INSULATED PANELS TO ENSURE FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 10 CONTINUOUS STAINLESS STEEL J-TRIM, TYPICAL ALONG ENTIRE LENGTH OF FIBER REINFORCED PANELS.
- 11 CONCEALED PANEL CONNECTORS, COORDINATE w/ INSULATED PANEL MANUFACTURER'S SHOP DWG'S FOR LOCATIONS & PANEL COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT ASSEMBLY FREE FROM ANY MOISTURE INFILTRATION & CONDENSATION.
- 12 PRESSURE TREATED 2" x 8" LADDER FRAMING AT 16" c/c. C/W TAPERED TOPS & CONTINUOUS 2" x 8" PRESSURE TREATED NAILERS SIZED TO SUIT, TYPICAL ALONG PERIMETER OF ROOF AREAS.
- 13 IN-FILL ENTIRE VOID SPACE w/ NON-COMBUSTIBLE BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS.
- 14 PRE-FINISHED ALUM. GRAVEL STOP FLASHING C/W CONTINUOUS FLASHING CLEATS, FASTENERS & CONTINUOUS BONDING AGENTS SANDWICHED BETWEEN ROOFING & U/S OF GRAVEL STOP. ENSURE COMPONENTS ARE COMPATIBLE w/ ROOFING MANUFACTURER'S SYSTEM. PROFILE DEPTH OF FLASHING TO MATCH EXISTING ADJACENT FLASHING. CONFIRM FLASHING DEPTH ON SITE PRIOR TO FABRICATION.
- 15 1" THK. FIBER REINFORCED PANELS C/W PEBBLED FINISH. TYPICAL ALONG UPPER & LOWER ROOF EDGE CONDITIONS. PROFILE DEPTH & COLOUR TO MATCH EXISTING ROOF TOP BANDING. CONFIRM DEPTH ON SITE PRIOR TO FABRICATION.
- 16 PRESSURE TREATED WOOD SHIMS SIZED TO SUIT & EQUALLY SPACED. TYPICAL ALONG PERIMETERS OF PARAPETS & ROOF EDGE CONDITIONS.
- 17 ROOF TOP UNIT C/W INTEGRAL FLASHING ASSEMBLY, REFER TO MECH. DWG'S FOR UNIT TYPE & SIZE, ANCHOR RTU TO DOUBLE TOP PLATE.
- 18 PRE-FINISHED METAL FLASHING C/W FLASHING CLEATS & FASTENERS.
- 19 CONTINUOUS TERMINATION BAR C/W MASTIC SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 20 CONTINUOUS SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 21 WELD ROOF SUPPORT PLATES TO TOP OF BEAMS.
- 22 REFER TO "ASSEMBLIES SCHEDULE", LOCATED ON THIS SHEET, FOR R1 & CB1 CONSTRUCTION ASSEMBLY NOTES.
- 23 TOP OF MODIFIED BITUMINOUS ROOFING BEYOND CRICKET.
- 24 LINE OF 1/4" THK. PROTECTION BOARD SHEATHING BEYOND CRICKET.
- 25 FORM CRICKETS & BACK SLOPES w/ TAPERED INSULATION. REFER TO ROOF PLAN FOR LOCATIONS.
- 26 FLAP OF NON-WOVEN REINFORCING MEMBRANE, TYPICAL AT EACH VERTICAL TRANSITIONS ALONG PARAPETS & CURBS.
- 27 CONTINUOUS 4" x 4" x 1/4" THK. SLOTTED CONNECTION ANGLE, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES.
- 28 CONTINUOUS EXPANSION JOINT COVER, FULLY BOND COVER TO ROOFING MEMBRANES, ENSURE INSTALLATION IS WEATHER TIGHT & FREE FROM ANY MOISTURE INFILTRATION. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 29 INTERMEDIATE MEMBRANE SHEET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 30 FULLY ADHERE ROOFING OVER EXISTING REMAINING MEMBRANES. RE-INSTATE EXISTING PEA GRAVEL TO ROOF EDGE AS INDICATED, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 31 8" COLD ROLLED STRUCTURAL STUDS AT 24" c/c. C/W TOP & BOTTOM COLD ROLLED TRACKS w/ TOP TRACKS C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS.
- 32 RELOCATE 24" WIDE STRIP OF EXISTING PEA GRAVEL BALLAST FROM ROOF EDGE BACK. REMOVE PORTIONS OF EXISTING ROOFING MEMBRANES ALONG ENTIRE LENGTH OF NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: FASTENERS, SEALANTS, PROTECTION BOARDS, CAP FLASHINGS, GRAVEL STOP FLASHING & ANY OTHER CONCEALED COMPONENTS TO EXPOSE EXISTING EDGE OF ROOF.
- 33 CONTINUOUS 2 HOUR FIRE RATED EXPANSION JOINT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 34 IN-FILL ENTIRE VOID SPACES AT DEFLECTION TRACKS, DECK FLUTES & AT TOP TRACKS OF COLD ROLLED STUDS. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 35 REMOVED PORTION OF EXIST. FLASHING & PARAPET BANDING.
- 36 ONLY SECURE INNER LAYER OF GYPSUM BD. INTO LONG LEG DEFLECTION TRACKS, TYPICAL.
- 37 10" LxH x 3 1/2" METAL DECK FLUTE CLOSURE SECURED TO U/S OF STEEL DECK ONLY. DO NOT ATTACH VERTICAL LEG OF CLOSURE TO GYPSUM BD. TO ALLOW FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 38 DIAGONAL STEEL ANGLE BRACING, SIZE & MATERIALS TO MATCH VERTICAL ANGLE SCREEN POSTS. TYPICAL AT EACH EXTERIOR CORNER.
- 39 PRE-FINISHED ROOF SCREEN C/W BLADES, BLADE BRACES VERTICAL SUPPORTS & ANY OTHER ANCILLARY SCREEN COMPONENTS TO ENSURE A COMPLETE INSTALLATION. REFER TO ROOF PLAN FOR EXTENT.
- 40 SET FLANGES OF ROOF COVER & EDGES OF BASE SHEETS IN COMPATIBLE CONTINUOUS BEDS OF BONDING ADHESIVE. TYPICAL AT BOTH EDGES OF COMPONENTS ALONG THE ENTIRE LENGTH OF NEW CONSTRUCTION.
- 41 CONTINUOUS EDGE SEALANT, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES & ROOF PENETRATIONS.
- 42 3-2" x 4" PRESSURE TREATED BUILT-UP WOOD CURB C/W COUNTERSUNK 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS.
- 43 NOTCH NAILER TO ACCOMMODATE PERIMETER DECK CLOSURE.
- 44 REFER TO DWG A-102 FOR P1 CONSTRUCTION.
- 45 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0", TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION.
- 46 CONTINUOUS SEALANT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 47 STRUCTURAL GIRT, COORDINATE w/ STRUCTURAL FRAMING ELEVATIONS ON DWG S-201 FOR SIZE, SPACING & LOCATIONS.
- 48 CONTINUOUS CLOSED CELL AIR SEAL GASKET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 49 REFER TO DWG A-102 FOR WALL ASSEMBLY W1 & PARTITION ASSEMBLIES P1 & P2.
- 50 PRE-FINISHED ALUM. FLASHING C/W 1/2" DRIP EDGE. CARRY VERTICAL LEG OF FLASHING UP BETWEEN WALL PANEL & ROOF MEMBRANES. SANDWICH MASTIC SEAL BETWEEN FLASHING & WALL PANEL. SEAL AT TOP OF ANGLE w/ CONTINUOUS SEALANT AS INDICATED.
- 51 14" x 3 1/2" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING C/W 12" x 12" x 3/8" THK. BASE PLATE, 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS, WASHERS & HOOKED ENDS.
- 52 ENSURE WEEP HOLES AT BASE OF COLUMN SUPPORTS, 1 PER SIDE AT EACH COLUMN SUPPORT, TO ALLOW FOR CONDENSATION DRAINAGE.
- 53 4" Dp. PROFILE ALUM. FLASHING BY JACK STACK FLASHING MANUFACTURER, TYPICAL AT EACH HSS SUPPORT.
- 54 4" HSS COLUMN SUPPORTS C/W 12" x 12" x 3/8" THK. TOP PLATE w/ 3/8" THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. REFER TO STAIR PLAN FOR HSS LOCATIONS & COORDINATE w/ STRUCTURAL DWG'S FOR ROOF FRAMING SUPPORTS.
- 55 C12 x 20.7 GALVANIZED CHANNEL FRAMING, TYPICAL AT PERIMETER OF LANDING.
- 56 1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS C/W 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 57 1/4" THK. GALVANIZED CAP FLUSH w/ TOP OF STEEL, TYPICAL AT EACH HSS POST.
- 58 1 1/2" DIAMOND SHAPED PUNCHED SERRATED GRATINGS, TYPICAL AT LANDING & TREADS.
- 59 1 3/4" GALVANIZED VERTICAL PIPE RAILS C/W 2-1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS, 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 60 18" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING VENT STACK C/W REMOVABLE CAP & EPDM BASE SEAL BONDED TO METAL SLEEVE. SET FLANGES INTO COMPATIBLE BEDS OF BONDING ADHESIVE TO ENSURE A WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 61 GUARDRAILS: ALUM. RAILINGS TO BE 1 3/4" W/ A MIN. HEIGHT OF 3'-6" FROM TOP OF ROOF MEMBRANE.
- 62 EXTEND VERTICAL FLAP OF VAPOUR RETARDER 6" PAST U/S OF BEAM FLANGE & SEAL TO INSULATED WALL PANEL.
- 63 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT.
- 64 1/2" THK. x 1'-0" CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD. TYPICAL AT WOOD CURBS ALONG UPPER & LOWER ROOF AREAS.
- 65 2" x 4" PRESSURE TREATED INSULATION STOP C/W 1/2" THK. CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD. TYPICAL AT INSULATION STOPS ALONG UPPER & LOWER ROOF AREAS.
- 66 3 5/8" STEEL STUD FRAMING AT 16" c/c. C/W PERIMETER TRACK STUDS ATTACHED TO SURROUNDING EXISTING MASONRY WALLS.
- 67 LINES OF APPLIED FIREPROOFING SYSTEM.



1 SECTION - AT ROOF EDGE
SCALE: 3" = 1'-0"



2 SECTION - AT ROOF EXPANSION JOINT
SCALE: 3" = 1'-0"

NOTES :

LEGEND:



CONSTRUCTION

1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21
NO.	REVISIONS	DD/MM/YY

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
ROOF DETAILS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3" = 1'-0"
DRAWN BY:	B.D.
DATE:	15/06/22

A-406

ASSEMBLIES SCHEDULE:

ROOF ASSEMBLY: R1 (FULLY ADHERED SYSTEM)

FULLY ADHERED 2 PLY MODIFIED BITUMINOUS ROOFING SYSTEM C/W BASE SHEETS, NON-WOVEN REINFORCED MEMBRANES, CAP SHEETS, BONDING ADHESIVES & ANY OTHER ANCILLARY ROOFING COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE INFILTRATIONS & CONDENSATION.

1/4" THK. GYPSUM BASED PROTECTION BOARD

TAPERED RIGID INSULATION AT MAIN ROOF AREAS, CRICKETS & BACK SLOPES C/W A MIN. SLOPE OF 2%. ENSURE LOW POINTS, ADJACENT TO ROOF EXPANSION JOINT, ARE AT A MIN. OF 4" W/ HIGH POINTS, ALONG RAISED PARAPETS, ARE AT A MAX. OF 10"±

CONTINUOUS SELF ADHERING VAPOUR RETARDER, TYPICAL ALONG ENTIRE SURFACE OF DECK SHEATHING. CONTRACTOR TO INSPECT ENTIRE SURFACE FOR ANY PERFORATIONS CAUSED DURING CONSTRUCTION. PATCH & REPAIR CONDITIONS PRIOR TO INSTALLATION OF TAPERED INSULATION

1/2" THK. GYPSUM BASED DECK SHEATHING

STEEL DECKING, REFER TO STRUCTURAL DWG'S FOR PROFILE DEPTH, DECK CLOSURES & FRAMING FOR ROOF PENETRATIONS

STEEL ROOF STRUCTURE, REFER TO STRUCTURAL DWG'S FOR BEAM SIZES, JOIST DEPTH, JOIST SPACING & SHOE DEPTH

CURB ASSEMBLY: CB1

CARRY ROOFING MEMBRANES UP CURBS, REVERSE LAPPING OF ROOFING IS NOT PERMITTED

1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

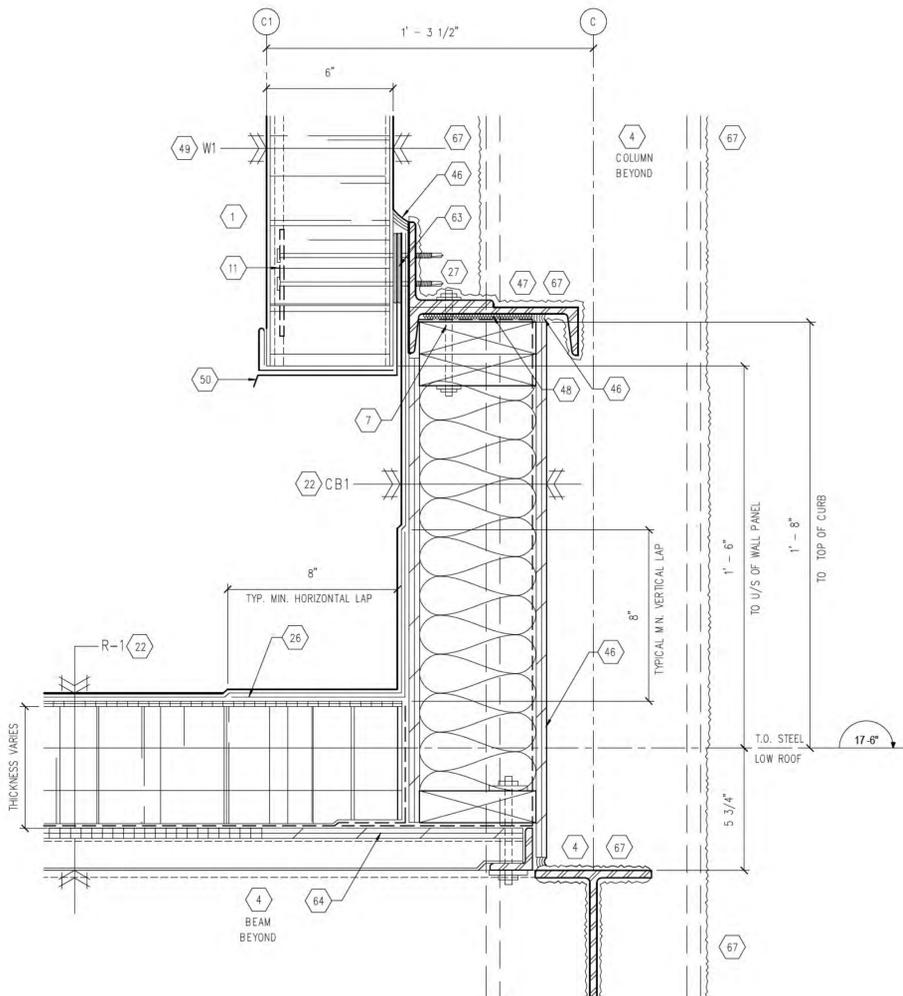
2" x 6" PRESSURE TREATED WOOD FRAMING AT 16" c/c. C/W TOP & BOTTOM PLATES. BOTTOM PLATES C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS, WASHERS & HOOKED ENDS.

CONTINUOUS VAPOUR RETARDER C/W TAPE SEALANT ALONG ENDS, JOINTS & LAPS. SEAL ENDS TO TOP PLATES & SEAL OPPOSITE ENDS TO ROOF VAPOUR RETARDER.

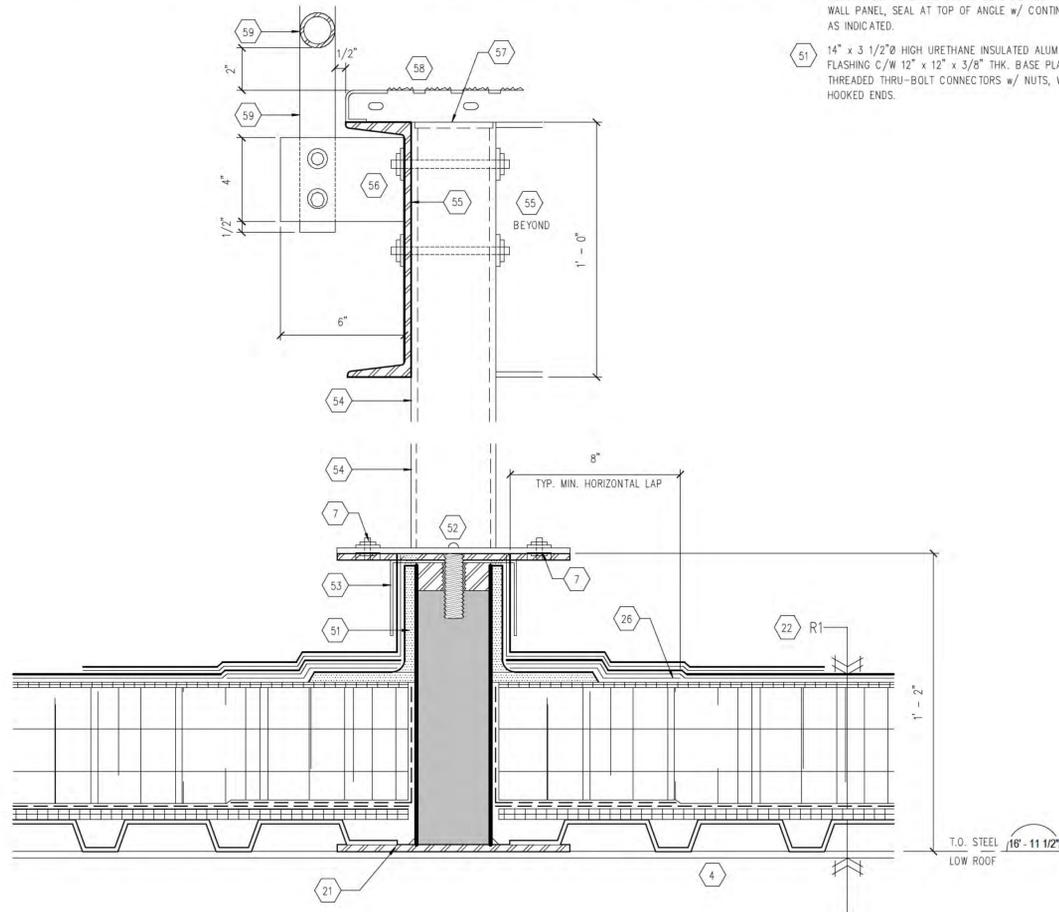
1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

ROOF ASSEMBLY KEY NOTES:

- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 4" x 6" x 4" x 1/2" THK. GALVANIZED CLIP ANGLES C/W 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS. TYPICAL AT EACH VERTICAL SUPPORT MEMBER ALONG THE ENTIRE LENGTH OF THE ROOF SCREEN & GUARDRAILS.
- 3 LIQUID ACRYLIC MEMBRANE FLASHING SANDWICHED BETWEEN VERTICAL FACE OF ROOFING & GALVANIZED CLIP ANGLE. TYPICAL AT EACH THRU-BOLT LOCATION.
- 4 TOP FLANGE OF BEAM, COORDINATE w/ STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 5 C8 x 11.5 GALVANIZED PARAPET FRAMING AT 24" c/c. C/W CONTINUOUS TOP & BASE CHANNELS w/ 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS. TYPICAL ALONG ENTIRE LENGTH OF ROOF SCREEN, REFER TO ROOF PLAN FOR EXTENT.
- 6 IN-FILL ENTIRE VOID SPACE w/ BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS. REFER TO ROOF PLAN FOR EXTENT.
- 7 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. TYPICAL AT VARIOUS LOCATIONS THROUGHOUT UPPER & LOWER ROOF AREAS. SEAL WITH ACRYLIC LIQUID MEMBRANE.
- 8 1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG SLOPED, HORIZONTAL & VERTICAL CONDITIONS.
- 9 DO NOT ATTACH BOTTOM OF PLYWOOD & J-TRIM TO FACE OF INSULATED PANELS TO ENSURE FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 10 CONTINUOUS STAINLESS STEEL J-TRIM, TYPICAL ALONG ENTIRE LENGTH OF FIBER REINFORCED PANELS.
- 11 CONCEALED PANEL CONNECTORS, COORDINATE w/ INSULATED PANEL MANUFACTURER'S SHOP DWG'S FOR LOCATIONS & PANEL COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT ASSEMBLY FREE FROM ANY MOISTURE INFILTRATION & CONDENSATION.
- 12 PRESSURE TREATED 2" x 8" LADDER FRAMING AT 16" c/c. C/W TAPERED TOPS & CONTINUOUS 2" x 8" PRESSURE TREATED NAILERS SIZED TO SUIT, TYPICAL ALONG PERIMETER OF ROOF AREAS.
- 13 IN-FILL ENTIRE VOID SPACE w/ NON-COMBUSTIBLE BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS.
- 14 PRE-FINISHED ALUM. GRAVEL STOP FLASHING C/W CONTINUOUS FLASHING CLEATS, FASTENERS & CONTINUOUS BONDING AGENTS SANDWICHED BETWEEN ROOFING & U/S OF GRAVEL STOP. ENSURE COMPONENTS ARE COMPATIBLE w/ ROOFING MANUFACTURER'S SYSTEM. PROFILE DEPTH OF FLASHING TO MATCH EXISTING ADJACENT FLASHING. CONFIRM FLASHING DEPTH ON SITE PRIOR TO FABRICATION.
- 15 1" THK. FIBER REINFORCED PANELS C/W PEBBLED FINISH. TYPICAL ALONG UPPER & LOWER ROOF EDGE CONDITIONS. PROFILE DEPTH & COLOUR TO MATCH EXISTING ROOF TOP BANDING. CONFIRM DEPTH ON SITE PRIOR TO FABRICATION.
- 16 PRESSURE TREATED WOOD SHIMS SIZED TO SUIT & EQUALLY SPACED. TYPICAL ALONG PERIMETERS OF PARAPETS & ROOF EDGE CONDITIONS.
- 17 ROOF TOP UNIT C/W INTEGRAL FLASHING ASSEMBLY, REFER TO MECH. DWG'S FOR UNIT TYPE & SIZE, ANCHOR RTU TO DOUBLE TOP PLATE.
- 18 PRE-FINISHED METAL FLASHING C/W FLASHING CLEATS & FASTENERS.
- 19 CONTINUOUS TERMINATION BAR C/W MASTIC SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 20 CONTINUOUS SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 21 WELD ROOF SUPPORT PLATES TO TOP OF BEAMS.
- 22 REFER TO "ASSEMBLIES SCHEDULE", LOCATED ON THIS SHEET, FOR R1 & CB1 CONSTRUCTION ASSEMBLY NOTES.
- 23 TOP OF MODIFIED BITUMINOUS ROOFING BEYOND CRICKET.
- 24 LINE OF 1/4" THK. PROTECTION BOARD SHEATHING BEYOND CRICKET.
- 25 FORM CRICKETS & BACK SLOPES w/ TAPERED INSULATION. REFER TO ROOF PLAN FOR LOCATIONS.
- 26 FLAP OF NON-WOVEN REINFORCING MEMBRANE, TYPICAL AT EACH VERTICAL TRANSITIONS ALONG PARAPETS & CURBS.
- 27 CONTINUOUS 4" x 4" x 1/4" THK. SLOTTED CONNECTION ANGLE, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES.
- 28 CONTINUOUS EXPANSION JOINT COVER, FULLY BOND COVER TO ROOFING MEMBRANES, ENSURE INSTALLATION IS WEATHER TIGHT & FREE FROM ANY MOISTURE INFILTRATION. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 29 INTERMEDIATE MEMBRANE SHEET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 30 FULLY ADHERE ROOFING OVER EXISTING REMAINING MEMBRANES. RE-INSTATE EXISTING PEA GRAVEL TO ROOF EDGE AS INDICATED, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 31 8" COLD ROLLED STRUCTURAL STUDS AT 24" c/c. C/W TOP & BOTTOM COLD ROLLED TRACKS w/ TOP TRACKS C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS.
- 32 RELOCATE 24" WIDE STRIP OF EXISTING PEA GRAVEL BALLAST FROM ROOF EDGE BACK. REMOVE PORTIONS OF EXISTING ROOFING MEMBRANES ALONG ENTIRE LENGTH OF NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: FASTENERS, SEALANTS, PROTECTION BOARDS, CAP FLASHINGS, GRAVEL STOP FLASHING & ANY OTHER CONCEALED COMPONENTS TO EXPOSE EXISTING EDGE OF ROOF.
- 33 CONTINUOUS 2 HOUR FIRE RATED EXPANSION JOINT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 34 IN-FILL ENTIRE VOID SPACES AT DEFLECTION TRACKS, DECK FLUTES & AT TOP TRACKS OF COLD ROLLED STUDS. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 35 REMOVED PORTION OF EXIST. FLASHING & PARAPET BANDING.
- 36 ONLY SECURE INNER LAYER OF GYPSUM BD. INTO LONG LEG DEFLECTION TRACKS, TYPICAL.
- 37 10" LLH x 3 1/2" METAL DECK FLUTE CLOSURE SECURED TO U/S OF STEEL DECK ONLY. DO NOT ATTACH VERTICAL LEG OF CLOSURE TO GYPSUM BD. TO ALLOW FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 38 DIAGONAL STEEL ANGLE BRACING, SIZE & MATERIALS TO MATCH VERTICAL ANGLE SCREEN POSTS. TYPICAL AT EACH EXTERIOR CORNER.
- 39 PRE-FINISHED ROOF SCREEN C/W BLADES, BLADE BRACES VERTICAL SUPPORTS & ANY OTHER ANCILLARY SCREEN COMPONENTS TO ENSURE A COMPLETE INSTALLATION. REFER TO ROOF PLAN FOR EXTENT.
- 40 SET FLANGES OF ROOF COVER & EDGES OF BASE SHEETS IN COMPATIBLE CONTINUOUS BEDS OF BONDING ADHESIVE. TYPICAL AT BOTH EDGES OF COMPONENTS ALONG THE ENTIRE LENGTH OF NEW CONSTRUCTION.
- 41 CONTINUOUS EDGE SEALANT, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES & ROOF PENETRATIONS.
- 42 3-2" x 4" PRESSURE TREATED BUILT-UP WOOD CURB C/W COUNTERSUNK 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS.
- 43 NOTCH NAILER TO ACCOMMODATE PERIMETER DECK CLOSURE.
- 44 REFER TO DWG A-102 FOR P1 CONSTRUCTION.
- 45 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0", TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION.
- 46 CONTINUOUS SEALANT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 47 STRUCTURAL GIRT, COORDINATE w/ STRUCTURAL FRAMING ELEVATIONS ON DWG S-201 FOR SIZE, SPACING & LOCATIONS.
- 48 CONTINUOUS CLOSED CELL AIR SEAL GASKET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 49 REFER TO DWG A-102 FOR WALL ASSEMBLY W1 & PARTITION ASSEMBLIES P1 & P2.
- 50 PRE-FINISHED ALUM. FLASHING C/W 1/2" DRIP EDGE. CARRY VERTICAL LEG OF FLASHING UP BETWEEN WALL PANEL & ROOF MEMBRANES. SANDWICH MASTIC SEAL BETWEEN FLASHING & WALL PANEL. SEAL AT TOP OF ANGLE w/ CONTINUOUS SEALANT AS INDICATED.
- 51 14" x 3 1/2" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING C/W 12" x 12" x 3/8" THK. BASE PLATE, 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS, WASHERS & HOOKED ENDS.
- 52 ENSURE WEEP HOLES AT BASE OF COLUMN SUPPORTS, 1 PER SIDE AT EACH COLUMN SUPPORT, TO ALLOW FOR CONDENSATION DRAINAGE.
- 53 4" Dp. PROFILE ALUM. FLASHING BY JACK STACK FLASHING MANUFACTURER, TYPICAL AT EACH HSS SUPPORT.
- 54 4" HSS COLUMN SUPPORTS C/W 12" x 12" x 3/8" THK. TOP PLATE w/ 3/8" THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. REFER TO STAIR PLAN FOR HSS LOCATIONS & COORDINATE w/ STRUCTURAL DWG'S FOR ROOF FRAMING SUPPORTS
- 55 C12 x 20.7 GALVANIZED CHANNEL FRAMING, TYPICAL AT PERIMETER OF LANDING.
- 56 1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS C/W 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 57 1/4" THK. GALVANIZED CAP FLUSH w/ TOP OF STEEL, TYPICAL AT EACH HSS POST.
- 58 1 1/2" DIAMOND SHAPED PUNCHED SERRATED GRATINGS, TYPICAL AT LANDING & TREADS.
- 59 1 3/4" GALVANIZED VERTICAL PIPE RAILS C/W 2-1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS, 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 60 18" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING VENT STACK C/W REMOVABLE CAP & EPDM BASE SEAL BONDED TO METAL SLEEVE. SET FLANGES INTO COMPATIBLE BEDS OF BONDING ADHESIVE TO ENSURE A WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 61 GUARDRAILS: ALUM. RAILINGS TO BE 1 3/4" w/ A MIN. HEIGHT OF 3'-6" FROM TOP OF ROOF MEMBRANE.
- 62 EXTEND VERTICAL FLAP OF VAPOUR RETARDER 6" PAST U/S OF BEAM FLANGE & SEAL TO INSULATED WALL PANEL.
- 63 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT.
- 64 1/2" THK. x 1'-0" CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD, TYPICAL AT WOOD CURBS ALONG UPPER & LOWER ROOF AREAS.
- 65 2" x 4" PRESSURE TREATED INSULATION STOP C/W 1/2" THK. CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD, TYPICAL AT INSULATION STOPS ALONG UPPER & LOWER ROOF AREAS.
- 66 3 5/8" STEEL STUD FRAMING AT 16" c/c. C/W PERIMETER TRACK STUDS ATTACHED TO SURROUNDING EXISTING MASONRY WALLS.
- 67 LINES OF APPLIED FIREPROOFING SYSTEM.



1 SECTION - AT ROOF TO WALL TRANSITION
A-102 SCALE: 3" = 1'-0"



2 SECTION - AT STAIR COLUMN SUPPORTS
A-102 SCALE: 3" = 1'-0"



NOTES :

LEGEND:



CONSTRUCTION

1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21
NO.	REVISIONS	DD/MM/YY

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
ROOF DETAILS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3" = 1'-0"
DRAWN BY:	B.D.
DATE:	15/06/22

A-407

ASSEMBLIES SCHEDULE:

ROOF ASSEMBLY: R1 (FULLY ADHERED SYSTEM)

FULLY ADHERED 2 PLY MODIFIED BITUMINOUS ROOFING SYSTEM C/W BASE SHEETS, NON-WOVEN REINFORCED MEMBRANES, CAP SHEETS, BONDING ADHESIVES & ANY OTHER ANCILLARY ROOFING COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE INFILTRATIONS & CONDENSATION.

1/4" THK. GYPSUM BASED PROTECTION BOARD

TAPERED RIGID INSULATION AT MAIN ROOF AREAS, CRICKETS & BACK SLOPES C/W A MIN. SLOPE OF 2%. ENSURE LOW POINTS, ADJACENT TO ROOF EXPANSION JOINT, ARE AT A MIN. OF 4" w/ HIGH POINTS, ALONG RAISED PARAPETS, ARE AT A MAX. OF 10"±

CONTINUOUS SELF ADHERING VAPOUR RETARDER, TYPICAL ALONG ENTIRE SURFACE OF DECK SHEATHING. CONTRACTOR TO INSPECT ENTIRE SURFACE FOR ANY PERFORATIONS CAUSED DURING CONSTRUCTION. PATCH & REPAIR CONDITIONS PRIOR TO INSTALLATION OF TAPERED INSULATION

1/2" THK. GYPSUM BASED DECK SHEATHING

STEEL DECKING, REFER TO STRUCTURAL DWG'S FOR PROFILE DEPTH, DECK CLOSURES & FRAMING FOR ROOF PENETRATIONS

STEEL ROOF STRUCTURE, REFER TO STRUCTURAL DWG'S FOR BEAM SIZES, JOIST DEPTH, JOIST SPACING & SHOE DEPTH

CURB ASSEMBLY: CB1

CARRY ROOFING MEMBRANES UP CURBS, REVERSE LAPPING OF ROOFING IS NOT PERMITTED

1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

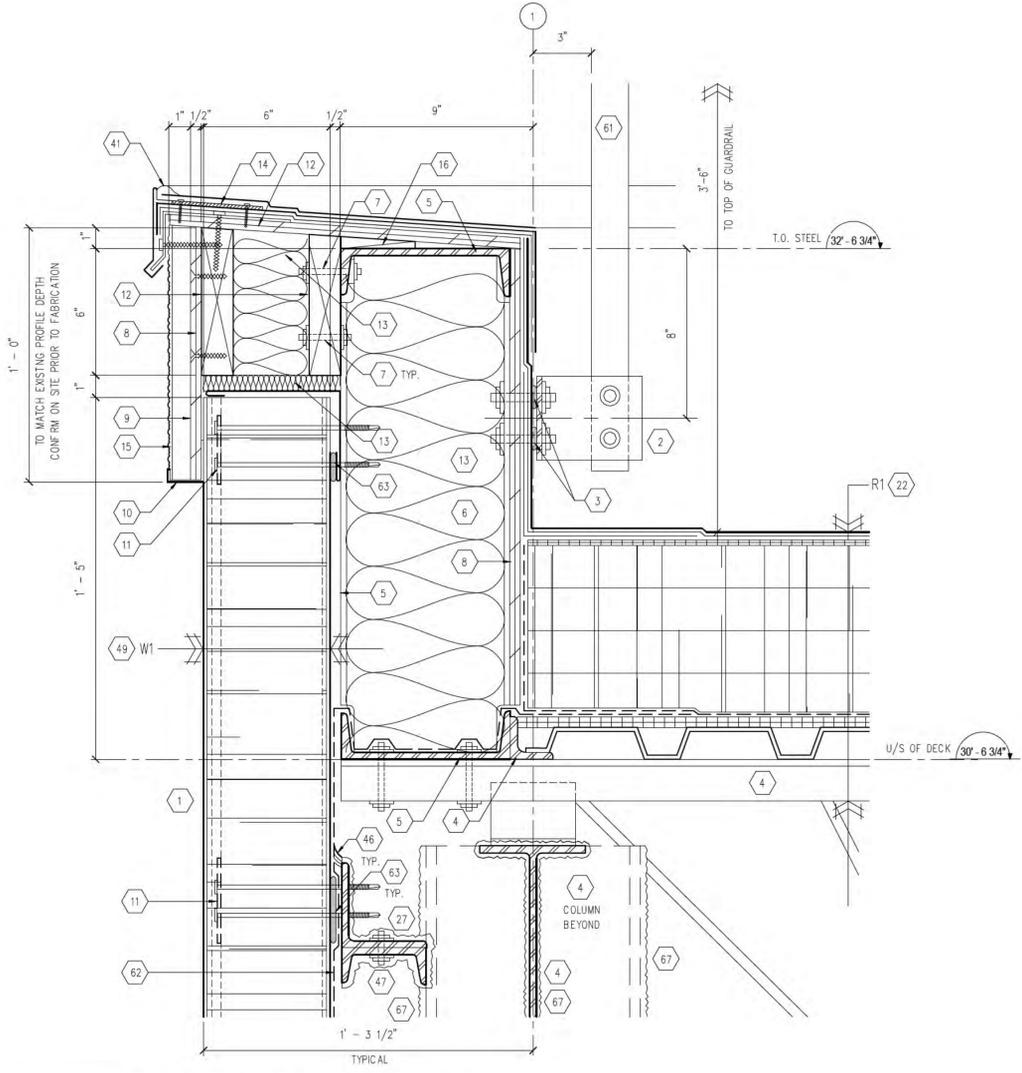
2" x 6" PRESSURE TREATED WOOD FRAMING AT 16" c/c. C/W TOP & BOTTOM PLATES. BOTTOM PLATES C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS, WASHERS & HOOKED ENDS.

CONTINUOUS VAPOUR RETARDER C/W TAPE SEALANT ALONG ENDS, JOINTS & LAPS. SEAL ENDS TO TOP PLATES & SEAL OPPOSITE ENDS TO ROOF VAPOUR RETARDER.

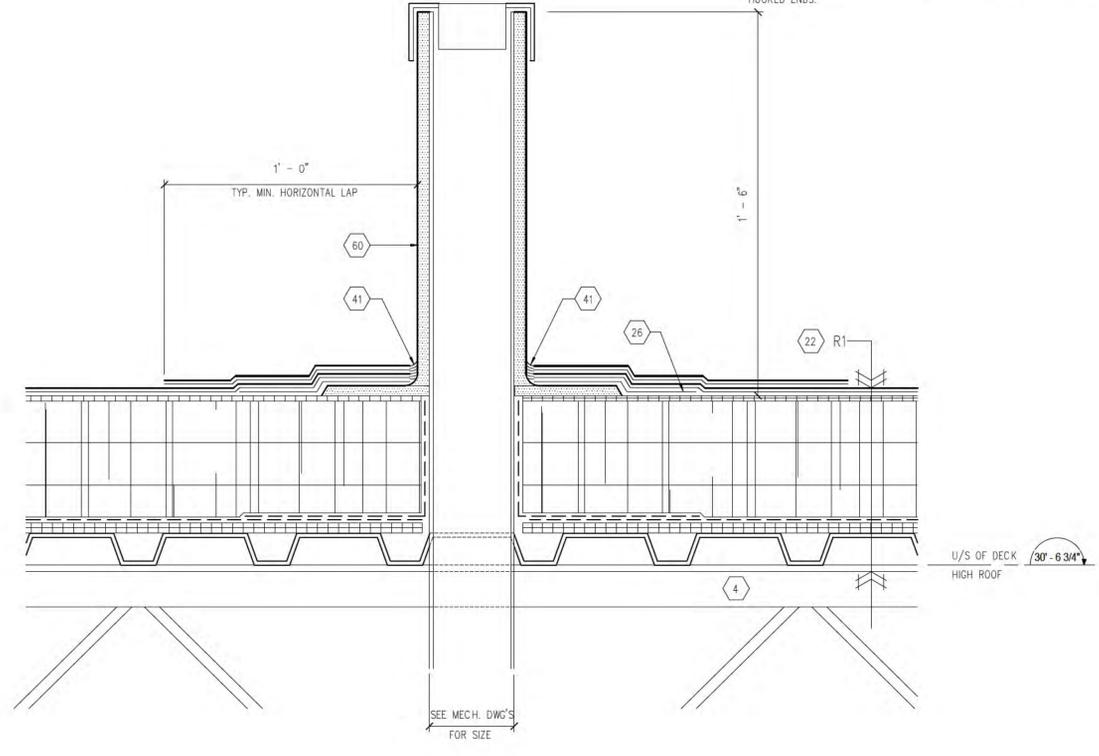
1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG ENTIRE PERIMETER CURBS.

ROOF ASSEMBLY KEY NOTES:

- 1 6" THK. 2 HR. FIRE RATED PRE-FINISHED METAL WALL PANELS C/W MINERAL FIBRE CORES. TYPICAL ALONG PERIMETER OF BUILDING UNLESS NOTED OTHERWISE.
- 2 4" x 6" x 4" x 1/2" THK. GALVANIZED CLIP ANGLES C/W 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS. TYPICAL AT EACH VERTICAL SUPPORT MEMBER ALONG THE ENTIRE LENGTH OF THE ROOF SCREEN & GUARDRAILS.
- 3 LIQUID ACRYLIC MEMBRANE FLASHING SANDWICHED BETWEEN VERTICAL FACE OF ROOFING & GALVANIZED CLIP ANGLE. TYPICAL AT EACH THRU-BOLT LOCATION.
- 4 TOP FLANGE OF BEAM, COORDINATE w/ STRUCTURAL DWG'S FOR SIZE & LOCATIONS.
- 5 C8 x 11.5 GALVANIZED PARAPET FRAMING AT 24" c/c. C/W CONTINUOUS TOP & BASE CHANNELS w/ 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS. TYPICAL ALONG ENTIRE LENGTH OF ROOF SCREEN, REFER TO ROOF PLAN FOR EXTENT.
- 6 IN-FILL ENTIRE VOID SPACE w/ BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS. REFER TO ROOF PLAN FOR EXTENT.
- 7 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. TYPICAL AT VARIOUS LOCATIONS THROUGHOUT UPPER & LOWER ROOF AREAS. SEAL WITH ACRYLIC LIQUID MEMBRANE.
- 8 1/2" THK. EXTERIOR GRADE PLYWOOD SHEATHING, TYPICAL ALONG SLOPED, HORIZONTAL & VERTICAL CONDITIONS.
- 9 DO NOT ATTACH BOTTOM OF PLYWOOD & J-TRIM TO FACE OF INSULATED PANELS TO ENSURE FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 10 CONTINUOUS STAINLESS STEEL J-TRIM, TYPICAL ALONG ENTIRE LENGTH OF FIBER REINFORCED PANELS.
- 11 CONCEALED PANEL CONNECTORS, COORDINATE w/ INSULATED PANEL MANUFACTURER'S SHOP DWG'S FOR LOCATIONS & PANEL COMPONENTS TO ENSURE A COMPLETE & WEATHER TIGHT ASSEMBLY FREE FROM ANY MOISTURE INFILTRATION & CONDENSATION.
- 12 PRESSURE TREATED 2" x 8" LADDER FRAMING AT 16" c/c. C/W TAPERED TOPS & CONTINUOUS 2" x 8" PRESSURE TREATED NAILERS SIZED TO SUIT, TYPICAL ALONG PERIMETER OF ROOF AREAS.
- 13 IN-FILL ENTIRE VOID SPACE w/ NON-COMBUSTIBLE BATT INSULATION, TYPICAL ALONG ENTIRE LENGTH OF RAISED PARAPETS.
- 14 PRE-FINISHED ALUM. GRAVEL STOP FLASHING C/W CONTINUOUS FLASHING CLEATS, FASTENERS & CONTINUOUS BONDING AGENTS SANDWICHED BETWEEN ROOFING & U/S OF GRAVEL STOP. ENSURE COMPONENTS ARE COMPATIBLE w/ ROOFING MANUFACTURER'S SYSTEM. PROFILE DEPTH OF FLASHING TO MATCH EXISTING ADJACENT FLASHING. CONFIRM FLASHING DEPTH ON SITE PRIOR TO FABRICATION.
- 15 1" THK. FIBER REINFORCED PANELS C/W PEBBLED FINISH. TYPICAL ALONG UPPER & LOWER ROOF EDGE CONDITIONS. PROFILE DEPTH & COLOUR TO MATCH EXISTING ROOF TOP BANDING. CONFIRM DEPTH ON SITE PRIOR TO FABRICATION.
- 16 PRESSURE TREATED WOOD SHIMS SIZED TO SUIT & EQUALLY SPACED. TYPICAL ALONG PERIMETERS OF PARAPETS & ROOF EDGE CONDITIONS.
- 17 ROOF TOP UNIT C/W INTEGRAL FLASHING ASSEMBLY, REFER TO MECH. DWG'S FOR UNIT TYPE & SIZE, ANCHOR RTU TO DOUBLE TOP PLATE.
- 18 PRE-FINISHED METAL FLASHING C/W FLASHING CLEATS & FASTENERS.
- 19 CONTINUOUS TERMINATION BAR C/W MASTIC SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 20 CONTINUOUS SEALANT, TYPICAL ALONG PERIMETER OF ROOF TOP UNIT.
- 21 WELD ROOF SUPPORT PLATES TO TOP OF BEAMS.
- 22 REFER TO "ASSEMBLIES SCHEDULE", LOCATED ON THIS SHEET, FOR R1 & CB1 CONSTRUCTION ASSEMBLY NOTES.
- 23 TOP OF MODIFIED BITUMINOUS ROOFING BEYOND CRICKET.
- 24 LINE OF 1/4" THK. PROTECTION BOARD SHEATHING BEYOND CRICKET.
- 25 FORM CRICKETS & BACK SLOPES w/ TAPERED INSULATION. REFER TO ROOF PLAN FOR LOCATIONS.
- 26 FLAP OF NON-WOVEN REINFORCING MEMBRANE, TYPICAL AT EACH VERTICAL TRANSITIONS ALONG PARAPETS & CURBS.
- 27 CONTINUOUS 4" x 4" x 1/4" THK. SLOTTED CONNECTION ANGLE, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES.
- 28 CONTINUOUS EXPANSION JOINT COVER, FULLY BOND COVER TO ROOFING MEMBRANES, ENSURE INSTALLATION IS WEATHER TIGHT & FREE FROM ANY MOISTURE INFILTRATION. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 29 INTERMEDIATE MEMBRANE SHEET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 30 FULLY ADHERE ROOFING OVER EXISTING REMAINING MEMBRANES. RE-INSTALL EXISTING PEA GRAVEL TO ROOF EDGE AS INDICATED, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 31 8" COLD ROLLED STRUCTURAL STUDS AT 24" c/c. C/W TOP & BOTTOM COLD ROLLED TRACKS w/ TOP TRACKS C/W 3/8" THREADED THRU-BOLT CONNECTORS, NUTS & WASHERS.
- 32 RELOCATE 24" WIDE STRIP OF EXISTING PEA GRAVEL BALLAST FROM ROOF EDGE BACK. REMOVE PORTIONS OF EXISTING ROOFING MEMBRANES ALONG ENTIRE LENGTH OF NEW CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: FASTENERS, SEALANTS, PROTECTION BOARDS, CAP FLASHINGS, GRAVEL STOP FLASHING & ANY OTHER CONCEALED COMPONENTS TO EXPOSE EXISTING EDGE OF ROOF.
- 33 CONTINUOUS 2 HOUR FIRE RATED EXPANSION JOINT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 34 IN-FILL ENTIRE VOID SPACES AT DEFLECTION TRACKS, DECK FLUTES & AT TOP TRACKS OF COLD ROLLED STUDS. TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 35 REMOVED PORTION OF EXIST. FLASHING & PARAPET BANDING.
- 36 ONLY SECURE INNER LAYER OF GYPSUM BD. INTO LONG LEG DEFLECTION TRACKS, TYPICAL.
- 37 10" LLH x 3 1/2" METAL DECK FLUTE CLOSURE SECURED TO U/S OF STEEL DECK ONLY. DO NOT ATTACH VERTICAL LEG OF CLOSURE TO GYPSUM BD. TO ALLOW FREE MOVEMENT WHEN ROOF IS UNDER DEFLECTION.
- 38 DIAGONAL STEEL ANGLE BRACING, SIZE & MATERIALS TO MATCH VERTICAL ANGLE SCREEN POSTS. TYPICAL AT EACH EXTERIOR CORNER.
- 39 PRE-FINISHED ROOF SCREEN C/W BLADES, BLADE BRACES VERTICAL SUPPORTS & ANY OTHER ANCILLARY SCREEN COMPONENTS TO ENSURE A COMPLETE INSTALLATION. REFER TO ROOF PLAN FOR EXTENT.
- 40 SET FLANGES OF ROOF COVER & EDGES OF BASE SHEETS IN COMPATIBLE CONTINUOUS BEDS OF BONDING ADHESIVE. TYPICAL AT BOTH EDGES OF COMPONENTS ALONG THE ENTIRE LENGTH OF NEW CONSTRUCTION.
- 41 CONTINUOUS EDGE SEALANT, TYPICAL ALONG ENTIRE PERIMETER OF ROOF EDGES & ROOF PENETRATIONS.
- 42 3-2" x 4" PRESSURE TREATED BUILT-UP WOOD CURB C/W COUNTERSUNK 3/8" GALVANIZED THREADED THRU-BOLT CONNECTORS w/ NUTS & WASHERS.
- 43 NOTCH NAILER TO ACCOMMODATE PERIMETER DECK CLOSURE.
- 44 REFER TO DWG A-102 FOR P1 CONSTRUCTION.
- 45 ADJUSTABLE Z-GIRTS, SPACED AT A MAX. OF 8'-0", TO ENSURE A PLUMB LINE OF CONSTRUCTION TO SUIT INSTALLATION OF "P1" PARTITION.
- 46 CONTINUOUS SEALANT, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 47 STRUCTURAL GIRT, COORDINATE w/ STRUCTURAL FRAMING ELEVATIONS ON DWG S-201 FOR SIZE, SPACING & LOCATIONS.
- 48 CONTINUOUS CLOSED CELL AIR SEAL GASKET, TYPICAL ALONG ENTIRE LENGTH OF NEW CONSTRUCTION.
- 49 REFER TO DWG A-102 FOR WALL ASSEMBLY W1 & PARTITION ASSEMBLIES P1 & P2.
- 50 PRE-FINISHED ALUM. FLASHING C/W 1/2" DRIP EDGE. CARRY VERTICAL LEG OF FLASHING UP BETWEEN WALL PANEL & ROOF MEMBRANES. SANDWICH MASTIC SEAL BETWEEN FLASHING & WALL PANEL. SEAL AT TOP OF ANGLE w/ CONTINUOUS SEALANT AS INDICATED.
- 51 14" x 3 1/2" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING C/W 12" x 12" x 3/8" THK. BASE PLATE, 3/8" THREADED THRU-BOLT CONNECTORS w/ NUTS, WASHERS & HOOKED ENDS.
- 52 ENSURE WEEP HOLES AT BASE OF COLUMN SUPPORTS, 1 PER SIDE AT EACH COLUMN SUPPORT, TO ALLOW FOR CONDENSATION DRAINAGE.
- 53 4" Dp. PROFILE ALUM. FLASHING BY JACK STACK FLASHING MANUFACTURER, TYPICAL AT EACH HSS SUPPORT.
- 54 4" HSS COLUMN SUPPORTS C/W 12" x 12" x 3/8" THK. TOP PLATE w/ 3/8" THREADED THRU-BOLT CONNECTORS C/W NUTS & WASHERS. REFER TO STAIR PLAN FOR HSS LOCATIONS & COORDINATE w/ STRUCTURAL DWG'S FOR ROOF FRAMING SUPPORTS
- 55 C12 x 20.7 GALVANIZED CHANNEL FRAMING, TYPICAL AT PERIMETER OF LANDING.
- 56 1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS C/W 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 57 1/4" THK. GALVANIZED CAP FLUSH w/ TOP OF STEEL, TYPICAL AT EACH HSS POST.
- 58 1 1/2" DIAMOND SHAPED PUNCHED SERRATED GRATINGS, TYPICAL AT LANDING & TREADS.
- 59 1 3/4" GALVANIZED VERTICAL PIPE RAILS C/W 2-1/4" THK. GUSSET PLATES SHOP WELDED TO LANDING SUPPORT CHANNELS, 3/8" THREADED GALVANIZED THRU BOLTS & WASHERS. TYPICAL AT EACH VERTICAL RAILING.
- 60 18" HIGH URETHANE INSULATED ALUM. JACK STACK FLASHING VENT STACK C/W REMOVABLE CAP & EPDM BASE SEAL BONDED TO METAL SLEEVE. SET FLANGES INTO COMPATIBLE BEDS OF BONDING ADHESIVE TO ENSURE A WEATHER TIGHT INSTALLATION FREE FROM ANY MOISTURE & CONDENSATION INFILTRATION.
- 61 GUARDRAILS: ALUM. RAILINGS TO BE 1 3/4" w/ A MIN. HEIGHT OF 3'-6" FROM TOP OF ROOF MEMBRANE.
- 62 EXTEND VERTICAL FLAP OF VAPOUR RETARDER 6" PAST U/S OF BEAM FLANGE & SEAL TO INSULATED WALL PANEL.
- 63 CONTINUOUS BUTYL SEALANT, AT BOTH SIDES OF TRIM, w/ MARRIAGE BEAD TO VERTICAL PANEL JOINT.
- 64 1/2" THK. x 1'-0" CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD, TYPICAL AT WOOD CURBS ALONG UPPER & LOWER ROOF AREAS.
- 65 2" x 4" PRESSURE TREATED INSULATION STOP C/W 1/2" THK. CONTINUOUS STRIPS OF EXTERIOR GRADE PLYWOOD, TYPICAL AT INSULATION STOPS ALONG UPPER & LOWER ROOF AREAS.
- 66 3 5/8" STEEL STUD FRAMING AT 16" c/c. C/W PERIMETER TRACK STUDS ATTACHED TO SURROUNDING EXISTING MASONRY WALLS.
- 67 LINES OF APPLIED FIREPROOFING SYSTEM.



1 SECTION - AT GUARDRAIL CONNECTIONS
SCALE: 3" = 1'-0"



2 SECTION - AT VENT STACK
SCALE: 3" = 1'-0"



NOTES :

LEGEND:



CONSTRUCTION

1	ISSUED FOR CONSTRUCTION	15/06/22
0	ISSUED FOR TENDER	10/09/21
NO.	REVISIONS	DD/MM/YY

PROJECT :
DALHOUSIE UNIVERSITY
GH MURRAY BUILDING
GAS ATOMIZER

DRAWING TITLE :
ARCHITECTURAL
ROOF DETAILS

C.P.#:	2020-0069
TRADE W.O.#:	
PROJECT MANAGER:	P.D.
CAD W.O.#:	460010
SCALE:	3" = 1'-0"
DRAWN BY:	Author
DATE:	15/06/22

A-408



EASTPOINT

July 7, 2022

Halifax Regional Municipality
Land Development & Subdivision
Current Planning/Planning and Development

Attention: Saira Shah, Planner I
Saira.shah@halifax.ca

**Re: Site Plan Approval Case File 24315 Dalhousie University 5291
Dacosta Row, Halifax NS**

Ms. Shah

Responding to the request made in the subject matter letter, which stated:

“1. Section 390 (2) (c) requires buffering to minimize visual impact for the roof features. Please increase the size of the roof screen proposed to ensure it is the same height as the roof features.”

Increasing the height of the roof screen, would greatly impact the wind, snow and moment loads designed for the roof to accommodate the screen height as requested. This would render the structural steel as designed to be insufficient and would require a total redesign of the roof structure.

We trust our explanation is satisfactory in allowing the structure to remain as designed and allow construction to proceed as scheduled.

Yours truly,

Original Signed

EASTPOINT ENGINEERING LIMITED

Ade Olatunde, P. Eng.
Structural Engineer