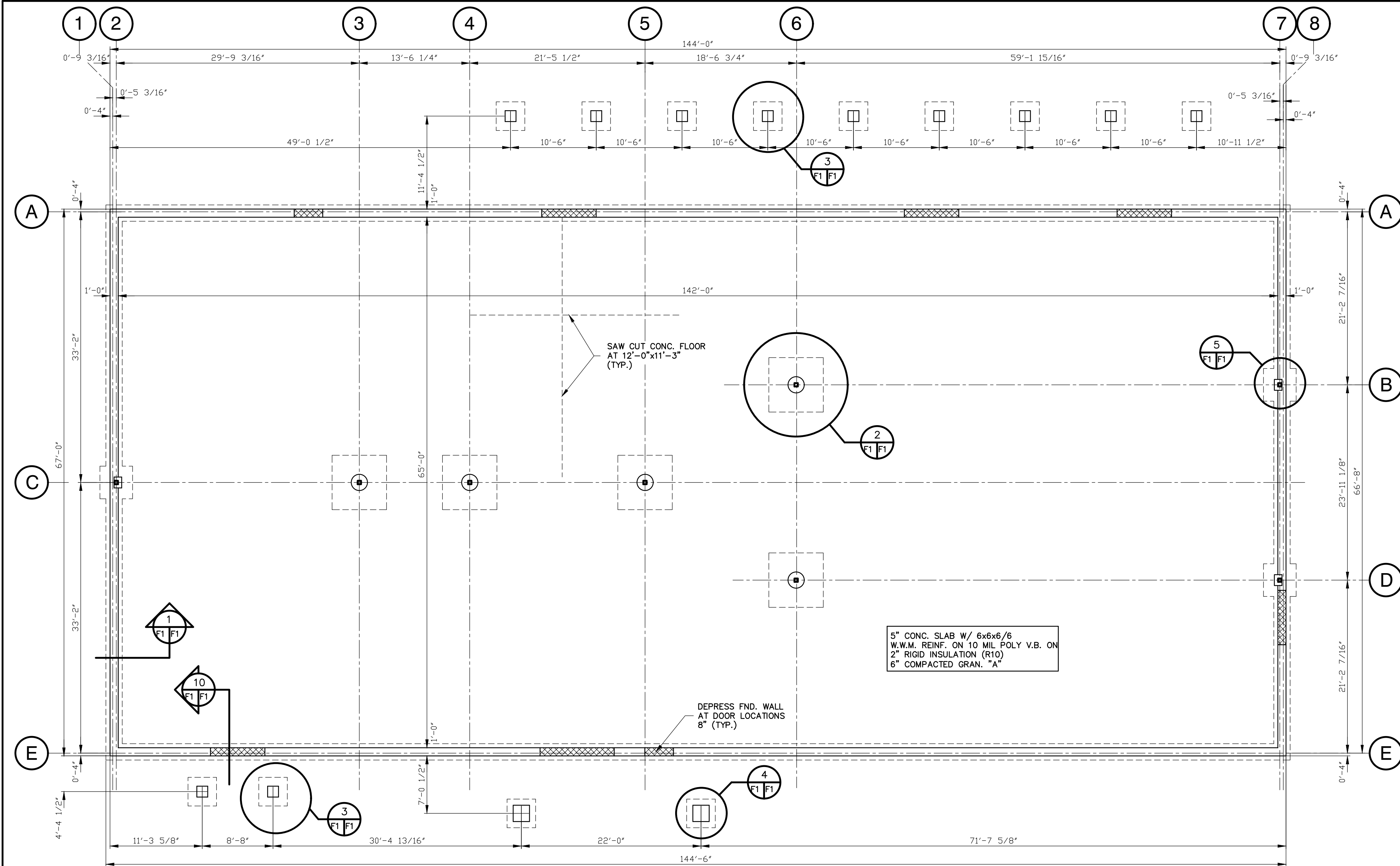
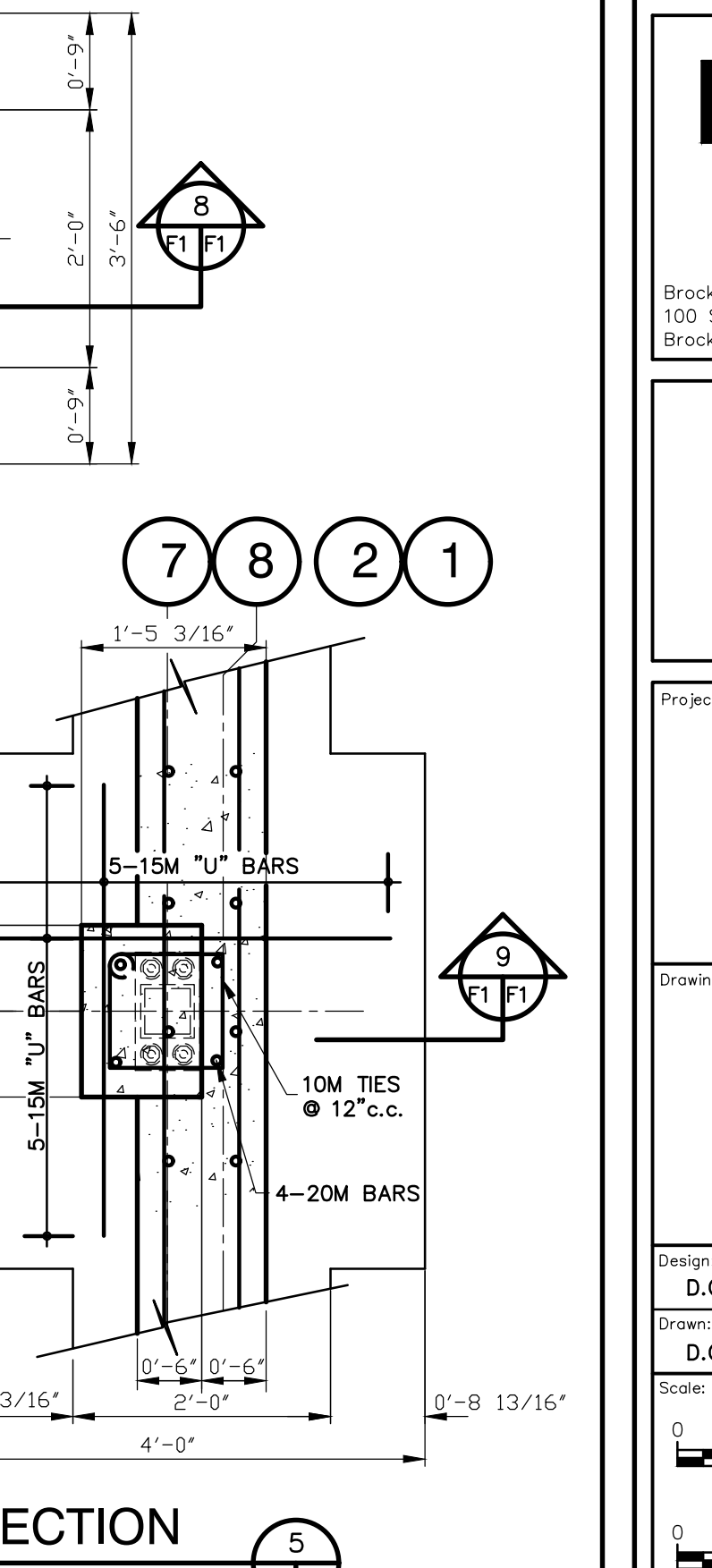
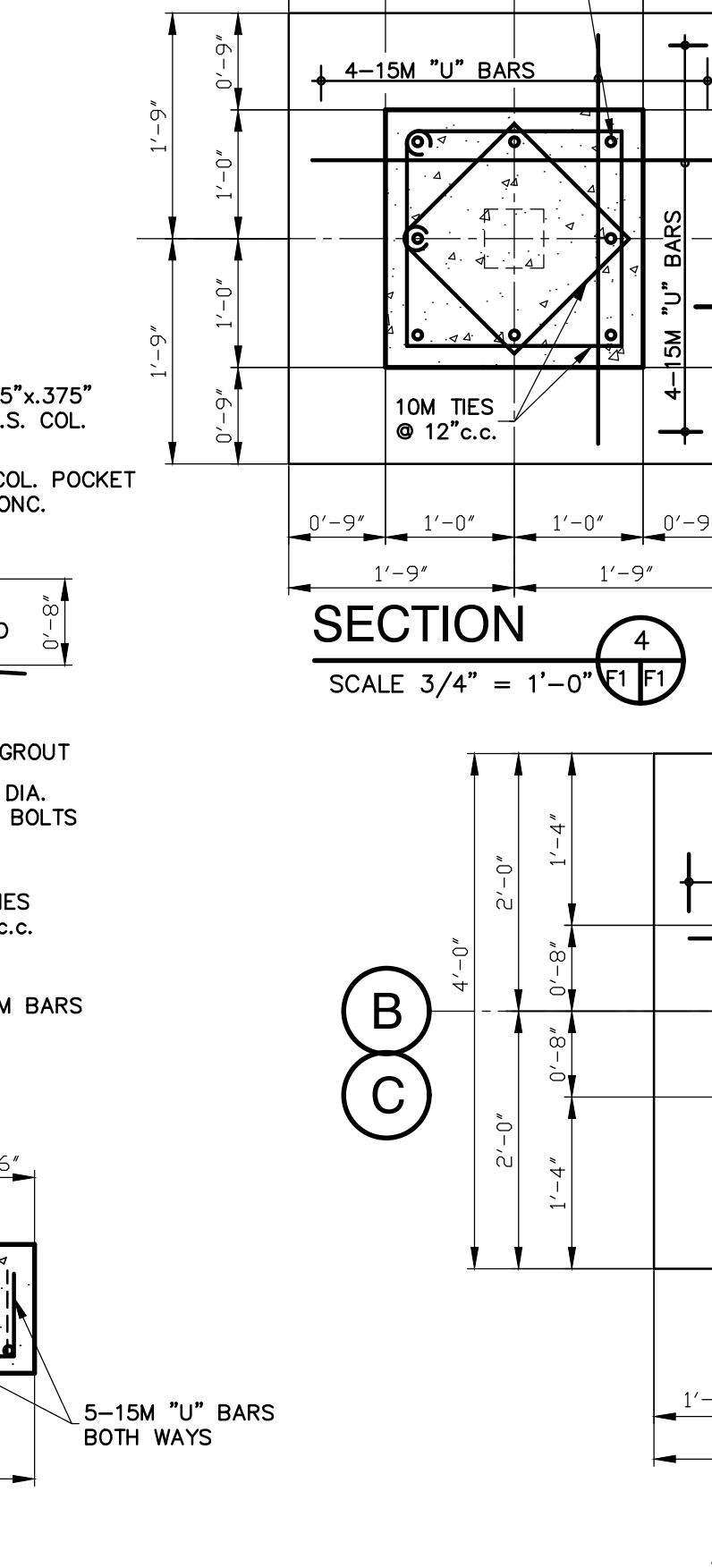
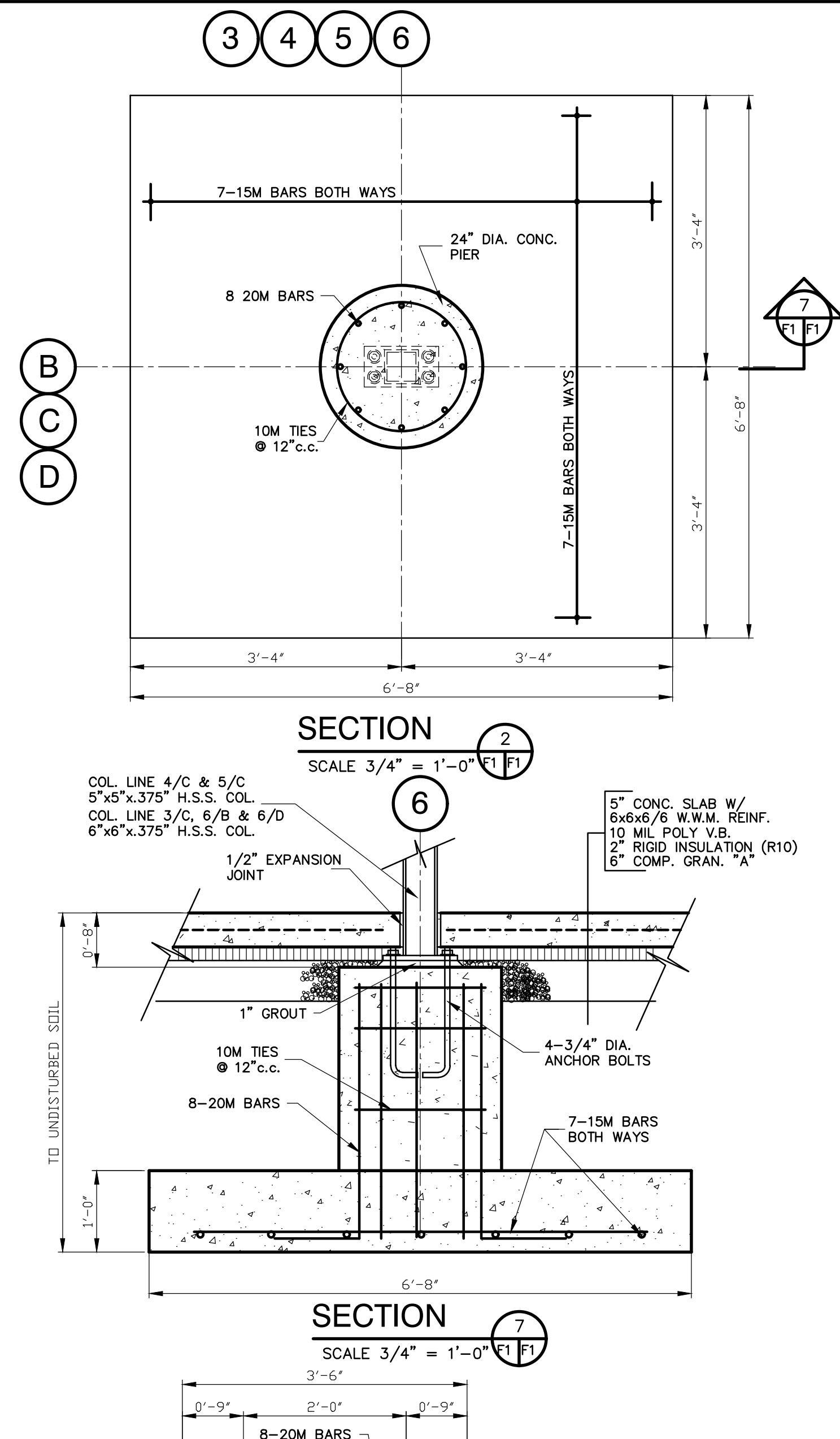
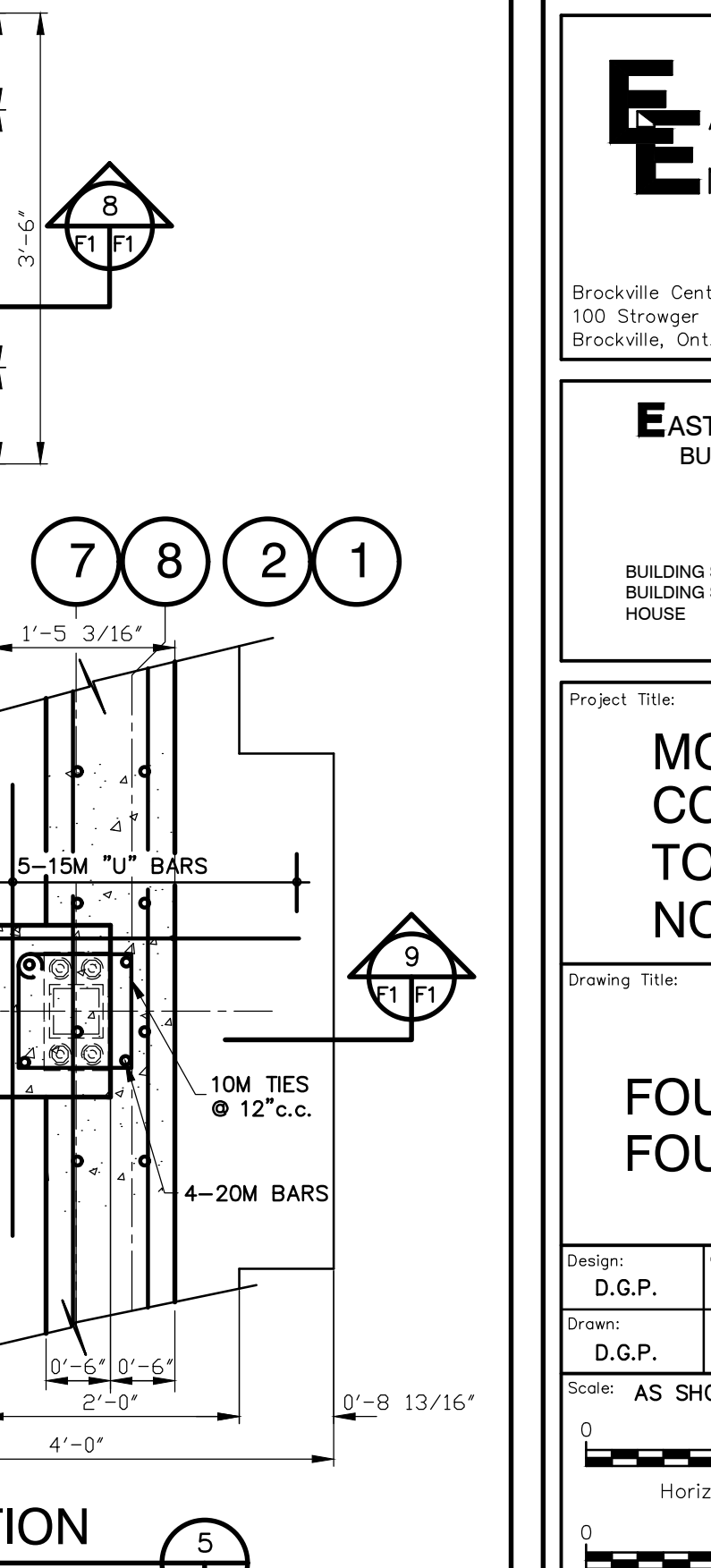
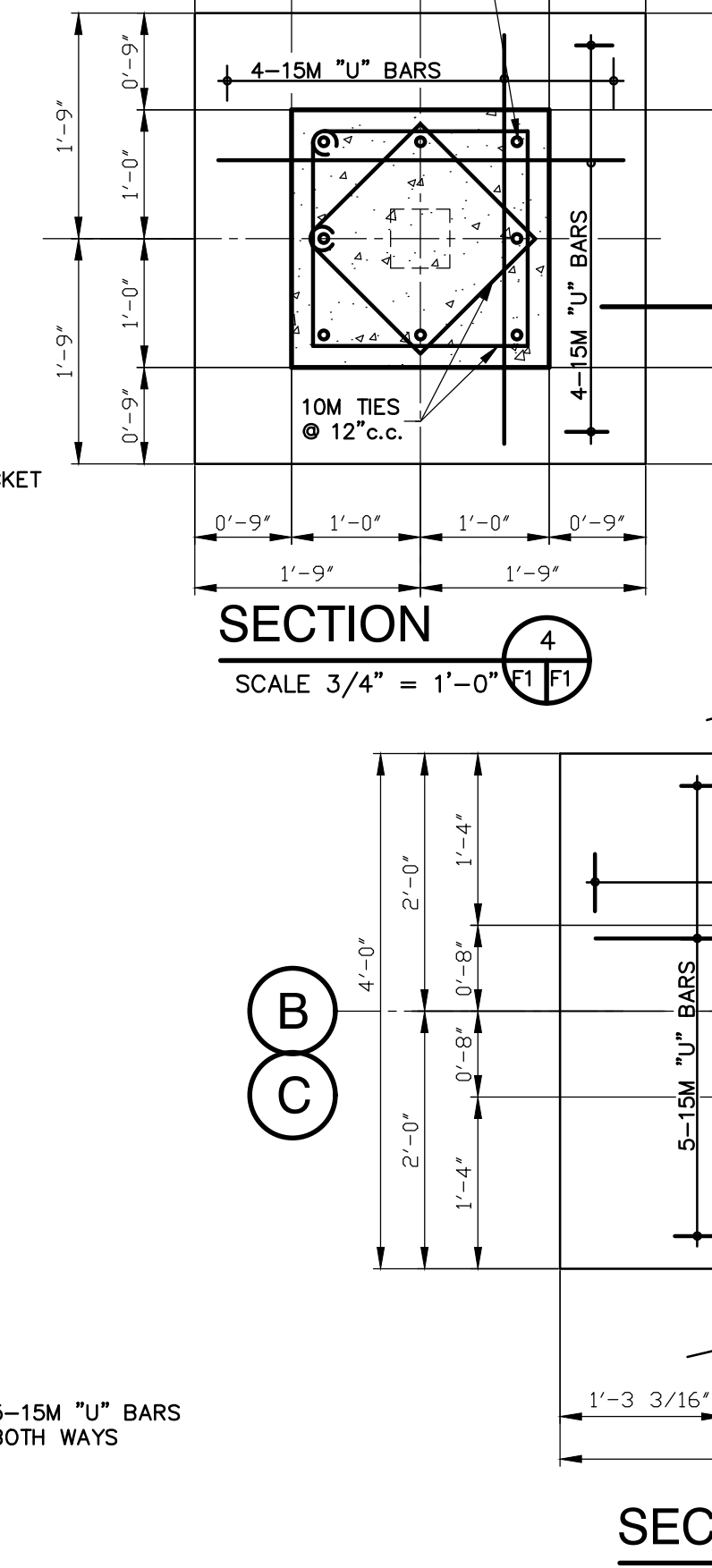
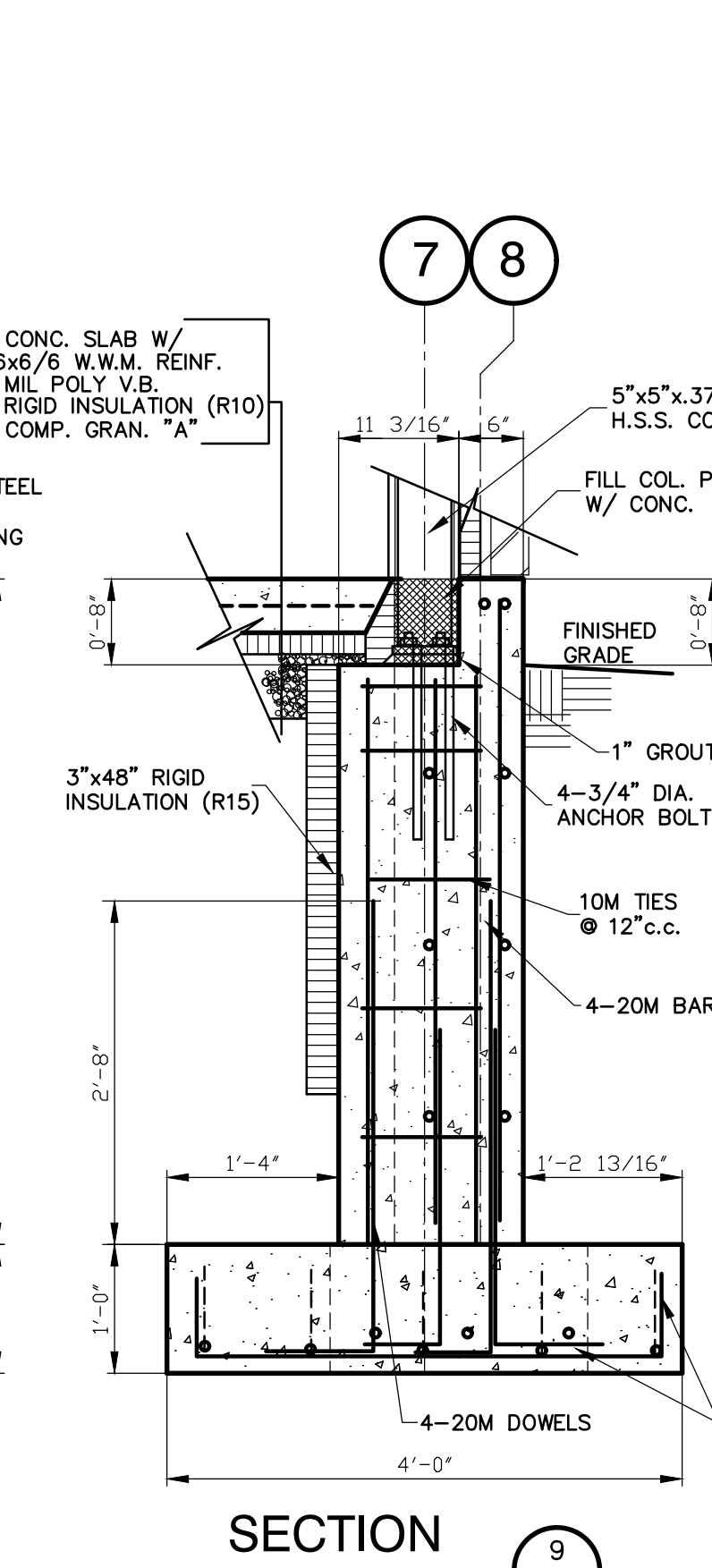
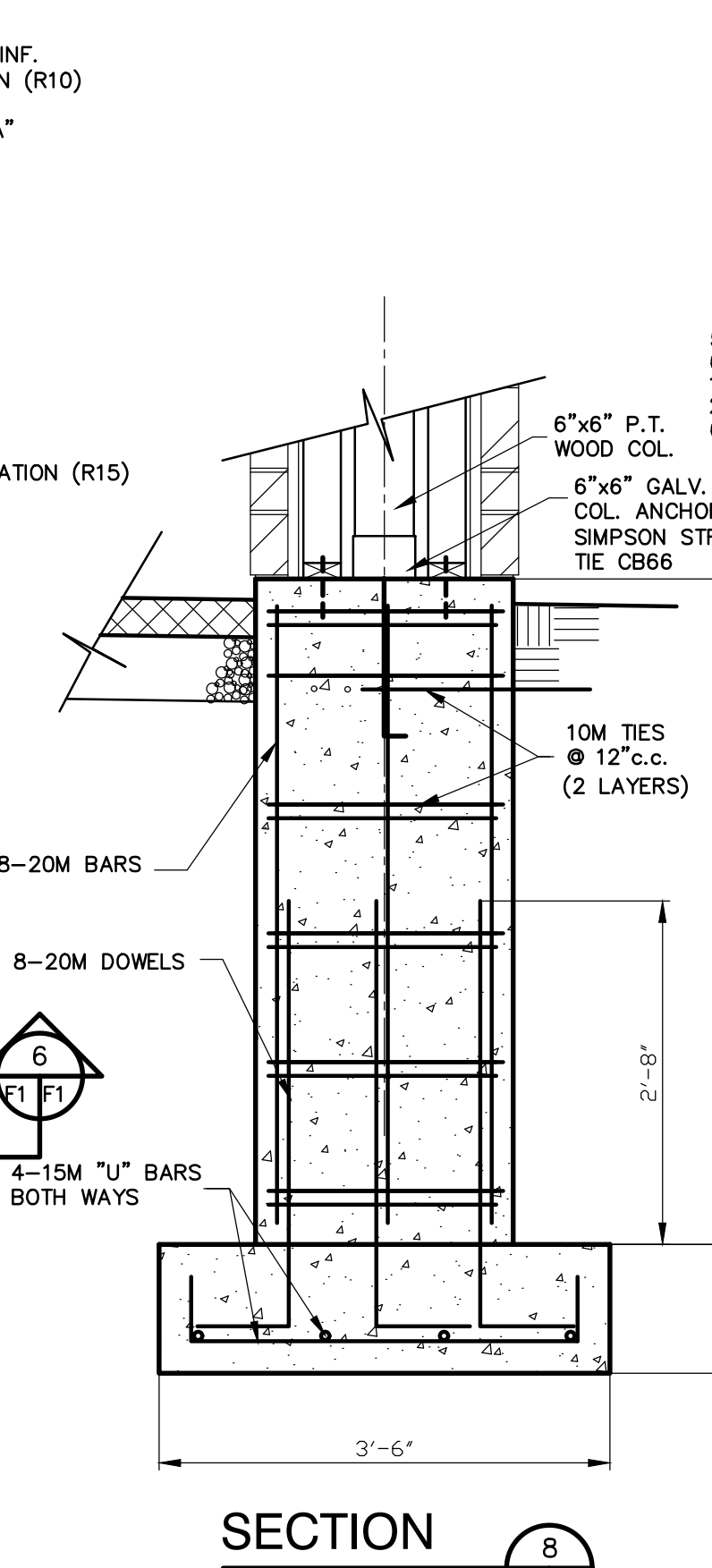
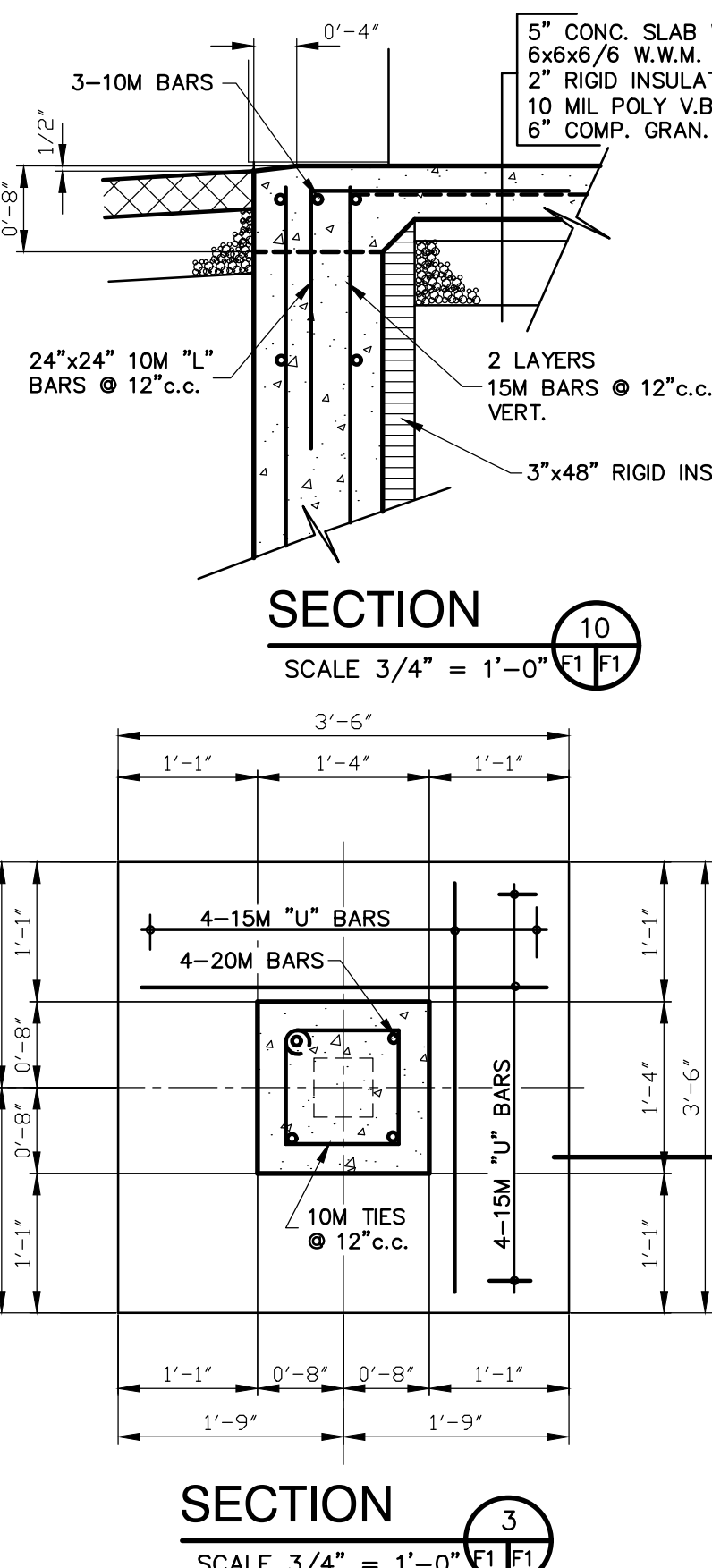
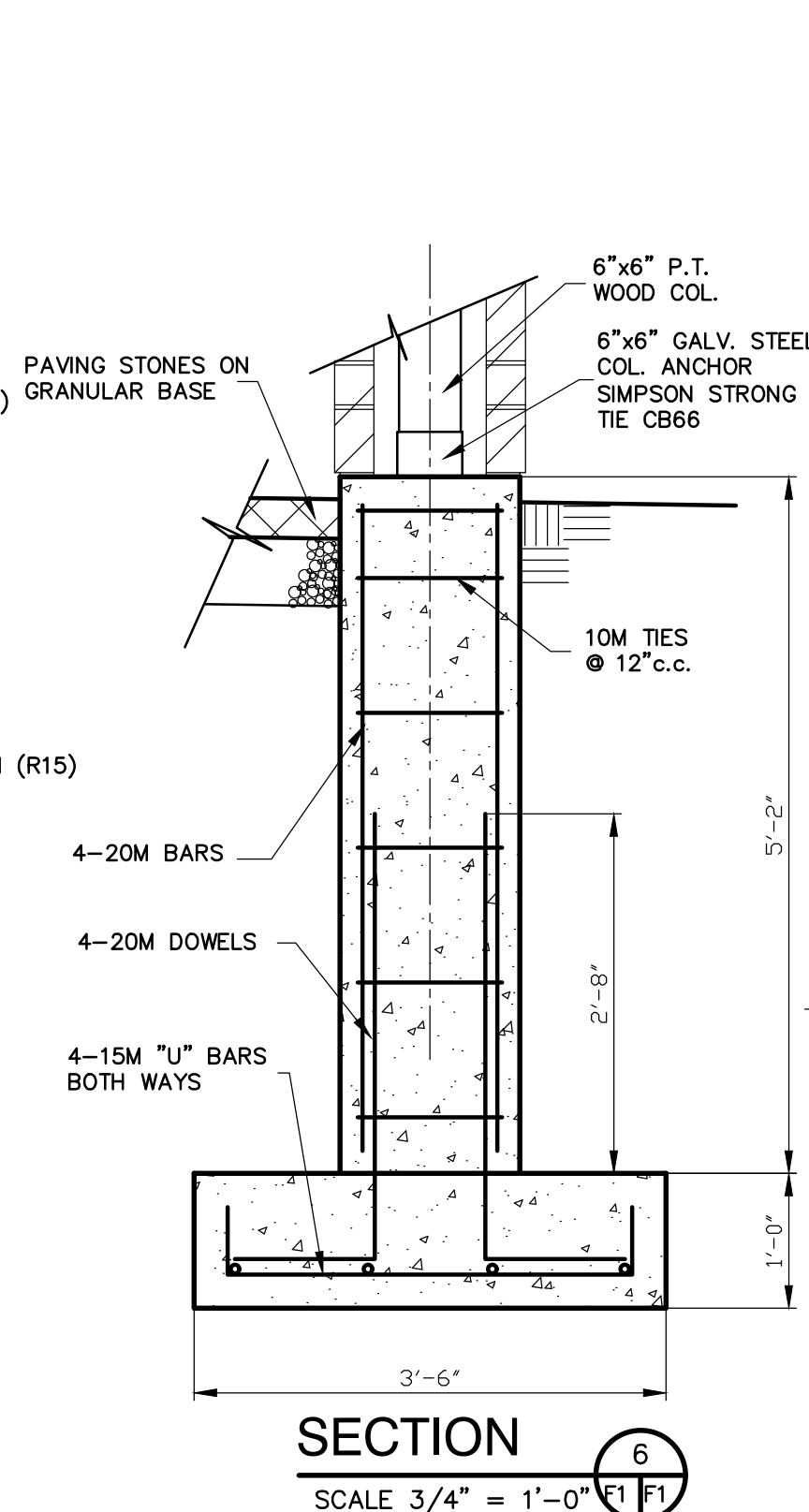
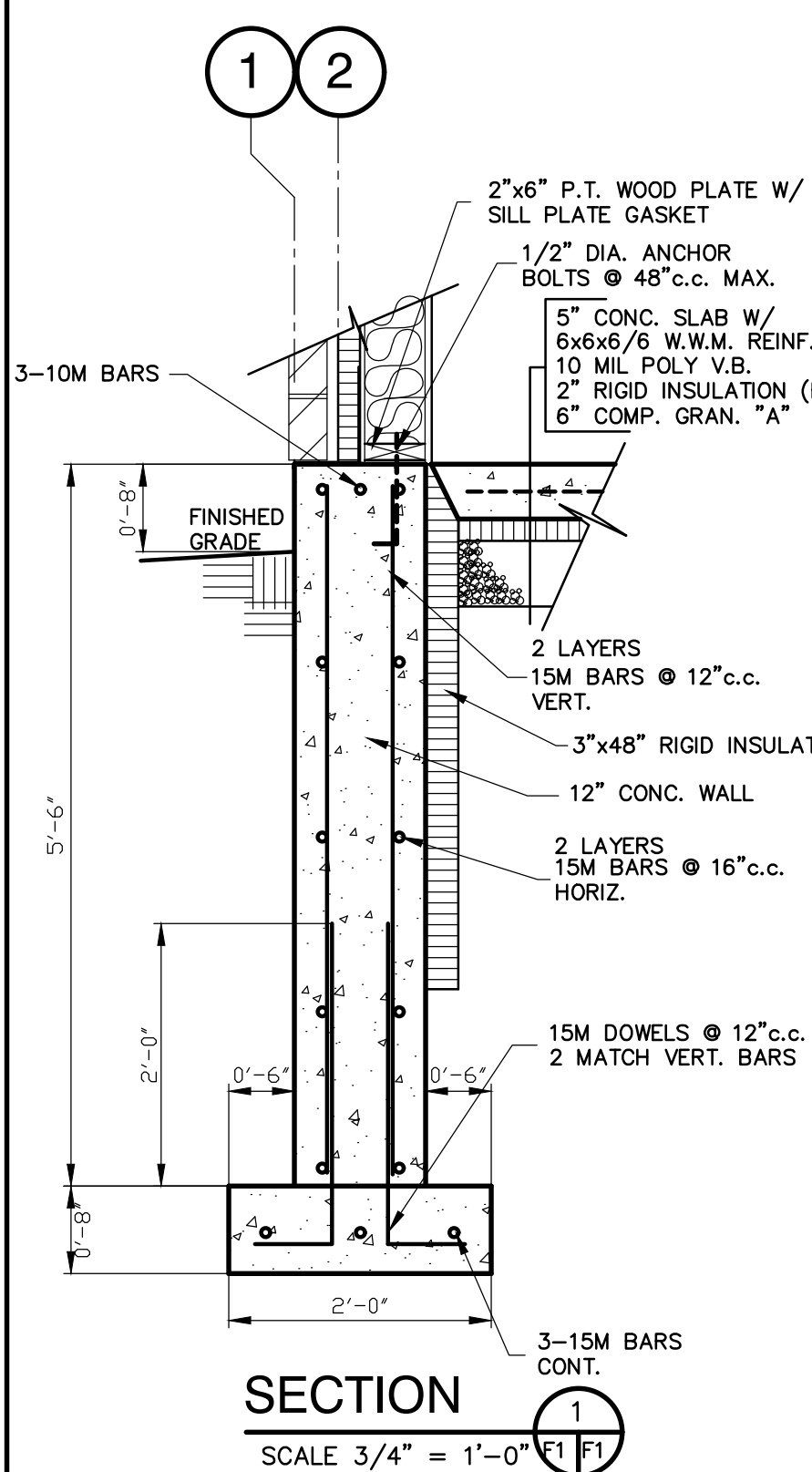




FOUNDATION PLAN
SCALE 1/8" = 1'-0"



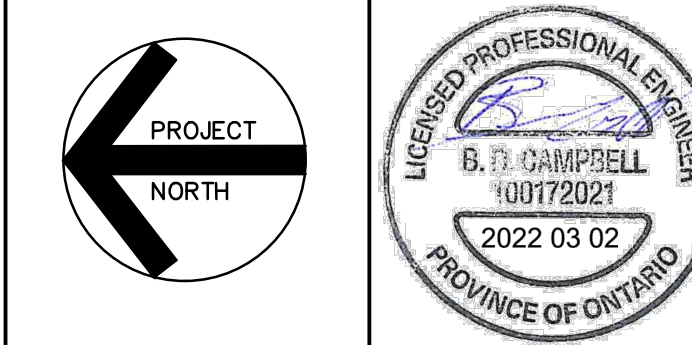
FOR GENERAL NOTES SEE DWG. S0

No.	By	Date	Revisions
1	DGP	2/3/22	FOR PERMIT

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EASTERN ENGINEERING GROUP INC.
BUILDING CODE IDENTIFICATION NO. 19467

CLASSES OF REGISTRATION:

BUILDING SERVICES	LARGE BUILDINGS
BUILDING STRUCTURAL	ON SITE SEWAGE
HOUSE	SMALL BUILDINGS

Project Title:

MOOSE CREEK COMMUNITY HALL
TOWNSHIP OF NORTH STORMONT

Drawing Title:

FOUNDATION PLAN
FOUNDATION DETAILS

Design: D.G.P.	Checked: B.C.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: B.C.	Date: MAY 26, 2021	Contract No.:
Scale: AS SHOWN		Drawing No.:	

Horizontal:

Vertical:

F1

File No.: 9657-F1

GENERAL NOTES

GOVERNING CODE - ONTARIO BUILDING CODE OF CANADA, 2012 EDITION:

DESIGN LOADS: (UNFACTORED)

GROUND SNOW LOAD:		Ss = 2.2 kPa Sr = 0.4 kPa Is = 1.15
ROOF:	DEAD LOAD SNOW LOAD	= 25.0 PSF (5 PSF ALLOWANCE SOLAR) = 52.0 PSF
FLOOR LOADS:	DEAD LOAD LIVE LOAD	= 70 PSF = 100 PSF
WIND LOAD:	q (1/50) = 0.41 kPa Iw = 1.15	
SEISMIC:	Sa (0.2) = 0.62 Sa (0.5) = 0.31	Sa (1.0) = 0.14 Sa (2.0) = 0.046 PGA = 0.31 Ie = 1.3 * SITE CLASS 'D' (TO BE CONFIRMED)

DESIGN LIVE LOADS TO INCLUDE POINT LOAD REQUIREMENTS AS PER ARTICLE 4.1.6.10 OF THE 2012 ONTARIO BUILDING CODE. FACTORED LOADS SHOWN ON DRAWINGS USE LOAD FACTORS LL = 1.5 AND DL = 1.25 PER ONTARIO BUILDING CODE.

FOUNDATIONS - GENERAL:

- THE FOUNDATION HAS BEEN DESIGNED FOR AN ASSUMED ALLOWABLE BEARING CAPACITY OF 75 kPa (1550 PSF) TO BE DETERMINED BY A THIRD PARTY GEO-TECHNICAL CONSULTANT. GEO-TECHNICAL ENGINEER TO REVIEW BEARING SOILS, SOME ADJUSTMENTS MAY BE REQUIRED.
- FOOTINGS MAY NOT BE POURED INTO AN EARTH-FORMED TRENCH.
- OPEN EXCAVATIONS SHALL BE DE-WATERED AS REQUIRED. MEASURES MAY BE REQUIRED TO PROTECT BEARING MATERIALS FROM DEGRADATION DUE TO EXTREME WEATHER AND CLIMATIC CONDITIONS.
- BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR ON NATIVE SOIL. FOOTING ELEVATIONS MAY NEED TO BE ADJUSTED.
- THE ENGINEER SHALL INSPECT ALL REBAR AND FORMWORK PRIOR TO PLACING CONCRETE. FORMWORK SHALL BE COMPLETE AT THE TIME OF INSPECTION, REINFORCEMENT MUST BE MINIMUM 95% COMPLETE AT TIME OF INSPECTION. PROVIDE MINIMUM 24 HOUR NOTICE AT THE FOLLOWING SCHEDULED EVENTS:
 - FOOTING PLACEMENT
 - FOUNDATION WALL PLACEMENT
 - SLAB ON GRADE PLACEMENT
- WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL. ALL FILL TO BE GRANULAR MATERIAL AS APPROVED BY ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE BRACING AND SUPPORT OF FORMWORK TO ENSURE WALLS ARE PLUMB WITHIN ACCEPTABLE LIMITS (1:500).
- GRANULAR FILL SHALL BE MINIMUM 6" GRANULAR "A" COMPACTED TO 98% S.P.D.D. ALL OTHER FILL ON SITE SHALL BE GRANULAR B TYPE II COMPACTED TO 98% S.P.D.D. U.N.O. GRANULAR FILL SHALL BE COMPACTED IN MAXIMUM 10" LIFTS. FILL NOT SPECIFIED ON THE DRAWINGS TO BE USED ON SITE MUST BE APPROVED BY THE DESIGNER PRIOR TO PLACEMENT.

CONCRETE:

- DESIGN OF CONCRETE ELEMENTS SHALL CONFORM TO CSA-A23.3-14. PROVIDE CONCRETE AND PERFORM WORK TO CSA A23.3-04.
- TEST CONCRETE IN ACCORDANCE WITH CSA-A23.3-14.
- CONCRETE REQUIREMENTS:

LOCATION CONDITION	MIN. DESIGN STR. Mpa = TYPE (DAYS) C = COMPRESSION F = FLEXURAL	CEMENT	AIR (mm)	MAX AGG.	EXP.
INTERIOR SLAB	25C (28)	GU	< 3	20	N
FOOTINGS	20C (28)	GU	< 3	20	N
FOUNDATION WALLS	25C (28)	GU	4-7	20	F-2
EXTERIOR CONC & GARAGE SLAB	35C (28)	GU	4-7	20	C-1
- WHERE SPECIFIED STRENGTH EXCEED THOSE IMPLIED BY EXPOSURE CLASS, SPECIFIED STRENGTH GOVERNS. - ALL CONCRETE TO BE NORMAL WEIGHT 2400 KG/CUBIC METER - WATER CEMENT RATIOS FOR EXPOSURE CLASSES AS PER TABLES 7 - 9, CAN/CSA-A23.1-14. - DO NOT USE ANY ADMIXTURE CONTAINING CHLORIDE FOR CONCRETE WITH S-2 EXPOSURE. - NORMAL PORTLAND CEMENT TO BE USED FOR CONCRETE.					
4. CONTROL JOINTS FOR SLAB ON GRADE: SAWCUT AT LOCATIONS SHOWN ON DRAWINGS BUT NOT EXCEEDING 4.572 m SPACING, UNLESS OTHERWISE NOTED.					
5. NO COLUMN OR WALL FORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 10 Mpa FOR ARCHITECTURAL CONCRETE AND 8 Mpa FOR OTHER COLUMNS OR WALLS.					
6. NO SLAB FORMS OR BEAM FORMS SHALL BE REMOVED BEFORE CONCRETE HAS REACHED 17 Mpa.					
7. STRENGTH OF CONCRETE FOR STRIPPING TO BE DETERMINED BY FIELD-CURED CYLINDERS. ALTERNATE METHODS, IF ACCEPTABLE TO THE STRUCTURAL DESIGN ENGINEER, MAY BE USED.					
8. RESHORING TO BE APPROVED BY THE ENGINEER PRIOR TO STRIPPING.					
9. ALL SLABS, BEAMS, GIRDERS, ETC. TO BE SHORED UNTIL CONCRETE REACHES DESIGN STRENGTH.					
10. BE RESPONSIBLE FOR THE MIX DESIGN. MIX DESIGN SHALL BE PROPORTIONED WITH DUE CONSIDERATION TO EXTREME TEMPERATURES - WINTER OR SUMMER AND CONSULT GENERAL CONTRACTOR TO DETERMINE REQUIREMENTS. ADMIXTURES AND ADDITIVES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.					

REINFORCING NOTES:

- REINFORCING STEEL: NEW DEFORMED BARS TO CSA/G30.18-09 (R2014), "BILLET STEEL BARS FOR CONCRETE REINFORCEMENT", GRADE 400R, BARS TO BE WELDED CONFORM TO CAN/CSA G30.18-09, GRADE 400W. ANCHOR BOLTS TO ASTM A307. EPOXY COATED REBAR TO ASTM A775. PLACE REBAR TO CAN/CSA-A23.1-14.
- PROVIDE CLEAR CONCRETE COVER OVER REBAR AS FOLLOWS:
 - SURFACE POURED AGAINST GROUND 75 mm
 - FORMED SURFACES EXPOSED TO GROUND OR WEATHER 40 mm
 - FORMED SURFACES NOT EXPOSED TO GROUND OR WEATHER:
BEAMS (TO STIRRUPS) 40 mm
COLUMNS (TO VERTICALS) 50 mm
SLABS, WALLS 20 mm
 - PARKING SURFACES AND EXTERIOR TOP OF SLAB: 40 mm
- REINFORCING WORK TO BE INSPECTED BY THE ENGINEER. NOTIFY THE ENGINEER 24 HOURS IN ADVANCE. CONTRACTOR MUST ENSURE MINIMUM 95% STEEL ARE IN PLACE FOR THE INSPECTION.
- REBAR LAP SPICE LENGTHS (UNLESS NOTED ON DRAWINGS)

BAR SIZE	COMP. SPLICES (mm)	TENSION SPLICE "CLASS B"	FOR CONCRETE STRENGTHS (mm)
		25 Mpa 30 Mpa	35 Mpa 40 Mpa
10M	330	430 (560) 380 (510)	360 (460) 330 (430)
15M	480	610 (790) 535 (700)	510 (660) 480 (610)
20M	580	740 (940) 660 (865)	610 (815) 580 (760)
25M	740	1170 (1525) 1065 (1400)	990 (1295) 940 (1220)

TOP BAR SPICE LENGTHS ARE DENOTED IN BRACKETS AND SHOULD BE USED WHEN HORIZONTAL SPICE BARS ARE PLACED SUCH THAT THERE IS MORE THAN 300mm OF CONCRETE POURED BELOW THE BAR.

REBAR EMBEDMENT LENGTHS (UNLESS NOTED ON DRAWINGS)

BAR SIZE	COMPRESSION EMBEDMENT FOR CONCRETE STRENGTH (mm)	TENSION EMBEDMENT FOR CONCRETE STRENGTH (mm)
	20 Mpa 25 Mpa 30 Mpa	25 Mpa 30 Mpa 35 Mpa 40 Mpa
10M	250(330) 230 (280) 200 (250)	330 (430) 305 (380) 80 (360) 50 (330)
15M	360 (450) 300 (400) 275 (360)	460 (610) 430 (530) 80 (510) 360 (480)
20M	430 (535) 380 (485) 360 (450)	560 (735) 510 (660) 80 (610) 60 (585)
25M	535 (710) 485 (635) 450 (585)	915 (1170) 840 (1070) 760 (990) 10 (940)
30M	635 (840) 585 (740) 535 (685)	1070 (1400) 90 (1270) 15 (1170) 40 (1120)
35M	760 (990) 685 (900) 635 (810)	1295 (1675) 170 (1525) 090 (1420) 1015 (1320)

TOP BAR DEVELOPMENT LENGTHS ARE DENOTED IN BRACKETS AND SHOULD BE USED WHEN HORIZONTAL BARS ARE PLACED SUCH THAT THERE IS MORE THAN 300 mm OF CONCRETE POURED BELOW THE BAR.

- MIN. REINFORCING AROUND OPENINGS LARGER THAN 300 mm: 2 - 15M EACH SIDE OF OPENING, EXTENDED 600 mm PAST CORNERS.
- DOWELS SHALL BE PLACED BEFORE CONCRETE IS POURED. TEMPLATES SHALL BE USED TO ENSURE CORRECT PLACEMENT OF DOWELS. DOWELS TO MATCH VERTICAL BARS.
- PROVIDE SUFFICIENT CHAIRS AND SUPPORT BARS TO MAINTAIN CONCRETE COVER AS SPECIFIED.

WOOD

- ALL LUMBER TO BE MIN. NO. 2 SPF TO CSA 086-14 ENGINEERING DESIGN IN WOOD, UNO.
- ROOF TRUSSES TO BE DESIGNED TO PART 4 OF THE ONTARIO BUILDING CODE TO THE LOADS SPECIFIED. TRUSS MANUFACTURER TO SUPPLY SHOP DRAWINGS AND LAYOUT DRAWING STAMPED BY PROFESSIONAL ENGINEER LICENSED IN PROVINCE OF ONTARIO. TRUSSES TO BE DESIGNED FOR BEARING SURFACES AS SHOWN ON DRAWINGS. ALL ROOF TO HAVE HURRICANE CLIPS TO RESIST UPLIFT LOADS.
- NAILING TO ONTARIO BUILDING CODE UNLESS NOTED OTHERWISE. BOLTS FOR WOOD CONNECTIONS SHALL BE MIN GRADE A307.
- WHERE FASTENERS ARE EXPOSED TO EXTERIOR CLIMATE ALL COMPONENTS, FASTENERS AND BRACKETS SHALL BE HOT DIP GALVANIZED.
- PRE-MANUFACTURED COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND INSTALLATION GUIDELINES. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.

STRUCTURAL STEEL:

- FABRICATE AND ERECT STRUCTURAL STEEL TO CAN/CSA S16.1-14. SUBMIT TWO SETS OF PRINTS OF SHOP DRAWINGS SHOWING ALL DETAILS AND MATERIAL SPECS. FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWING SHALL BE SEALED BY PROFESSIONAL ENGINEER REGISTERED IN ONTARIO.
- PROVIDE STRUCTURAL STEEL TO CSA G40.21-13 WITH THE FOLLOWING GRADES:

WIDE FLANGE BEAMS & COLUMNS	350 W
CHANNELS	350 W
HSS SECTION (CLASS H)	350 W
ANGLES & BARS & PLATES	300 W
MISCELLANEOUS STEEL	300 W
PIPE COLUMNS (HSS)	350 W "CLASS C"

- PROVIDE ERECTION BOLTS TO ASTM A325, MINIMUM M20. DESIGN BOLTED CONNECTIONS TO ASTM A325 ASSUMING THREADS IN THE SHEAR PLANE.
- WELD TO CSA W59-18 BY FABRICATORS CERTIFIED TO CSA W47.1-09 WELDING OF REINFORCING BARS SHALL CONFORM TO CSA W186-M1990(R2012).
- MINIMUM WELDS FOR CONNECTIONS SHALL BE 5mm FILLET WELDS AND WHERE EXPOSED IN FINISHED BUILDING WELDS SHALL BE GROUND SMOOTH.
- CONNECTIONS NOT DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGNED BY THE STEEL FABRICATOR. MINIMUM BEAM SHEAR IS 80% OF THE TOTAL BEAM LOAD CAPACITY AS LISTED IN "CISC MANUAL BEAM LOADS TABLES" FOR THE GIVEN SPAN OF THE BEAM U.N.O. UNUSUAL LOADINGS SHOWN ON PLANS ARE SPECIFIED LOADS. SEE LEGEND FOR EXPLANATION OF THESE LOADS.

UNLESS OTHERWISE NOTED, ALL CONNECTIONS SHALL BE SIMPLE CONNECTIONS. FOR BEAMS TO FACE OF HSS COLUMN CONNECTIONS PROVIDE DOUBLE ANGLE OR TEE-TYPE CONNECTIONS PER CISC HANDBOOK.

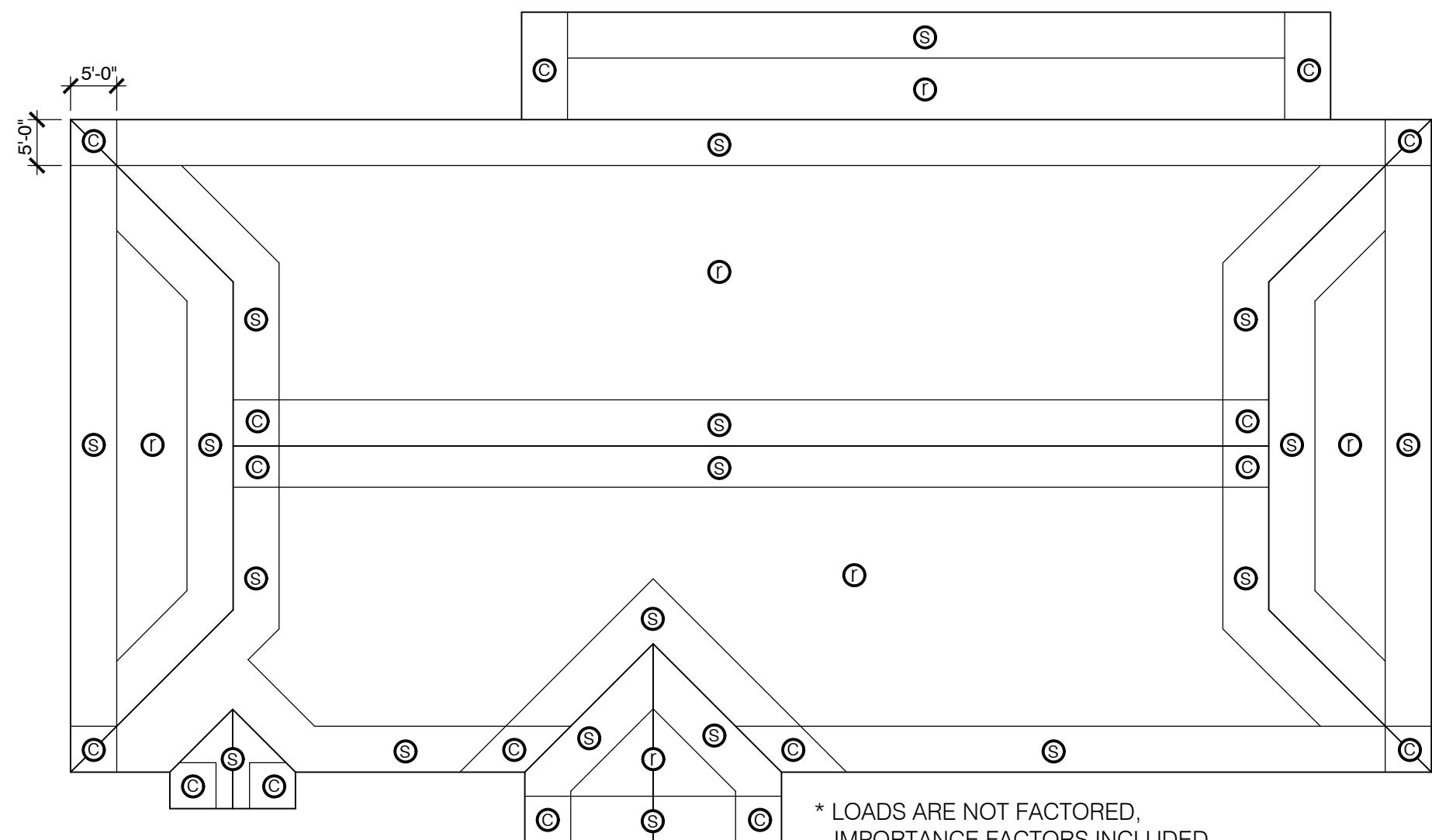
FOR CONNECTIONS NOT DESCRIBED ABOVE NOR DETAILED ON THE STRUCTURAL DRAWINGS (I.E. SMALL FRAMING MEMBERS) USE ANY TYPE OF SIMPLE CONNECTION AND DESIGN FOR THE SPECIFIED LOAD SHOWN.

SIMPLE BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED TO DELIVER SHEAR ONLY TO THE FACE OF THE COLUMN. SEISMIC AND DRAG STRUT CONNECTIONS SHALL BE DESIGNED TO DELIVER SHEAR ONLY TO THE CENTER LINE OF THE COLUMN.

UNLESS OTHERWISE NOTED, CONNECTIONS ARE TO BE WELDED OR BOLTED WITH HIGH STRENGTH BOLTS IN BEARING TYPE CONNECTIONS (MIN. 2 - 20 DIA. BOLTS).

BOLTED CONNECTIONS FOR DRAG STRUT LINES ARE TO BE PRE-TENSIONED. THE PRIME STRUCTURAL CONSULTANT SHALL HAVE FINAL APPROVAL ON ALL CONNECTIONS.

- TEMPORARY BRACING DURING CONSTRUCTION TO BE DESIGNED BY CONTRACTOR (WHOMEVER IS RESPONSIBLE FOR ERECTION). CONTRACTOR IS RESPONSIBLE FOR SAFETY ON SITE.
- COORDINATE WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS TO AVOID CONFLICT WITH STRUCTURAL ELEMENTS.
- NO BURNING OF HOLES SHALL BE ALLOWED IN STRUCTURAL STEEL ANYWHERE.
- FOR MISC. STEEL SUCH AS RAILINGS, AWNINGS AND NON-STRUCTURAL ARCH. STEEL NOT DETAILED ON STRUCTURAL DRAWINGS, STRUCTURAL ENGINEER SHALL CHECK SHOP DRAWINGS AND COMMENT ON THE ABILITY OF THE SHOWN MEMBERS AND CONNECTIONS TO RESIST LOADS AND OTHER EFFECTS REQUIRED BY ONTARIO BUILDING CODE 2012. OVERALL DETAILING TO COMPLY WITH ARCHITECTURAL DRAWINGS AND ARE THE SUB-CONTRACTOR'S RESPONSIBILITY. ALL RAILINGS AND STAIR SHOP DRAWINGS TO BE STAMPED BY P.ENG. OF ONTARIO.
- ALL VISUALLY EXPOSED SURFACES OR SURFACES EXPOSED TO WEATHER AND NOT REQUIRING FIREPROOFING SHALL BE PAINTED WITH ONE COAT OF PRIMER TO CISC/CPMA 1-73A (REFER TO ARCHITECTURAL DRAWINGS). ALL SITE WELD AND WELDING CONNECTIONS TO BE TOUCHED-UP WITH ANTI-RUST PAINT.
- THE STEEL STRUCTURE IS A NON-SELF-SUPPORTING STEEL FRAME AND IS DEPENDENT UPON DIAPHRAGM ACTION THE DECK FLOORS AND ATTACHMENT TO THE WALL SYSTEM FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES. PROVIDE ALL TEMPORARY SUPPORTS REQUIRED FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES UNTIL THESE ELEMENTS ARE COMPLETE AND ARE CAPABLE OF PROVIDING THIS SUPPORT.
- REFER TO SCHEDULE ON DWG FOR NON-BEARING WALL LINTELS NOT SHOWN ON STRUCTURAL DWG. REFER TO ARCH. & MECH. DWG. FOR OPENING SIZES AND LOCATIONS.
- PROVIDE HOLES IN STEEL MEMBER FOR ATTACHMENT OF OTHER MATERIALS EXCEPT AT CRITICAL TENSILE SECTIONS OF BEAMS.
- NO SPLICES IN COLUMNS AND BEAMS ARE ALLOWED WITHOUT THE ENGINEER'S APPROVAL. 100% BUTT WELDS IN SPLICES ARE TO BE ULTRASONICALLY TESTED OR EQUAL AND ACCEPTED BY A WELDING INSPECTION COMPANY.



* LOADS ARE NOT FACTORED, IMPORTANCE FACTORS INCLUDED

- 54 PSF
- 35 PSF
- 17 PSF

WIND UPLIFT ROOF PLAN

1	B.C.	2/3/22	FOR PERMIT
No.	By	Date	Revisions

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DRAWINGS ARE NOT TO BE SCALED



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EASTERN ENGINEERING GROUP INC.

BUILDING SERVICES
BUILDING STRUCTURAL
DETECTION, LIGHTING & POWER
HOUSE

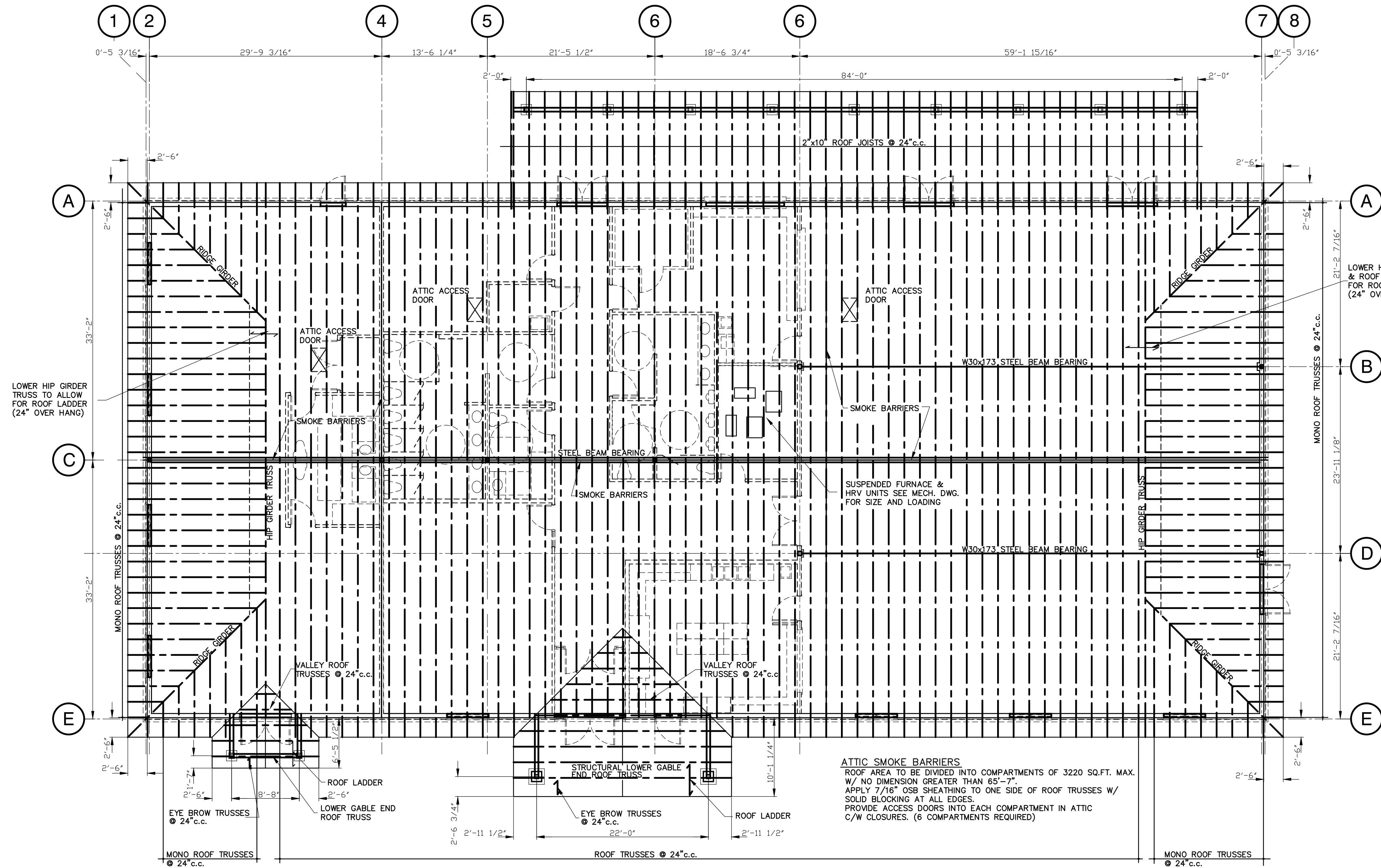
LARGE BUILDINGS
ON SITE SEWAGE
SMALL BUILDINGS

Project Title:
**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:
STRUCTURAL NOTES

Design:	Checked:	Approved:	Project No.: 9657
Drawn:	Checked:	Date: JULY 22, 2021	Contract No.:
Scale: Horizontal: Vertical:	Drawing No.: S0 File No.: 9657-S0		

Scale: AS SHOWN  Horizontal:  Vertical:	Drawing No.: S1 File No.: 9657-S1
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STRUCTURAL ROOF FRAMING PLAN
SCALE 1/8" = 1'-0"

NOTE: SEE WALL SECTIONS FOR DETAILS OF
HOLD DOWN CLIPS AND BEARING SIZES.
CONTRACTOR TO PROVIDE 3 ATTIC ACCESS
DOORS. LOCATIONS TO BE APPROVED BY
OWNER.

GENERAL NOTES

1. ROOF TRUSSES TO BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE O.B.C. AND NATIONAL BUILDING CODE SUPPLEMENT FOR SNOW/RAIN LOADING
2. DESIGN LOADS:
SEE DRAWING No. S0 FOR ALL DESIGN LOADS
3. ROOF TRUSS MANUFACTURER TO PROVIDE LAYOUT DRAWINGS.
4. ROOF TRUSS MANUFACTURER TO SUPPLY SHOP DRAWINGS OF ROOF TRUSSES WITH STAMP OF PROFESSIONAL ENGINEER, REGISTERED IN THE PROVINCE OF ONTARIO.
5. ROOF TRUSSES TO BE DESIGNED TO PART 4 OF THE ONTARIO BUILDING CODE.
6. TRUSS MANUFACTURER TO PROVIDE RATED HANGERS FOR REQUIRED LOADS.
7. TRUSS MANUFACTURER TO DESIGN TRUSSES FOR BEARING LENGTH AVAILABLE ON WALLS, BEAMS AND LINTELS SHOWN ON THE DRAWINGS.
8. ALL LUMBER USED FOR CONSTRUCTION OF TRUSSES, PLATES, ETC. SHALL BE MIN. SPRUCE SPECIES GROUP, No. 1 OR 2.
9. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF TRUSSES.
10. FOR ADDITIONAL NOTES SEE DWG. No. S0.

FOR GENERAL NOTES SEE DWG. S0

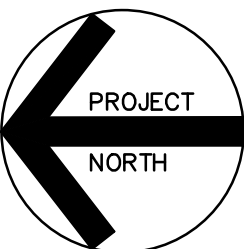
NOTE: DIMENSIONS ARE TAKEN FROM
FACE OF 7/16" WALL SHEATHING

1	DGP	2/3/22	FOR PERMIT
No.	By	Date	Revisions

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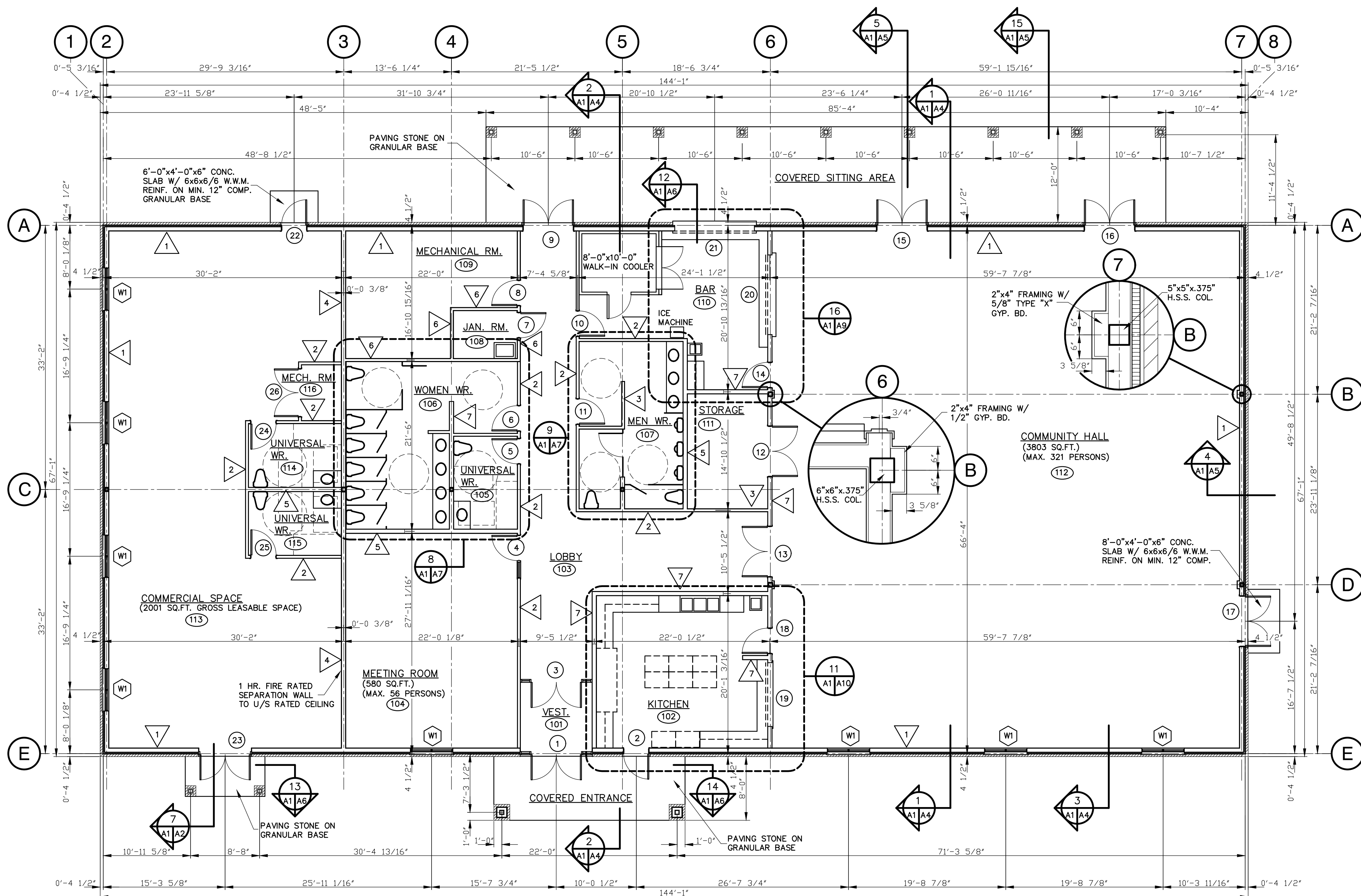
EASTERN ENGINEERING GROUP INC.
BUILDING CODE IDENTIFICATION No.
19467

CLASSES OF REGISTRATION:
BUILDING SERVICES LARGE BUILDINGS
BUILDING STRUCTURAL ON SITE SEWAGE
HOUSE SMALL BUILDINGS

Project Title:
**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:
**STRUCTURAL ROOF
FRAMING PLAN**

Design: B.C.	Checked:	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: B.C.	Date: MAY 26, 2021	Contract No.:
Scale: 1/8" = 1'-0"		Drawing No.:	
Horizontal:		Vertical:	
		S2	
		File No.: 9657-S2	



FLOOR PLAN
SCALE 1/8" = 1'-0"

GENERAL SCOPE OF WORK FOUNDATIONS & SITE WORK

- EXCAVATE FOR NEW FOUNDATIONS FOR COMMUNITY CENTRE & COVERED AREAS. REMOVE ALL TOPSOIL IN AREA OF CONSTRUCTION AND REMOVE ALL SURPLUS MATERIALS FROM SITE.
- PLACE CONCRETE FOOTINGS ON UNDISTURBED SOIL OR SOUND BEDROCK.
- BACK FILL FOUNDATIONS WITH COMPACTED GRANULAR MATERIAL TO WITH-IN 6" OF U/S OF CONCRETE SLAB. PLACE 6" COMPACTED GRANULAR "A" UNDER CONCRETE SLAB.
- PLACE 3" (R15) RIGID INSULATION ON INSIDE FACE OF FOUNDATION WALLS TO 48" BELOW FINISHED GRADE.
- INSTALL 10 MIL POLY V.B. UNDER CONCRETE FLOOR SLAB.
- INSTALL CONCRETE PADS OUTSIDE OF EXIT DOORS.
- ROUGH GRADE AROUND BUILDING. FINAL GRADING AND LANDSCAPING TO BE DONE BY OTHERS.
- SEE DRAWING No. SO FOR ADDITIONAL NOTES FOR FOUNDATIONS AND CONCRETE WORK.

FRAMING

- SEE DRAWING No. SO FOR GENERAL NOTES FOR WOOD AND WOOD ROOF TRUSSES.
- PROVIDE SILL PLATE GASKET UNDER ALL WOOD FRAMED WALLS PLACED ON CONCRETE.
- ALL SILL PLATES FOR FRAMED WALLS TO BE PRESSURE TREATED.

MASONRY VENEER

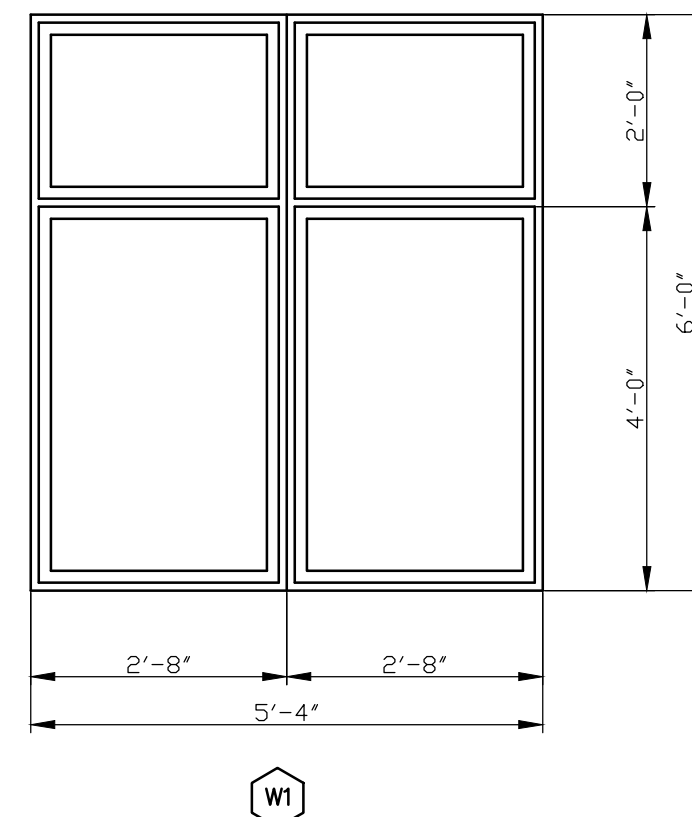
- STONE VENEER TO BE BRAMPTON BRICK CONCRETE STONE "ARTISTE 2".
- PRECAST CONCRETE SILLS TO BE AS MANUFACTURED BY BRAMPTON BRICK, SPLIT FACE FINISH.
- SUPPLY AND INSTALL ALL BRICK FLASHINGS, PREMANUFACTURED PVC WEEP HOLES @ 32" c.c. AND BLOK-LOC BL607 GALV. MASONRY TIES @ 18"x24" c.c.

MATERIAL SPECIFICATIONS

- INTERIOR WALL BOARD TO BE 1/2" STANDARD GYPSUM BOARD AND 5/8" TYPE "X" GYPSUM BOARD AS NOTED ON DRAWINGS.
- EXTERIOR WALL INSULATION TO BE R20 FIBREGLASS BATT IN WALL CAVITY AND 2" RIGID (R10) INSULATION BOARD ON EXTERIOR OF WALL SHEATHING.
- ATTIC INSULATION TO BE R71 FIBREGLASS.
- SIDING - ROOF GABLES - STANDARD "DOUBLE 5" VINYL HORIZ. SIDING EXTERIOR WALLS - HARDIE BOARD VERTICAL BOARD & BATTEN (8") SIDING COLOUR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD COLOURS.
- EXTERIOR TRIMS TO BE AS SUPPLIED BY HARDIE BOARD MANUFACTURER.
- ROOF FASCIA TO BE FLAT STOCK ALUMINUM, 0.024", COLOUR WHITE.
- SOFFIT TO BE VENTED ALUMINUM 0.024", COLOUR WHITE.
- METAL FLASHINGS TO BE PREFINISHED METAL, 26 GA. COLOUR TO BE SELECTED BY OWNER.
- ROOFING TO BE ASPHALT SHINGLES "CAMBRIDGE" ARCHITECTURAL SHINGLES BY IKO OR APPROVED EQUAL. COLOUR TO BE SELECTED BY OWNER.
- INTERIOR FINISHES
- FLOORING - VINYL TILE - ARMSTRONG COMMERCIAL GRADE VINYL FLOOR TILE COLOUR TO BE SELECTED BY OWNER FROM MANUFACTURER'S STANDARD COLOURS.
- OR APPROVED EQUAL.
- INSTALL AS PER MANUFACTURER'S SPECIFICATIONS. ALLOW FOR 2 COLOURS OR APPROVED EQUAL.
- RUBBER BASE - 4" HIGH x 1/8" THICK WITH TOE AS MANUFACTURED BY JOHNSITE OR APPROVED EQUAL.
- CERAMIC TILE - PROVIDE AN ALLOWANCE OF \$6.00 PER SQ.FT. FOR THE SUPPLY ONLY OF FLOOR AND WALL TILE. COST OF INSTALLATION TO BE INCLUDED IN BID.
- SUSPENDED ACOUSTICAL CEILING - SUSPENSION SYSTEM - FIRE RATED, TWO DIRECTIONAL EXPOSED TEE BAR GRID SYSTEM.
- CEILING PANELS - 24"x48"x3/4" BEVELED REGULAR EDGE SECOND LOOK "CIRRUS" BY ARMSTRONG No. 513 OR APPROVED EQUAL.
- 24"x24"x3/4" REGULAR EDGE ACOUSTICBRIGHT CL MODEL No. 238 BY ARMSTRONG OR APPROVED EQUAL.
- PAINTING - WALLS - ONE COAT PRIMER-SEALER TWO COATS SATIN FINISH LATEX
- CEILING - ONE COAT PRIMER-SEALER TWO COATS FLAT LATEX
- DOORS & FRAMES - ONE COAT SPOT PRIMER ONE COAT ENAMEL UNDERCOAT TWO COATS SEMI-GLOSS ENAMEL

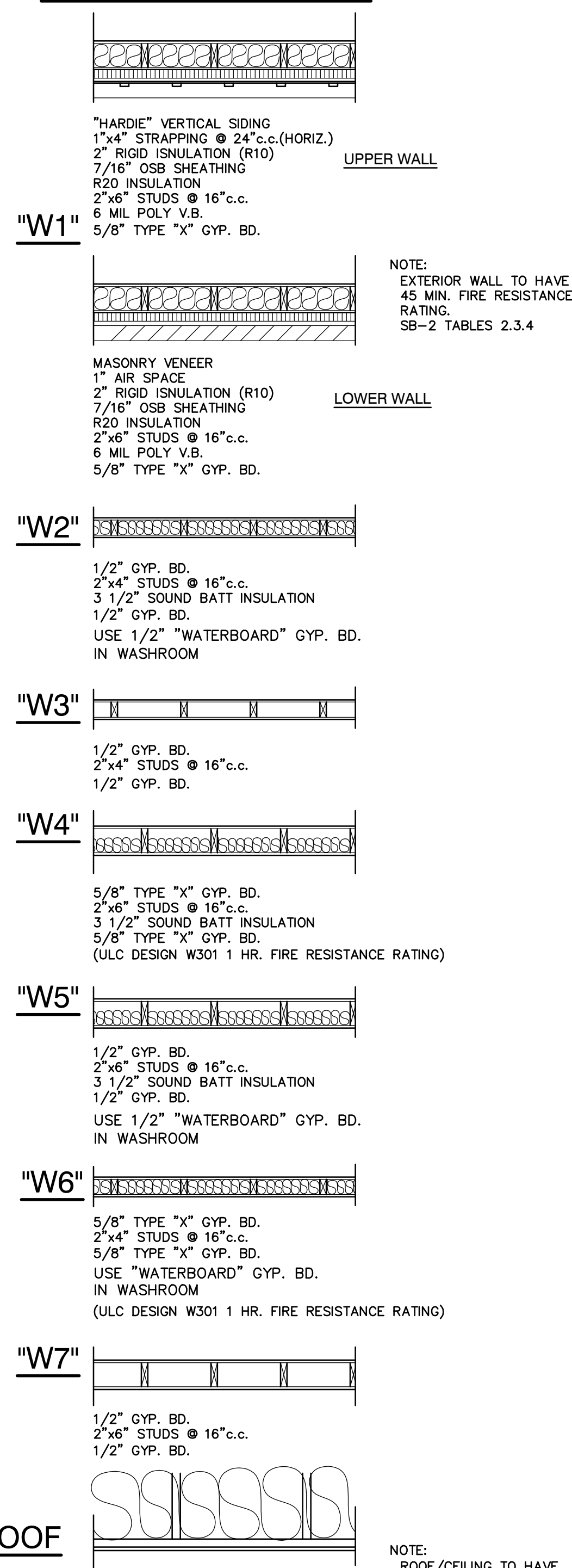
- DOORS - ALUMINUM ENTRANCE - ALUMICOR "CANADIANA" SERIES 600A (THERMALLY BROKEN FOR EXTERIOR DOORS) FRAMING 4 1/2" (THERMALLY BROKEN FOR EXTERIOR FRAMINGS) FINISH - STANDARD BRONZE
- HOLLOW METAL DOORS - STANDARD DUTY HOLLOW METAL FRAMES - 16 GA.
- WOOD DOORS - SOLID CORE, INSTITUTIONAL GRADE, 3 PLY PARTICLE BOARD CORE WITH COMPOSITE FINISH, PAINT GRADE
- ROLLING SHUTTER DOOR - ALPINE COUNTER COILING SHUTTER AS MANUFACTURED BY ALPINE OVERHEAD DOORS INC.
- MANUAL OPERATION W/ HAND CRANK, 2" CURVED INTERLOCKING SLATS, FINISH ALUMINUM, OR APPROVED EQUAL.
- MODEL "M1" INSULATED DOOR AS MANUFACTURED BY LAWRENCE ROLL-UP DOORS INC. DOOR TO PROVIDE A MIN. R-VALUE OF R5. CURTAIN TO BE ASSEMBLED FROM INTERLOCKING FLAT SLATS ROLL-FORMED FROM GALV. 20 GA. STEEL STRIPS. SLATS TO BE INSULATED WITH EXPANDED POLYSTYRENE FOAM & COVERED WITH PRESSURE FIT BACKSLATS EXTRUDED FROM RIGID PVC. OR APPROVED EQUAL.
- DOOR HARDWARE - ALL HARDWARE TO BE COMMERCIAL GRADE, LEVER TYPE.
- MILLWORK - ALL MILLWORK TO BE COMMERCIAL GRADE. SEE DRAWING No. A7 & A9 FOR DETAILS
- MILLWORK TO BE PARTICLEBOARD CORE CONSTRUCTION. COUNTER TOPS TO HAVE LAMINATED PLASTIC W/ 4" HIGH BACKSPLASH. ALL UPPIERS AND LOWERS INCLUDING DOORS TO HAVE MELAMINE FINISH. DOOR PULLS TO BE BRUSHED CHROME "D" TYPE.
- ALL HINGES TO BE FULLY CONCEALED 107 DEG. MODULAR OPENING, SELF CLOSING. DRAWER GLIDES TO BE BALL BEARING TYPE, FULL EXTENSION.
- COLOUR OF PLASTIC LAMINATES TO BE SELECTED BY OWNER FROM SAMPLES SUPPLIED BY CONTRACTOR
- WINDOWS TO BE VINYL CASEMENT WITH 1 OPERATING UNIT PER WINDOW UNIT, COMPLETE WITH SCREENS ON OPERATOR. GLAZING TO BE SEALED DOUBLE GLAZED UNITS WITH LOW "E" AND ARGON GAS FILLED. UNITS TO PROVIDE A MAX. U FACTOR OF 1.42 (A1) 0.25 (IP)

- WASHROOM ITEMS
- HAND DRYER - BOBRICK MODEL No. B-708 (WHITE)
- SOAP DISPENSER - BOBRICK MODEL No. B-8226 (STAINLESS STEEL)
- GRAB BARS - BOBRICK SERIES B-6106.99 (SATIN FINISH)
- COMBINATION TOWEL/WASTE - BOBRICK MODEL No. B-3942 (STAINLESS STEEL)
- TOILET TISSUE DISPENSER - BOBRICK MODEL No. B-3803 (STAINLESS STEEL)
- WASTE RECEPTACLE - BOBRICK MODEL No. B-264 (CHROME)
- SANITARY NAPKIN DISPOSAL - BOBRICK MODEL No. B-2250 (STAINLESS STEEL)
- COAT HOOKS - BOBRICK MODEL No. B8707 (SATIN)
- TOILET PARTITIONS TO BE HEADRAIL BRACED STANDARD SERIES, POWDER COATED METAL PANELS WITH STAINLESS STEEL HARDWARE AS MANUFACTURED BY HADRIAN INC.
- URINAL SCREEN TO BE 2'-4" WIDE x 48" HIGH x 1" THICK POWDER COATED METAL TO MATCH TOILET PARTITIONS AS MANUFACTURED BY HADRIAN INC. OR APPROVED EQUAL.



WINDOW SCHEDULE
SCALE 1/2" = 1'-0"

WALL TYPE SCHEDULE



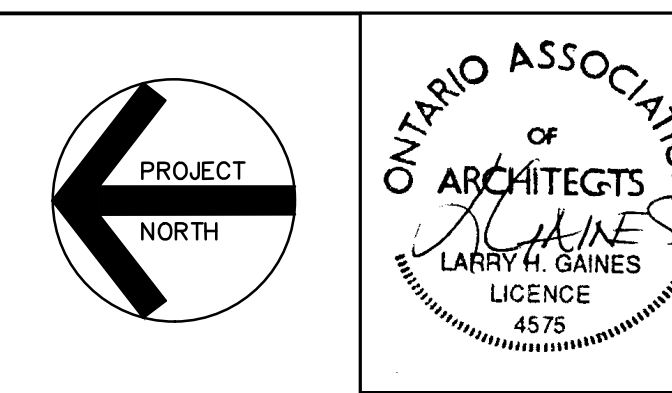
FOR GENERAL NOTES SEE DWG. SO
NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM FACE OF 2" WALL INSULATION

4	DGP	2/3/22	FOR PERMIT
3	DGP	7/2/22	FOR TENDER
2	DGP	3/2/22	WALL TYPE CHANGED
1	DGP	1/6/21	PRELIMINARY FOR REVIEW
No.	By	Date	Revisions

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The contractor must check and verify all dimensions

Drawings are not to be scaled.



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BUILDING CODE IDENTIFICATION No. 19467

CLASSES OF REGISTRATION:

BUILDING SERVICES
BUILDING STRUCTURAL
HOUSE

LARGE BUILDINGS
ON SITE SEWAGE
SMALL BUILDINGS

Project Title:

**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

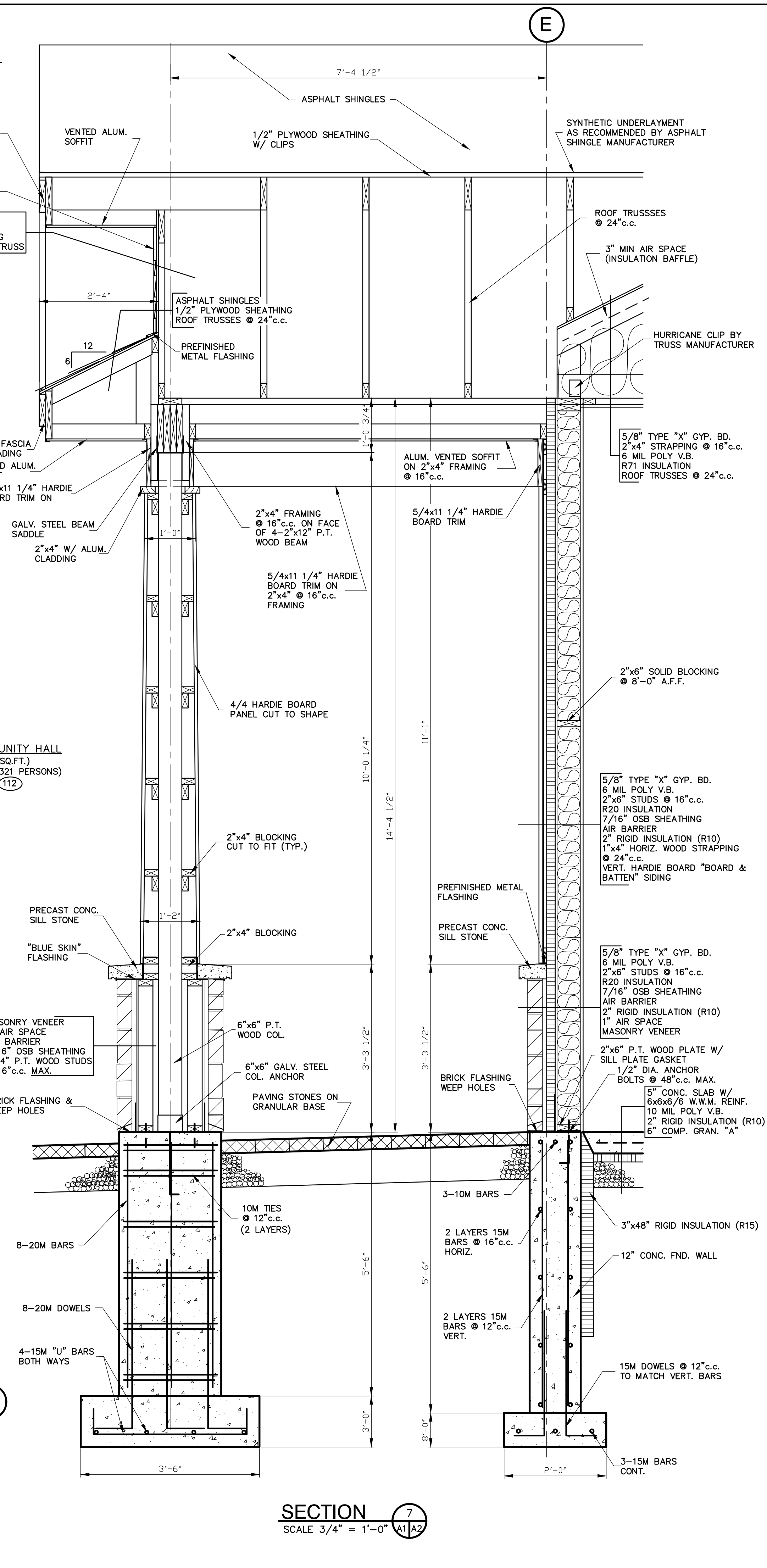
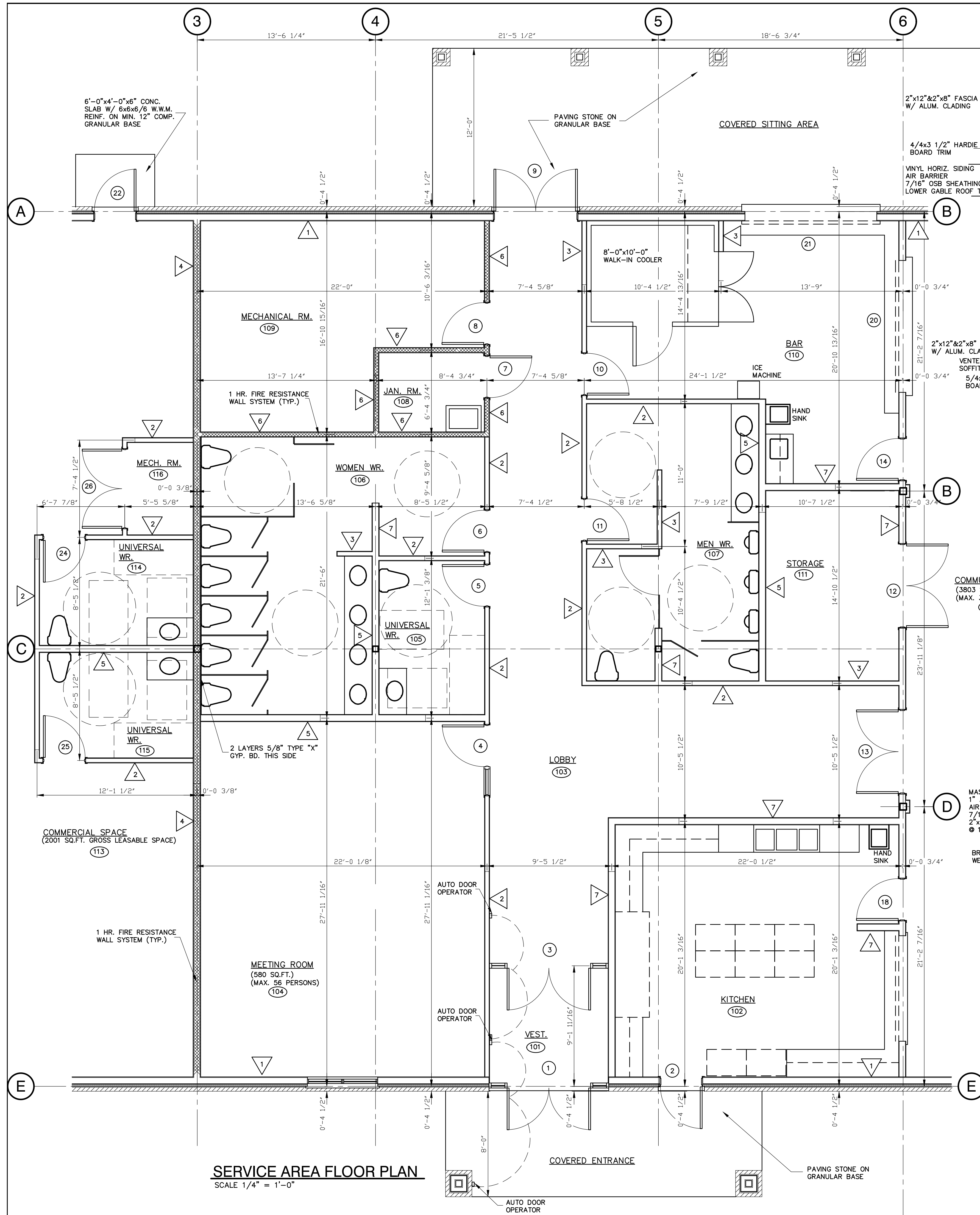
Drawing Title:

**FLOOR PLAN
WALL SCHEDULE
WINDOW SCHEDULE
GENERAL SCOPE OF
WORK**

Design:	Checked:	Approved:	Project No.:
D.G.P.	L.G.		9657
Drawn:	Checked:	Date:	Contract No.:
D.G.P.	L.G.	MAY 26, 2021	
Scale:	1/8" = 1'-0"	Drawing No.:	
Horizontal:			
Vertical:			

A1

File No.: 9657-A1



SERVICE AREA FLOOR PLAN
SCALE 1/4" = 1'-0"

SECTION 7
SCALE 3/4" = 1'-0"

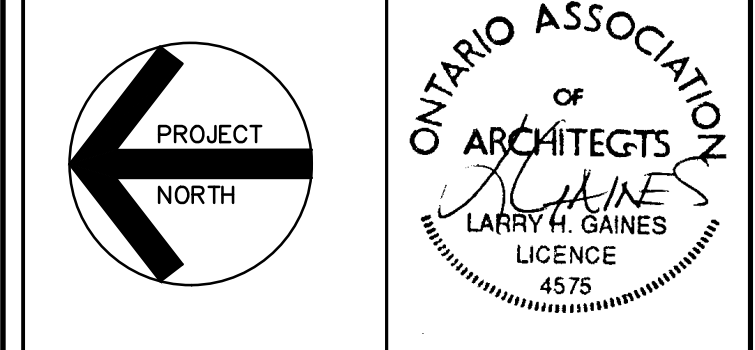
FOR GENERAL NOTES SEE DWG. S0
NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM
FACE OF 2" WALL INSULATION

No.	By	Date	Revisions
4	DGP	2/3/22	FOR PERMIT
3	DGP	7/2/22	FOR TENDER
2	DGP	3/2/22	WALL TYPE CHANGED
1	DGP	1/6/21	PRELIMINARY FOR REVIEW

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BUILDING STRUCTURAL	ON SITE SEWAGE
HOUSE	SMALL BUILDINGS

Project Title:

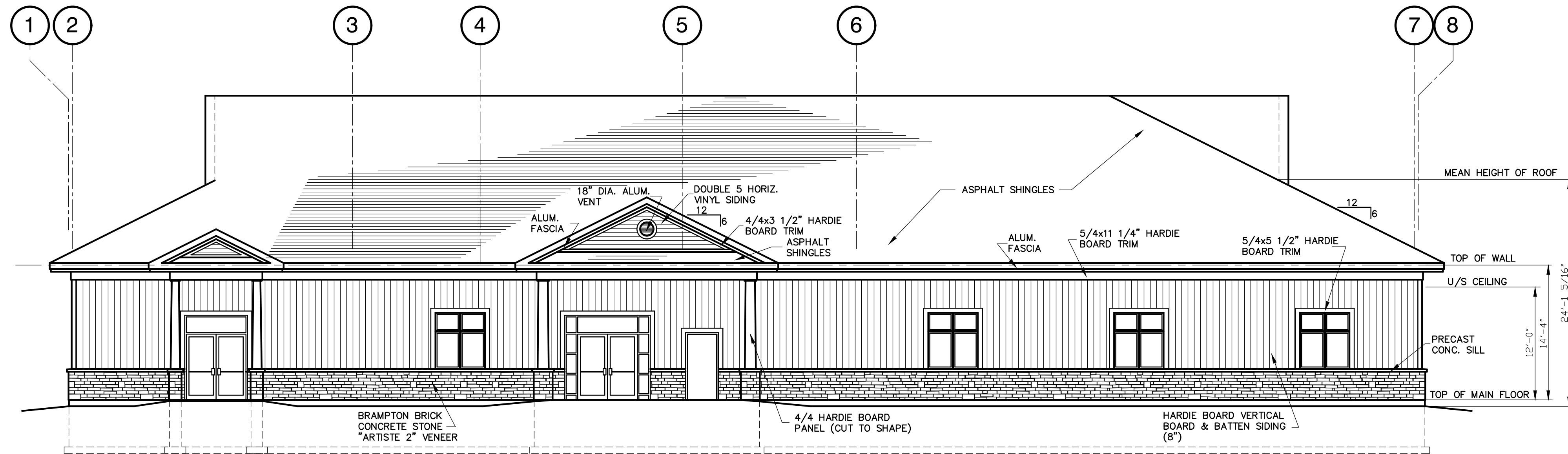
**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:

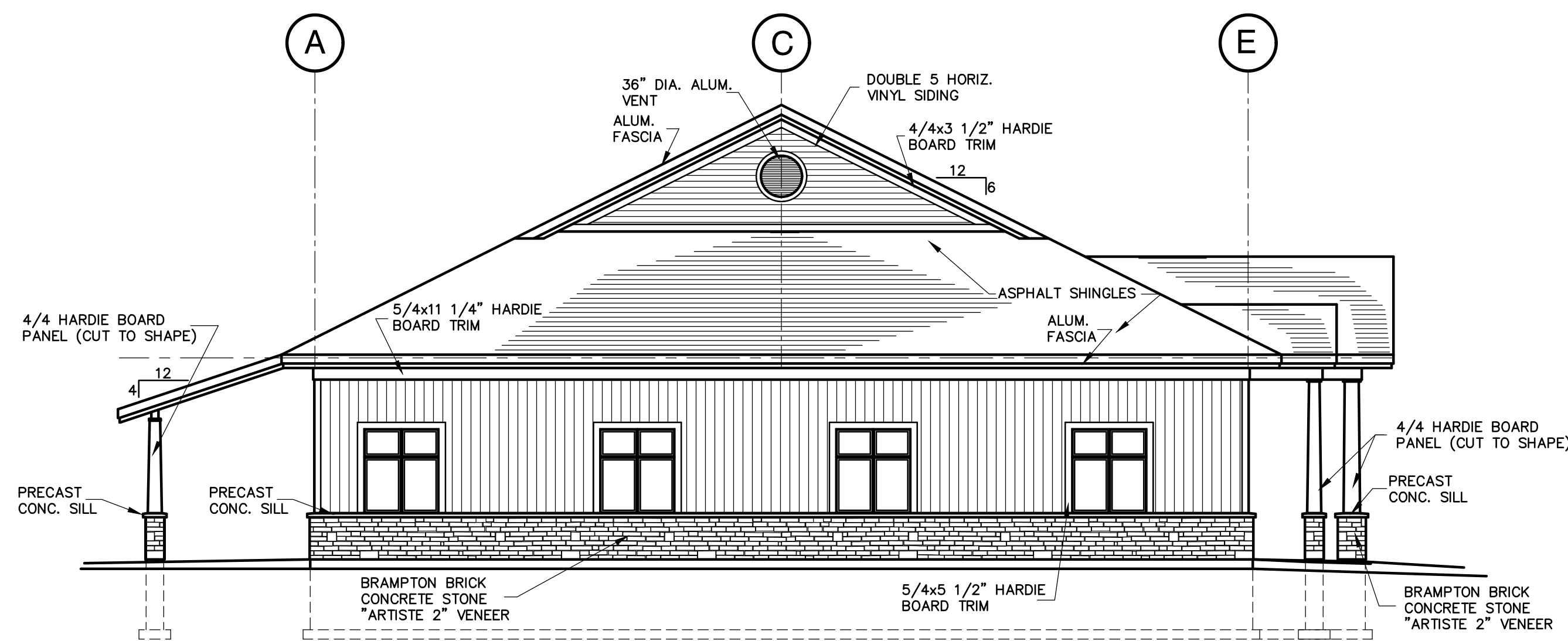
**SERVICE AREA
FLOOR PLAN
WALL SECTION**

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: AS SHOWN	Drawing No.:	A2	
Horizontal:	Vertical:		

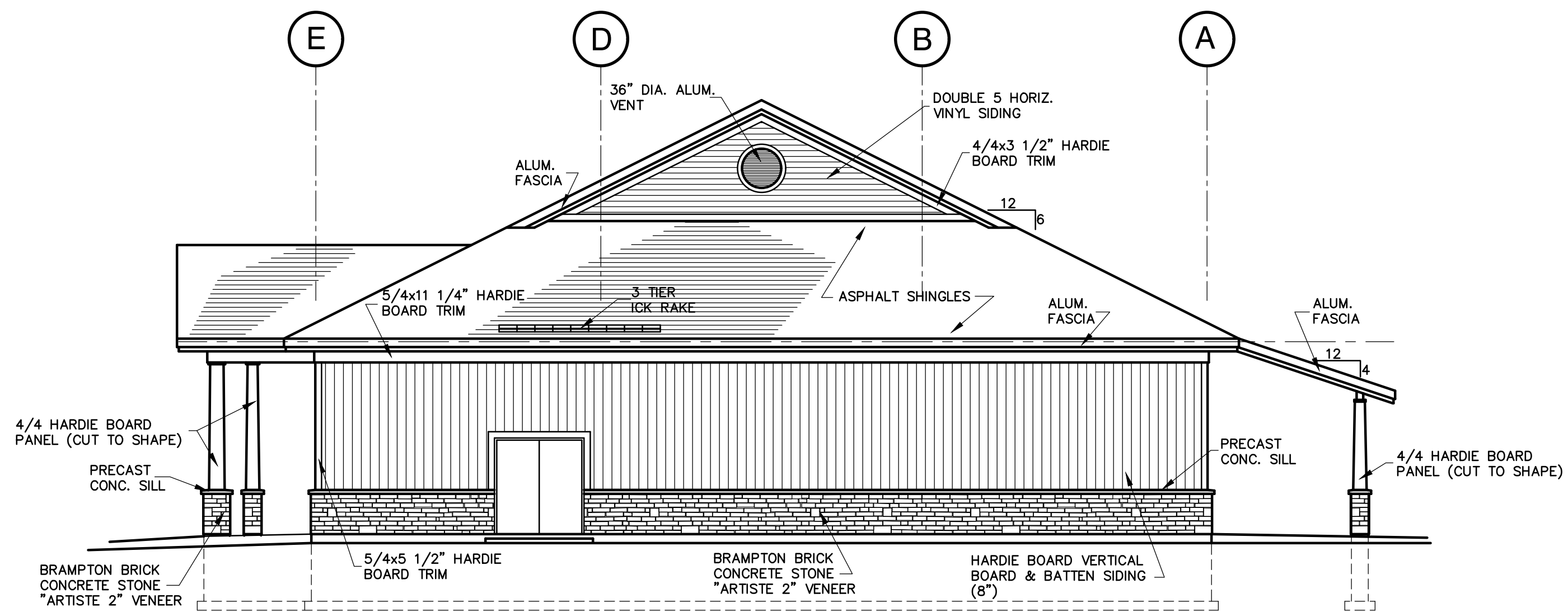
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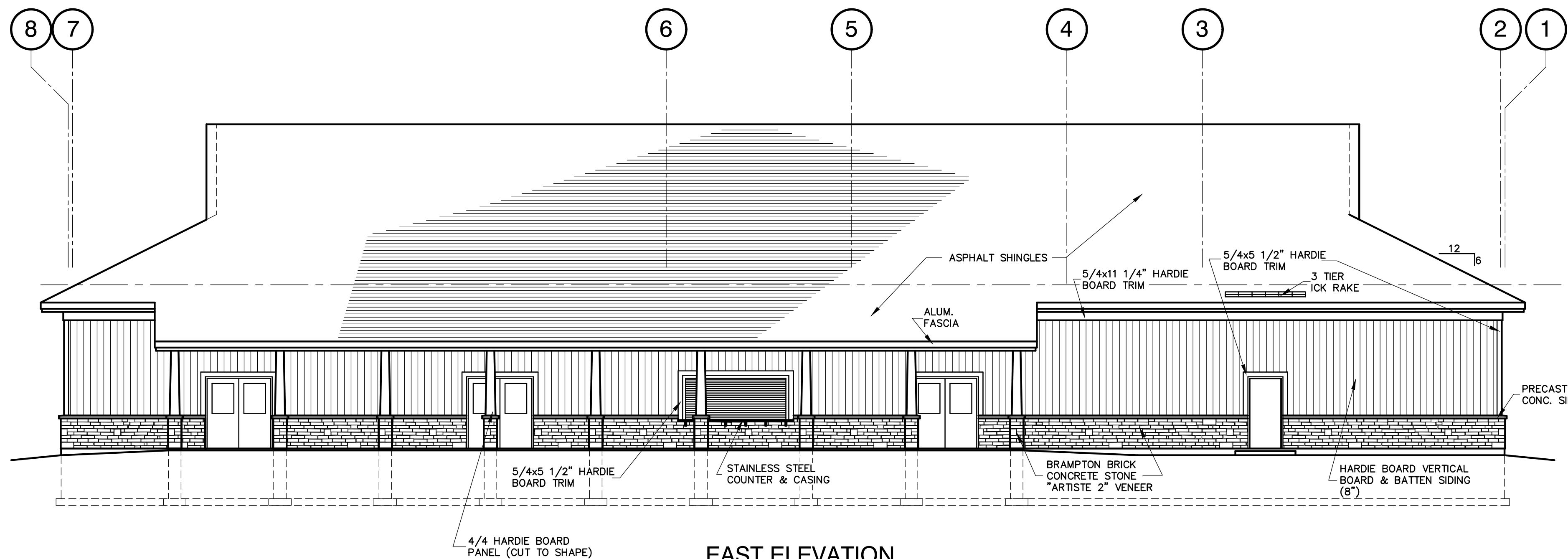
WEST ELEVATION
SCALE 1/8" = 1'-0"



NORTH ELEVATION
SCALE 1/8" = 1'-0"



SOUTH ELEVATION
SCALE 1/8" = 1'-0"



EAST ELEVATION
SCALE 1/8" = 1'-0"

4	DGP	2/3/22	FOR PERMIT
3	DGP	21/2/22	ROOF RAISED 2'-0"
2	DGP	7/2/22	FOR TENDER
1	DGP	1/6/21	PRELIMINARY FOR REVIEW
No.	By	Date	Revisions

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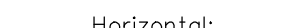
BUILDING SERVICES	LARGE BUILDINGS
BUILDING STRUCTURAL	ON SITE SEWAGE
HOUSE	SMALL BUILDINGS

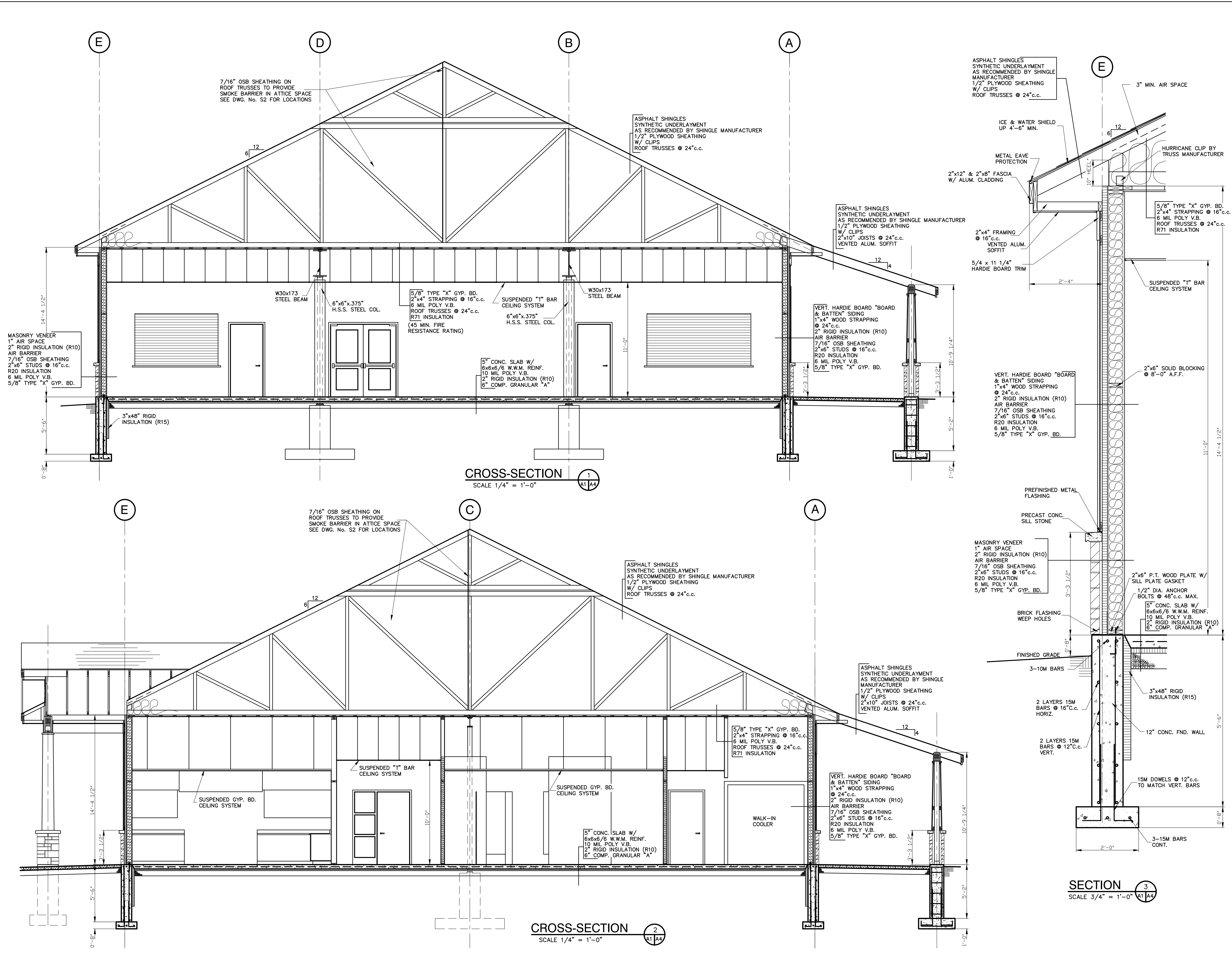
Project Title:

**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:

ELEVATIONS

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: 1/8" = 1'-0"		Drawing No.:	
 Horizontal:			
 Vertical:			
File No.: 9657-A3			



FOR GENERAL NOTES SEE DWG. S0

2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER
No.	By	Date	Revisions

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ONTARIO ASSOCIATION
OF
ARCHITECTS
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LICENCE
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BUILDING STRUCTURAL	ON SITE SEWAGE
HOUSE	SMALL BUILDINGS

Project Title:

**MOOSE CREEK COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:

**CROSS-SECTIONS
WALL SECTION**

Design:	Checked:	Approved:	Project No.:
D.G.P.	L.G.		9657
Drawn:	Checked:	Date:	Contract No.:
D.G.P.	L.G.	MAY 26, 2021	

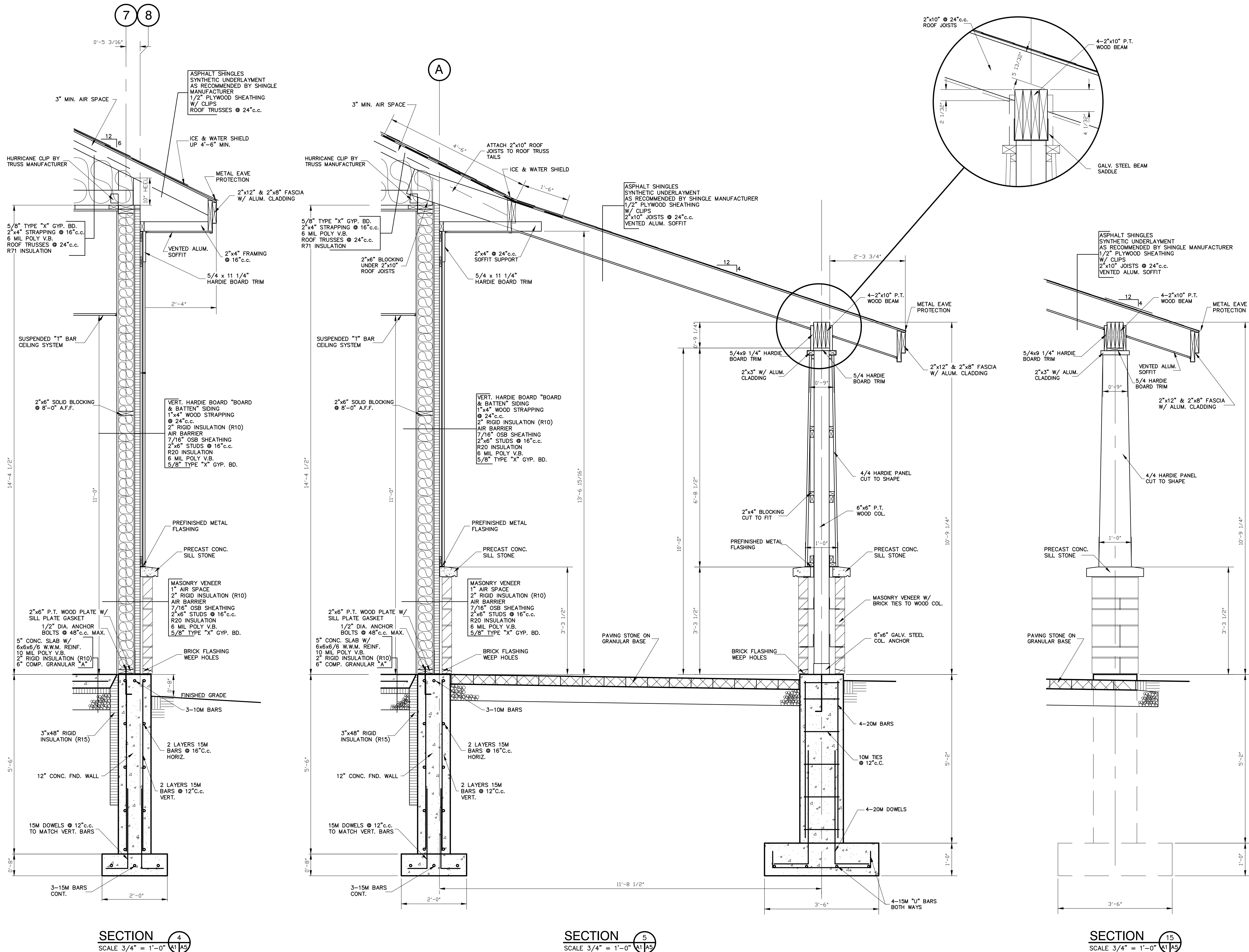
Scale: AS SHOWN

Horizontal:

Vertical:

A4

File No.: 9657-A4



FOR GENERAL NOTES SEE DWG. 50

NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM FACE OF 2" WALL INSULATION

2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER
No.	By	Date	Revisions

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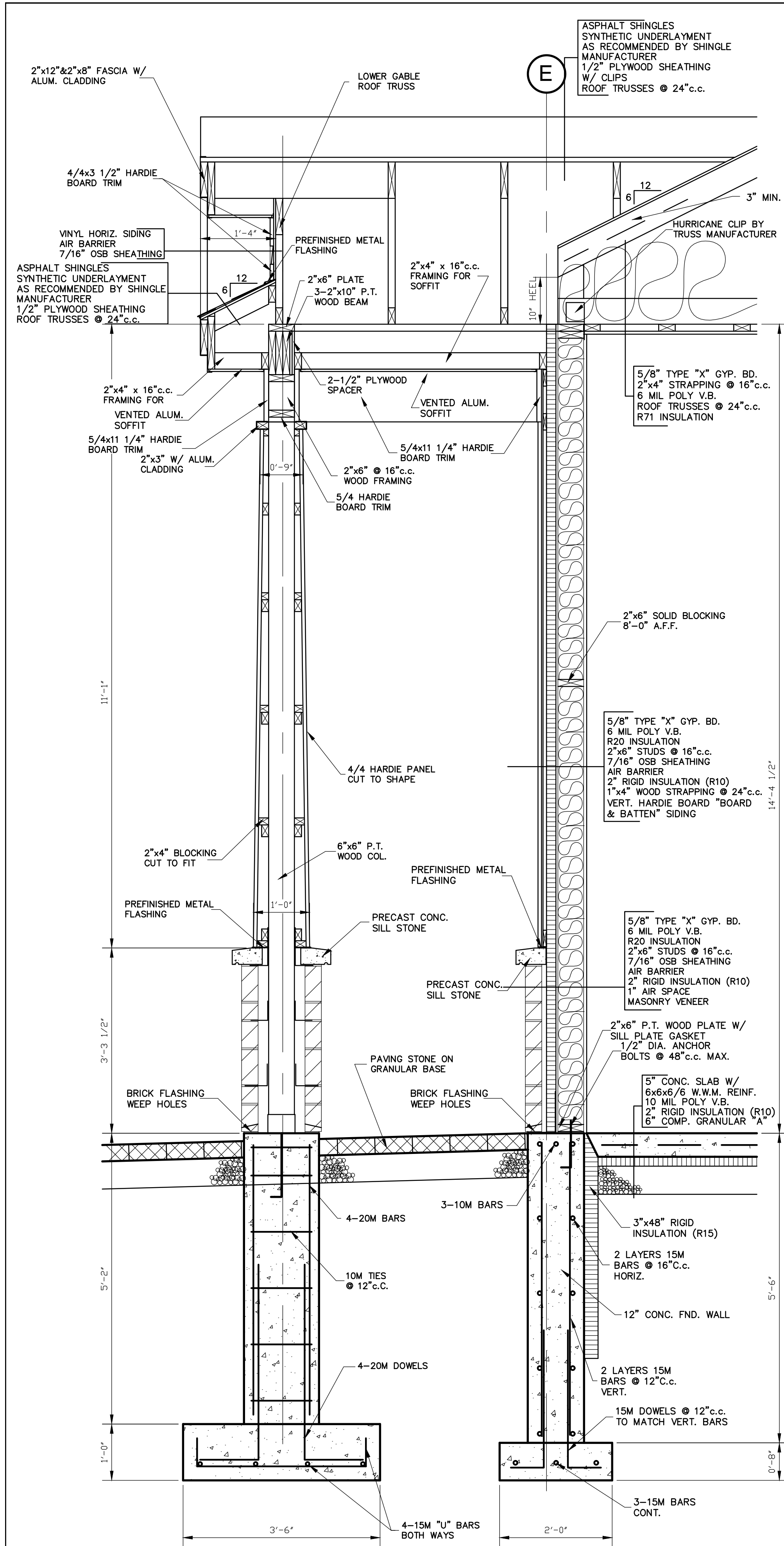
EASTERN ENGINEERING GROUP INC.
BUILDING CODE IDENTIFICATION No. 19467
CLASSES OF REGISTRATION:
BUILDING SERVICES
BUILDING STRUCTURAL
HOUSE
LARGE BUILDINGS
ON SITE SEWAGE
SMALL BUILDINGS

Project Title:
**MOOSE CREEK COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

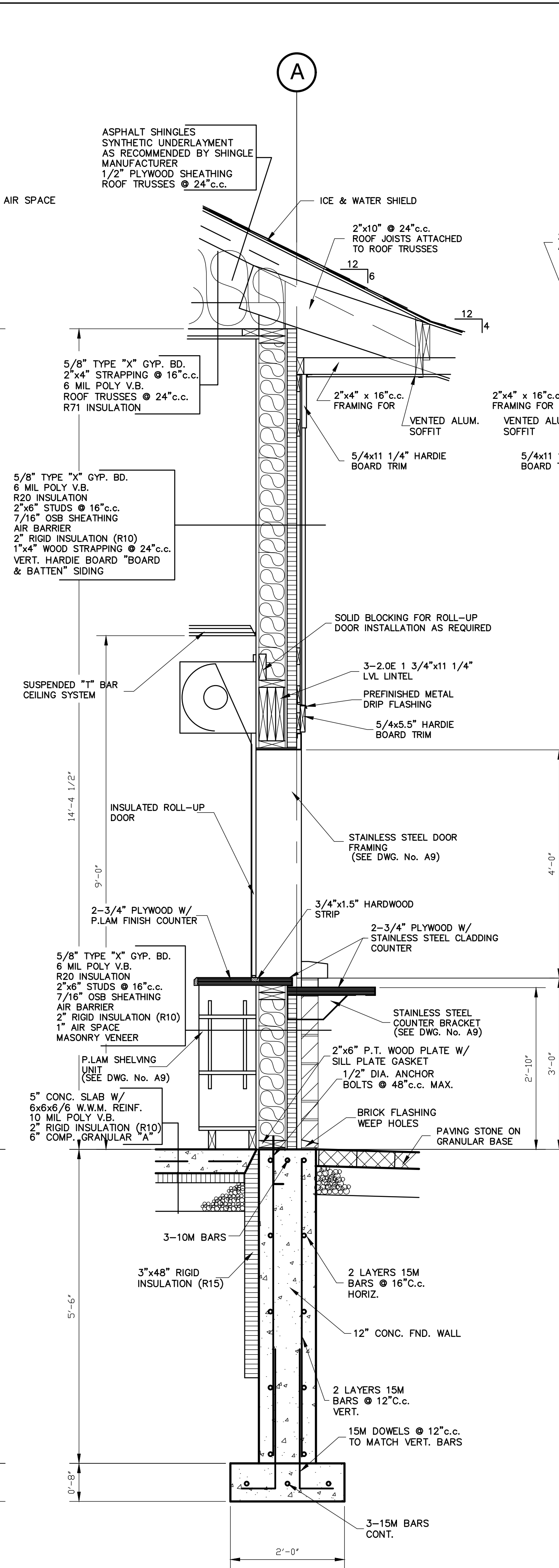
Drawing Title:
WALL SECTIONS

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: 3/4" = 1'-0"	Drawing No.:		
Horizontal:	A5		
Vertical:			

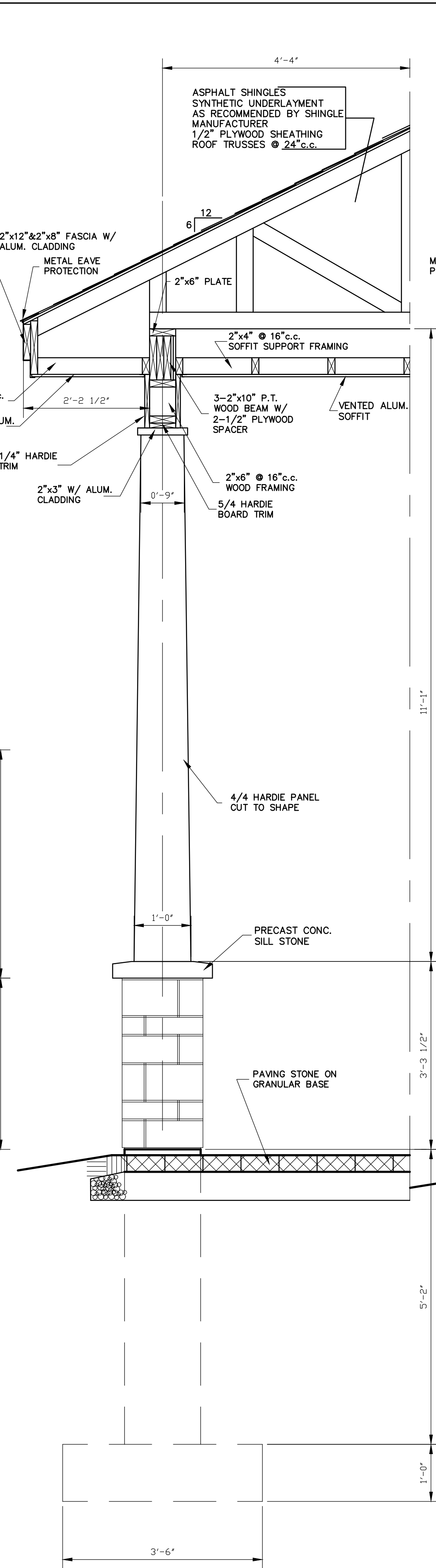
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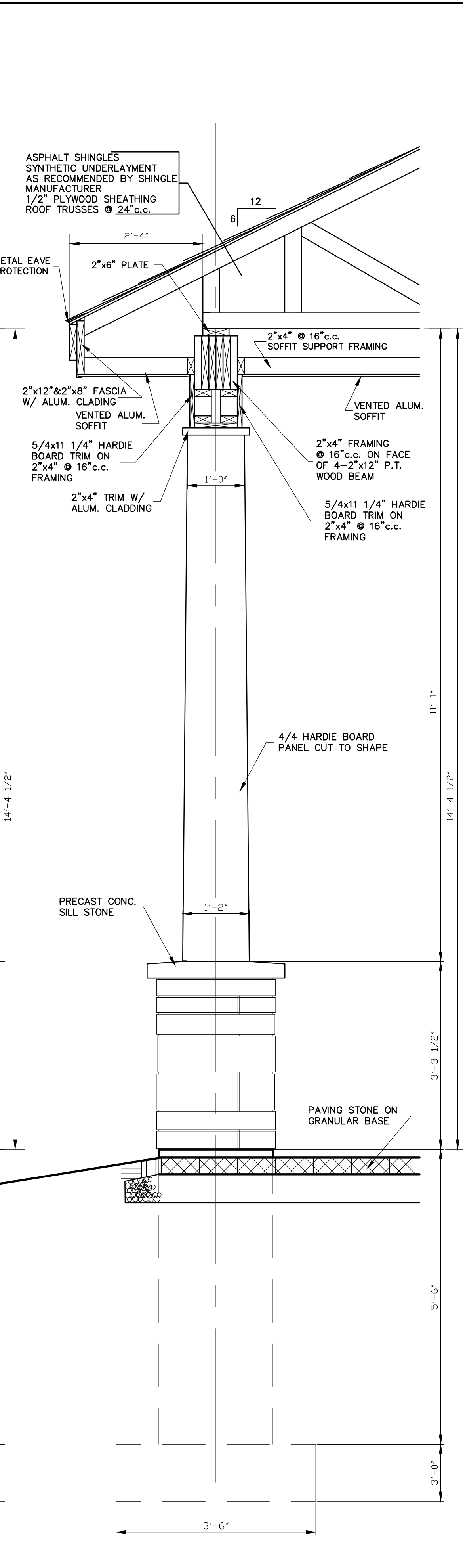
SECTION 7
SCALE 3/4" = 1'-0" A1 A6



SECTION 12
SCALE 3/4" = 1'-0" A1 A6



SECTION 13
SCALE 3/4" = 1'-0" A1 A6



SECTION 14
SCALE 3/4" = 1'-0" A1 A6

FOR GENERAL NOTES SEE DWG. 50

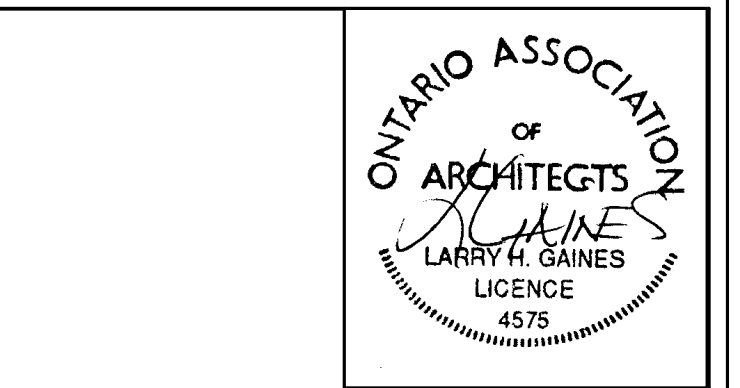
NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM FACE OF 2" WALL INSULATION

No.	By	Date	Revisions
2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER

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HOUSE	SMALL BUILDINGS

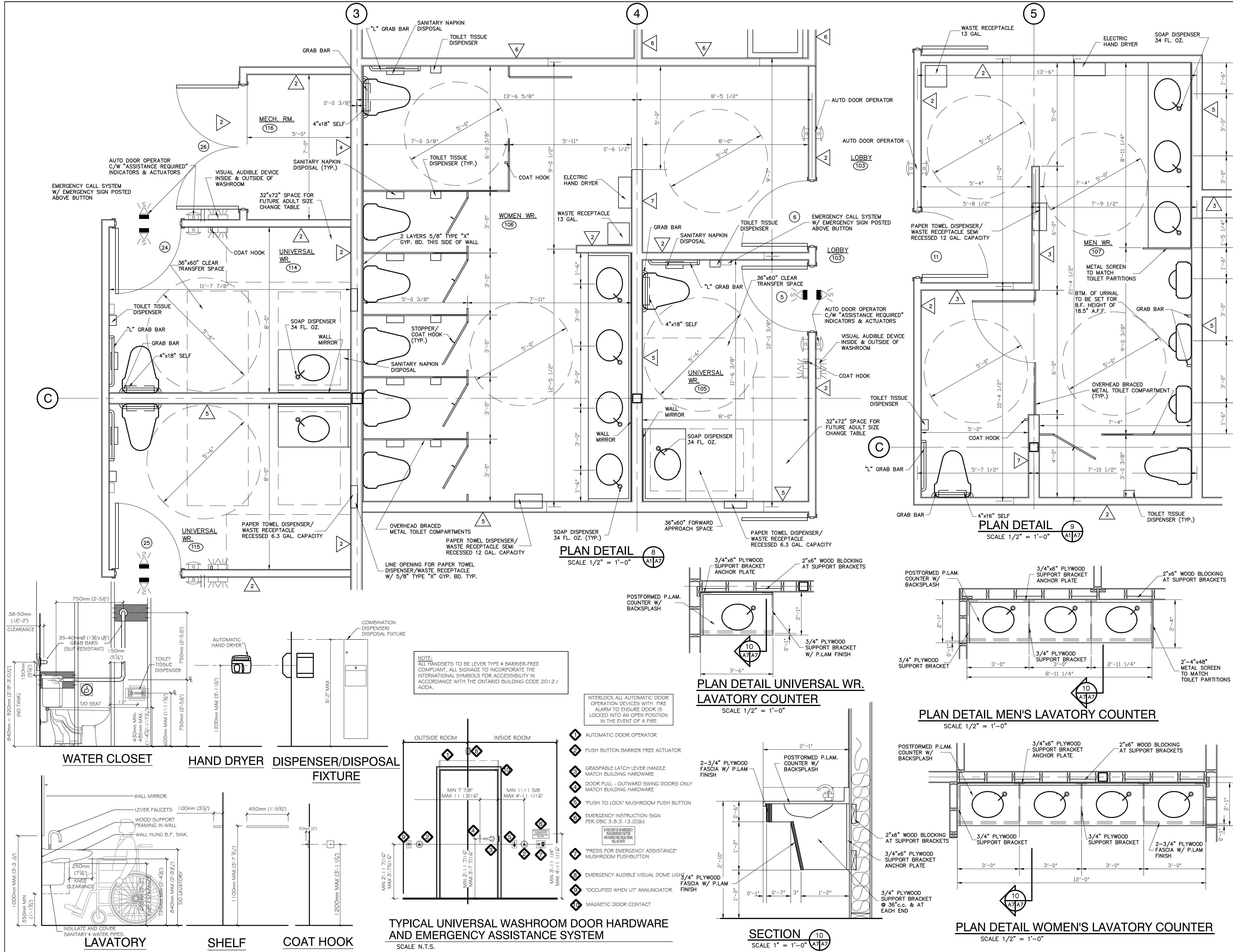
Project Title:

**MOOSE CREEK COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:

WALL SECTIONS

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: 3/4" = 1'-0"		Drawing No.:	
 Horizontal:		A6	
 Vertical:			
File No.: 9657-A6			



FOR GENERAL NOTES SEE DWG. 50

No.	By	Date	Revisions
2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER

NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM FACE OF 2" WALL INSULATION

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PROJECT NORTH

ONTARIO ASSOCIATION OF ARCHITECTS
LARRY H. GAINES
LICENCE 4575

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BUILDING SERVICES	LARGE BUILDINGS ON SITE SEWAGE
BUILDING STRUCTURAL	SMALL BUILDINGS
HOUSE	

Project Title:

MOOSE CREEK COMMUNITY HALL TOWNSHIP OF NORTH STORMONT

Drawing Title:

WASHROOM DETAIL FLOOR PLANS LAVATORY COUNTER DETAILS BARRIER FREE DETAILS

Design:	Checked:	Approved:	Project No:
D.G.P.	L.G.		9657
Drawn:	Checked:	Date:	Contract No:
D.G.P.	L.G.	MAY 26, 2021	

Scale: AS SHOWN

Horizontal: 0' 1" = 1'-0"

Vertical: 0' 1" = 1'-0"

File No.: 9657-A7

ROOM FINISH SCHEDULE

RM No.	ROOM NAME	FLOOR		BASE		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING				REMARKS
		FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	TYPE	FINISH	HEIGHT	FIRE RATING	
GARAGE LEVEL																		
101	VEST.	-	C. TILE	-	C. TILE	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	GYP. BD.	PAINT	10'-0"	-	
102	KITCHEN	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	GYP. BD.	PAINT	9'-0"	-	
103	LOBBY	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	T BAR	-	10'-0"	-	
104	MEETING ROOM	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	T BAR	-	10'-0"	-	
105	UNIVERSAL WASHROOM	-	C. TILE	-	C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	GYP. BD.	PAINT	9'-0"	-	USE WATER BOARD GYP. BD. C. TILE UP WALLS 6'-0"
106	WOMEN'S WASHROOM	-	C. TILE	-	C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	GYP. BD.	PAINT	9'-0"	-	USE WATER BOARD GYP. BD. C. TILE UP WALLS 6'-0"
107	MEN'S WASHROOM	-	C. TILE	-	C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	GYP. BD.	PAINT	9'-0"	-	USE WATER BOARD GYP. BD. C. TILE UP WALLS 6'-0"
108	JANITOR ROOM	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	GYP. BD.	PAINT	9'-0"	45 MIN.	WALLS TO BE 1 hr. FIRE SEPARATION PROVIDE C. TILE WALL PROTECTION AT SLOP SINK
109	MECHANICAL ROOM	WAX	V. TILE	-	RUBBER	-	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	GYP. BD.	PAINT	14'-2"	1 HR.	WALLS & CEILING TO BE 1 HR. FIRE SEPARATIONS
110	BAR	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	T BAR	-	9'-0"	-	
111	STORAGE ROOM	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	-	-	14'-2"	-	
112	COMMUNITY HALL	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	T BAR	-	11'-0"	-	
113	COMMERCIAL SPACE	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	T BAR	-	12'-0"	45 MIN.	
114	UNIVERSAL WASHROOM	-	C. TILE	-	C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	GYP. BD.	PAINT	9'-0"	-	USE WATER BOARD GYP. BD. C. TILE UP WALLS 6'-0"
115	UNIVERSAL WASHROOM	-	C. TILE	-	C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	PAINT	GYP. BD. C. TILE	GYP. BD.	PAINT	9'-0"	-	USE WATER BOARD GYP. BD. C. TILE UP WALLS 6'-0"
116	MECH. RM.	WAX	V. TILE	-	RUBBER	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	PAINT	GYP. BD.	-	-	14'-2"	-	NOTE: GYP. BD. ON U/S OF ROOF TRUSSES TO PROVIDE 45 MIN. FIRE RESISTANCE RATING

NOTE:

VINYL TILE TO BE 12"x12"x1/8" COLOUR THROUGH COMPOSITION BY ARMSTRONG OR EQUAL
RUBBER BASE TO BE COVE TYPE, 4" HIGH, 1/8" THICK BY JOHNSONITE OR EQUAL
CERAMIC FLOOR TILE TO BE 12"x12" BY OLYMPIA, COLOUR TO BE SELECTED BY OWNER FROM SAMPLES SUPPLIED BY CONTRACTOR SEE DWG. No. A1 FOR ADDITIONAL DETAILS

DOOR SCHEDULE

DOORS

DOOR No.	FROM ROOM	TO ROOM	DOOR SIZE	TYPE	MATERIAL	FINISH	GLAZING	FIRE RATING
1	FOYER 101	EXTERIOR	2'-3"-2'x7'-0"	4	ALUM.	BRONZE ANODIZED	THERMAL	-
2	KITCHEN 102	EXTERIOR	3'-2'x7'-0"	2	INSUL. H.M.	PAINT	-	-
3	LOBBY 103	VEST. 101	2'-3"-2'x7'-0"	4	ALUM.	BRONZE ANODIZED	-	-
4	LOBBY 103	MEETING ROOM 104	3'-2'x7'-0"	1	H.M.	PAINT	TEMPERED	-
5	LOBBY 103	UNIVERSAL WR. 105	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
6	LOBBY 103	WOMEN'S WR. 106	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
7	LOBBY 103	JANITOR RM. 108	3'-2'x7'-0"	2	H.M.	PAINT	-	3/4 HR.
8	LOBBY 103	MECHANICAL RM. 109	3'-2'x7'-0"	2	H.M.	PAINT	-	3/4 HR.
9	LOBBY 103	EXTERIOR	2'-3"-2'x7'-0"	1	INSUL. H.M.	PAINT	THERMAL	-
10	LOBBY 103	BAR 110	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
11	LOBBY 103	MEN'S WR. 107	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
12	STOEAGE RM. 111	COMMUNITY HALL 112	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
13	COMMUNITY HALL 112	LOBBY 103	2'-3"-2'x7'-0"	1	H.M.	PAINT	TEMPERED	-
14	COMMUNITY HALL 112	BAR 110	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
15	COMMUNITY HALL 110	EXTERIOR	2'-3"-2'x7'-0"	1	INSUL. H.M.	PAINT	THERMAL	-
16	COMMUNITY HALL 112	EXTERIOR	2'-3"-2'x7'-0"	1	INSUL. H.M.	PAINT	THERMAL	-
17	COMMUNITY HALL 112	EXTERIOR	2'-3"-2'x7'-0"	1	INSUL. H.M.	PAINT	THERMAL	-
18	COMMUNITY HALL 112	KITCHEN 102	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
19	KITCHEN 102	COMMUNITY HALL 112	8'-0"x4'-0"	6	METAL	PREFINISHED	-	-
20	BAR 110	COMMUNITY HALL 112	10'-0"x4'-0"	5	METAL	PREFINISHED	-	-
21	BAR 110	EXTERIOR	10'-0"x4'-0"	7	INSULATED METAL	PREFINISHED	-	-
22	COMMERCIAL SPACE	EXTERIOR	3'-2'x7'-0"	2	INSUL. H.M.	PAINT	-	-
23	COMMERCIAL SPACE	EXTERIOR	2'-3"-2'x7'-0"	4	ALUM.	BRONZE ANODIZED	THERMAL	-
24	COMMERCIAL SPACE	UNIVERSAL WR. 114	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
25	COMMERCIAL SPACE	UNIVERSAL WR. 115	3'-2'x7'-0"	2	SOLID CORE WOOD	PAINT	-	-
26	MECH. RM. 116	COMMERCIAL SPACE 113	2'-3"-2'x7'-0"	2	H.M.	PAINT	-	-

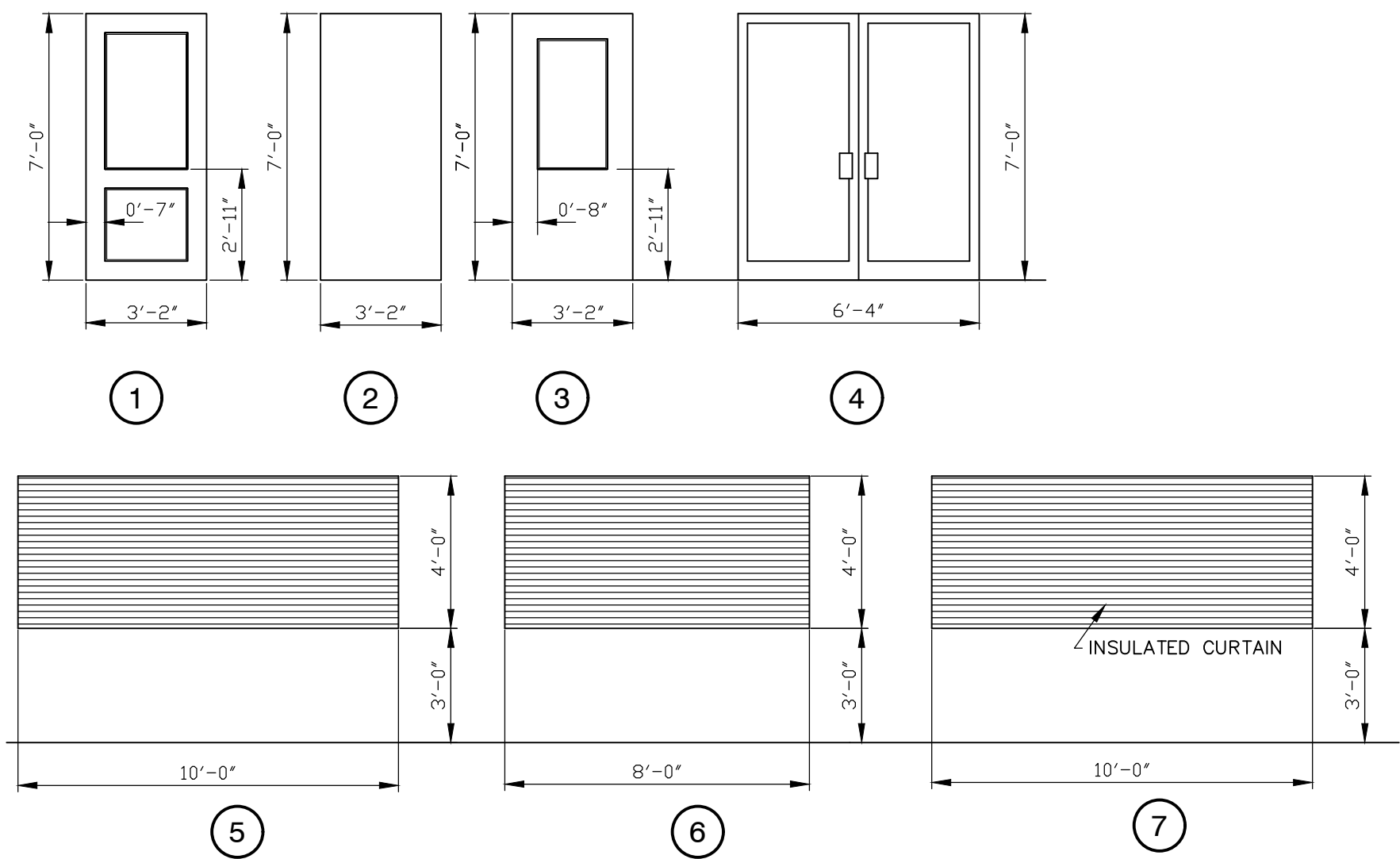
FRAMES

TYPE	MATERIAL	FINISH	SIDE/LITE GLAZING	THRESHOLD	PASS	PRIV	LOCK	PANIC	DEAD	FLUS	DP	DC	WS	FS	KP	BFH	CH	WSTR	V	TH	REMARKS
4	ALUM. THERMAL	BRONZE ANODIZED	THERMAL	ALUM.																	AUTO DOOR OPERATOR REQUIRED ON 1 DOOR PANEL
1D	H.M. THERMAL	PAINT	-	ALUM.																	
3	ALUM.	BRONZE ANODIZED	-	-																	AUTO DOOR OPERATOR REQUIRED ON 1 DOOR PANEL
2A	H.M.	PAINT	TEMPERED	-																	
1A	H.M.	PAINT	-	-																	AUTO DOOR OPERATOR REQUIRED BARRIER FREE WASHROOM HARDWARE SIGN "UNIVERSAL WASHROOM"
1A	H.M.	PAINT	-	-																	SIGN "WOMEN'S WASHROOM" AUTO DOOR OPERATOR REQUIRED
1B	H.M.	PAINT	-	-																	SIGN "JANITOR"
1B	H.M.	PAINT	-	-																	SIGN "MECHANICAL RM."
3D	H.M. THERMAL	PAINT	-	ALUM.																	
1A	H.M.	PAINT	-	-																	
1A	H.M.	PAINT	-	-																	SIGN "MEN'S WASHROOM" AUTO DOOR OPERATOR REQUIRED
3A	H.M.	PAINT	-	-																	SIGN "STORAGE ROOM"
3C	H.M.	PAINT	-	-																	
1C	H.M.	PAINT	-	-																	
3D	H.M. THERMAL	PAINT	-	ALUM.																	
3D	H.M. THERMAL	PAINT	-	ALUM.																	
3D	H.M. THERMAL	PAINT	-	ALUM.																	
1C	H.M.	PAINT	-	-																	SIGN "KITCHEN"
-	WOOD	PAINT	-	-																	ROLL-UP DOOR HARDWARE
-	WOOD	PAINT	-	-																	ROLL-UP DOOR HARDWARE
5	STAINLESS STEEL	-	-	-																	ROLL-UP DOOR HARDWARE
1D	H.M. THERMAL	PAINT	-	ALUM.																	
-	ALUM. THERMAL	BRONZE ANODIZED	-	ALUM.																	AUTO DOOR OPERATOR REQUIRED ON 1 DOOR PANEL
1A	H.M.	PAINT	-	-																	BARRIER FREE WASHROOM HARDWARE
1A	H.M.	PAINT	-	-																	BARRIER FREE WASHROOM HARDWARE
3A	H.M.	PAINT	-	-																	SIGN "MECHANICAL RM."

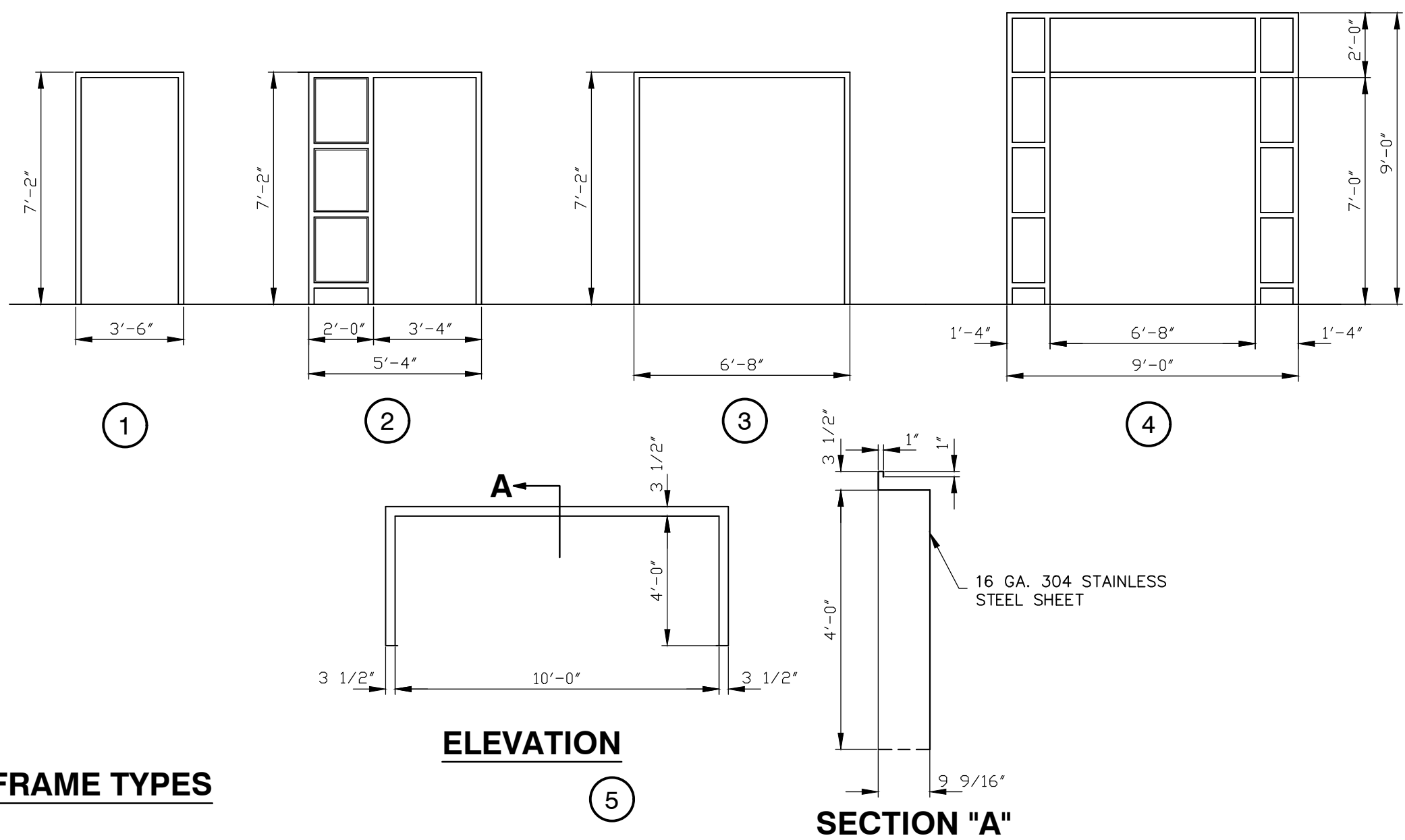
LEGEND

HARDWARE
PASS - PASSAGE SET
PRIV - PRIVATE SET
LOCK - LOCKSET
PANIC - PANIC SET
DP - DOOR PULL / PUSH PLATE
DC - DOOR CLOSER
WS - WALL STOP
FS - FLOOR STOP
CH - COAT HOOK
WSTR - WEATHER STRIP
V - VIEWER
TH - THRESHOLD
DEAD - DEADBOLT
FLUS - FLUSHBOLT
KP - KICK PLATE
BFH - BI-FOLD

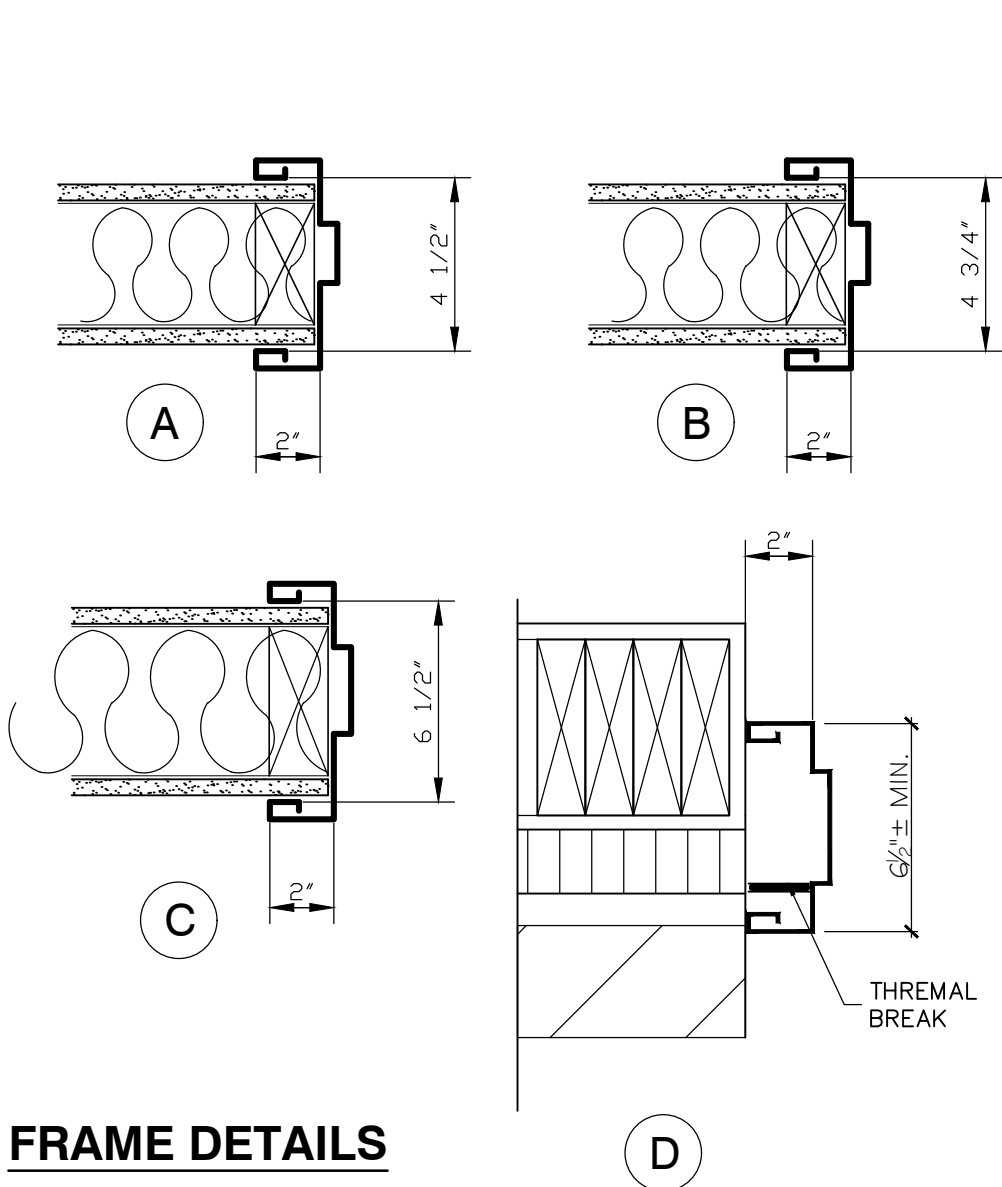
MATERIAL
H.M. - HOLLOW METAL
P.FIN. - PRE-FINISHED
G.W. - GEORGIAN WIRE GLASS
S.C. - SOLID CORE WOOD



DOOR TYPES



FRAME TYPES



FRAME DETAILS

FOR GENERAL NOTES SEE DWG. S0

2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER
No.	By	Date	Revisions

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The contractor must check and verify all dimensions

Drawings are not to be scaled.



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EASTERN ENGINEERING GROUP INC.
BUILDING CODE IDENTIFICATION No. 19467

CLASSES OF REGISTRATION:

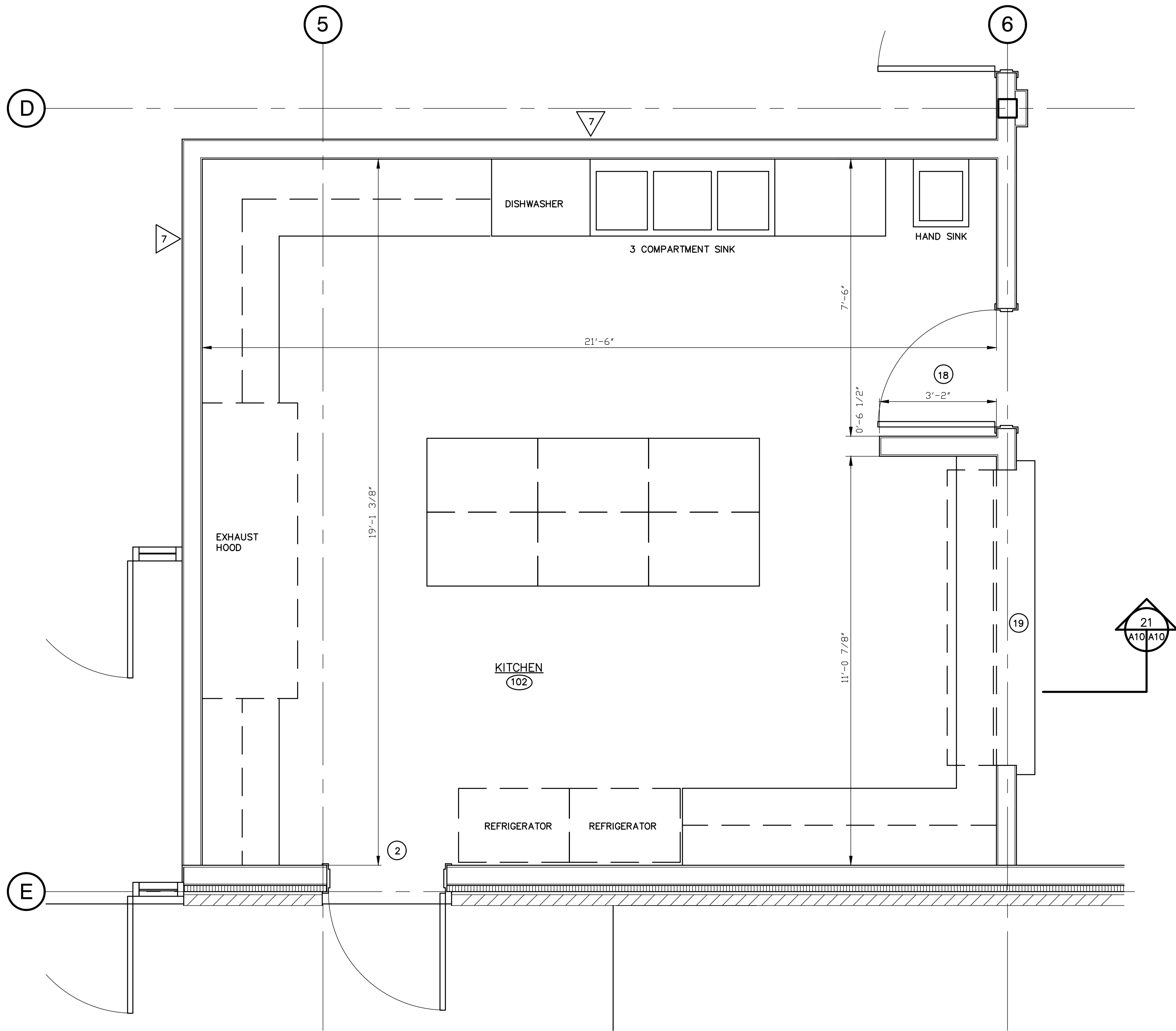
BUILDING SERVICES
BUILDING STRUCTURAL
HOUSE

LARGE BUILDINGS
ON SITE SEWAGE
SMALL BUILDINGS

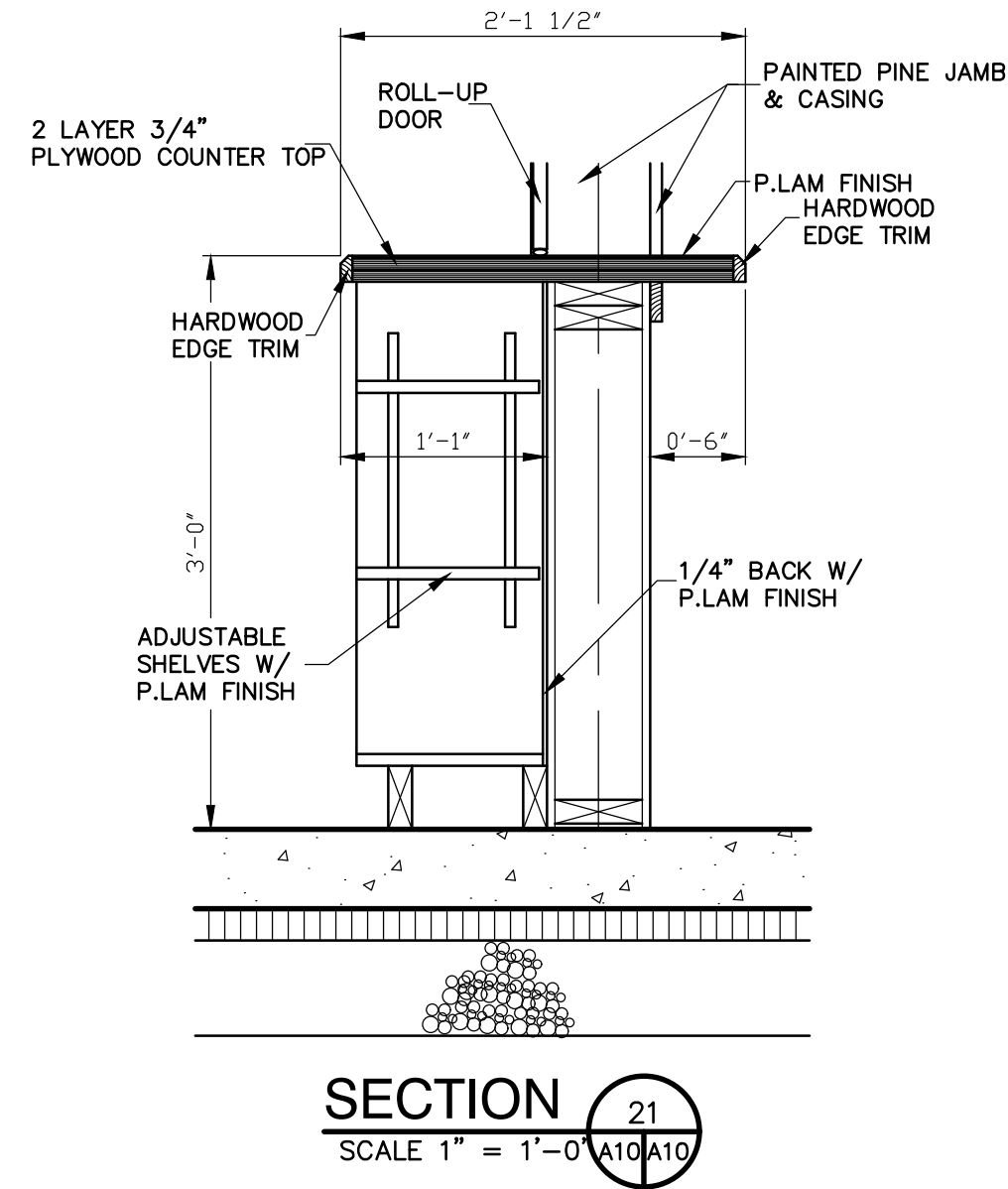
Project Title:
**MOOSE CREEK
COMMUNITY HALL
TOWNSHIP OF
NORTH STORMONT**

Drawing Title:
**ROOM SCHEDULE
DOOR SCHEDULE**

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: NTS		Drawing No.:	
0  Horizontal:		A8	
0  Vertical:			
File No.: 9657-A8			



PLAN DETAIL 11
SCALE 1/2" = 1'-0" A1 A10



SECTION 21
SCALE 1" = 1'-0" A10 A10

FOR GENERAL NOTES SEE DWG. S0

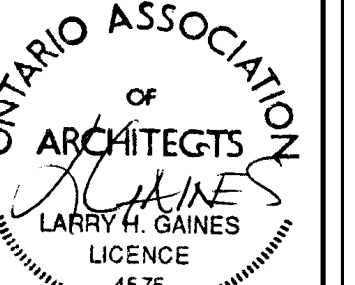
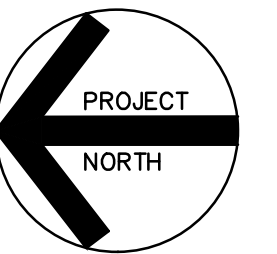
NOTE: EXTERIOR WALL DIMENSIONS ARE TAKEN FROM FACE OF 2" WALL INSULATION

No.	By	Date	Revisions
2	DGP	2/3/22	FOR PERMIT
1	DGP	7/2/22	FOR TENDER

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EASTERN ENGINEERING GROUP INC.
BUILDING CODE IDENTIFICATION No. 19467
CLASSES OF REGISTRATION:

BUILDING SERVICES	LARGE BUILDINGS
BUILDING STRUCTURAL	ON SITE SEWAGE
HOUSE	SMALL BUILDINGS

Project Title:
MOOSE CREEK COMMUNITY HALL TOWNSHIP OF NORTH STORMONT

Drawing Title:
KITCHEN DETAILS

Design: D.G.P.	Checked: L.G.	Approved:	Project No.: 9657
Drawn: D.G.P.	Checked: L.G.	Date: MAY 26, 2021	Contract No.:
Scale: 1/2" = 1'-0"		Drawing No.:	
Horizontal:		Vertical:	
A10		File No.: 9657-A10	

MECHANICAL NOTES

MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS FOR THIS PROJECT.

1 GENERAL:

- CONFORM WITH APPLICABLE REQUIREMENTS OF THE MINISTRY OF LABOUR, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
- DO COMPLETE INSTALLATION IN ACCORDANCE WITH THE FOLLOWING:
 - ONTARIO BUILDING CODE (OBC);
 - NATURAL GAS AND PROPANE INSTALLATION CODE (GAS CODE);
 - ASHRAE;
 - SMACNA;
 - NFPA;
 - ALL OTHER RELEVANT CODES AND STANDARDS, AS APPLICABLE.
- OBTAIN ALL PERMITS REQUIRED FOR THE INSTALLATION OF MECHANICAL TRADES WORK, ARRANGE FOR INSPECTIONS AND TESTS, AND PAY ALL FEES AND COSTS FOR THE PERMITS, INSPECTIONS AND FEES. OBTAIN PERMITS IMMEDIATELY AFTER NOTIFICATION OF AWARD OF CONTRACT.
- PROVIDE DIGITAL AND HARD COPY OF COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR EQUIPMENT FURNISHED UNDER THIS CONTRACT. BIND INSTRUCTIONS IN 3-RING BINDERS. INCLUDE THE FOLLOWING:
 - SCHEMATIC DIAGRAM OF ELECTRICAL SYSTEMS.
 - CONTROL SHOP DRAWINGS AND OPERATING SEQUENCE INCLUDING WIRING OF COMPONENTS.
 - WIRING DIAGRAM OF CONTROL PANELS.
 - OPERATING INSTRUCTIONS, INCLUDING START-UP AND SHUT-DOWN PROCEDURE.
 - MAINTENANCE INSTRUCTIONS INCLUDING PREVENTIVE MAINTENANCE INSTRUCTIONS FOR COMPONENTS OF THE EQUIPMENT.
 - COMPLETE PARTS LIST OF ASSEMBLIES AND THEIR COMPONENT PARTS, SHOWING MANUFACTURER'S NAME, CATALOGUE NUMBER, AND NEAREST REPLACEMENT SOURCE.
 - LIST OF RECOMMENDED SPARE PARTS AND QUANTITY OF EACH ITEM TO BE STOCKED.
 - MANUFACTURERS' WARRANTIES AND GUARANTEES.
- CLEAN ALL MECHANICAL SYSTEMS AT PROJECT COMPLETION.
- COMPLETE AS-BUILT DRAWINGS SHOWING ALL CHANGES AS WORK PROGRESSES.

2 CONTRACTOR QUALIFICATIONS:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE "TRADE QUALIFICATION AND APPRENTICESHIP ACT" AND REGULATIONS, BY PERSONS WHO HOLD THE FOLLOWING CERTIFICATES OF QUALIFICATION (AS APPLICABLE):
 - PLUMBER;
 - REFRIGERATION & AIR CONDITIONING SYSTEMS MECHANIC;
 - RESIDENTIAL AIR CONDITIONING SYSTEMS MECHANIC;
 - SHEET METAL WORKER.
- ALL FUELS-RELATED WORK TO BE CARRIED OUT IN ACCORDANCE WITH TSSA REQUIREMENTS AND ONTARIO REGULATION 215/01, "FUEL INDUSTRY CERTIFICATES" BY PERSONS WHO HOLD THE APPROPRIATE CERTIFICATES FOR THE WORK BEING PERFORMED.

3 FACILITIES AND DEMOLITION:

- LOCATE AND PROTECT ALL EXISTING EXTERIOR SITE SERVICES.
- RETAIN AND PROTECT ALL EXISTING INTERIOR SERVICES AND BUILDING FABRIC. MAKE GOOD ANY AND ALL DAMAGE RESULTING FROM THIS WORK.
- CUTTING AND PATCHING:
 - EXECUTE CUTTING, FITTING AND PATCHING REQUIRED TO MAKE THE WORK FIT PROPERLY TOGETHER. CUT AND PATCH FOR PROCESS, MECHANICAL AND ELECTRICAL WORK.
 - COORDINATE WORK WITH OTHER TRADES SO THAT THERE IS A MINIMUM OF CUTTING, FITTING AND PATCHING.
 - DRILLING, CUTTING, FITTING AND PATCHING AND MAKING GOOD WHERE NECESSARY DUE TO FAILURE TO DELIVER ITEMS TO BE BUILT IN TIME OR INSTALLATION IN WRONG LOCATION, SHALL BE EXECUTED AS DIRECTED AT NO COST TO THE OWNERS.
 - DRILLING AND CUTTING OF LOAD BEARING STRUCTURAL MEMBERS SHALL BE DONE ON PRIOR EXPRESS WRITTEN PERMISSION OF THE ENGINEER FOR EACH INSTANCE.
 - CUT HOLES ACCURATELY, WITH SMOOTH, TRUE, CLEAN EDGES. FIT UNITS TO TOLERANCES TO BEST STANDARD PRACTICE FOR APPLICABLE WORK.
 - HOLES IN BLOCK AND CONCRETE WORK SHALL BE SAWCUT OR CORE-DILLED, AND SHALL NOT BE MADE WITH A HAMMER GUN.
 - PATCHED WORK SHALL BE INVISIBLE, SIZE HOLES AND OPENINGS FOR PIPES SO AS TO ALLOW FOR EXPANSION AND CONTRACTION OF SUCH PIPES.

4 FIXTURES AND EQUIPMENT:

- PROVIDE SHOP DRAWINGS AND PRODUCT DATA FOR ALL MECHANICAL FIXTURES AND EQUIPMENT FOR APPROVAL, PRIOR TO PROCUREMENT.
- HVAC EQUIPMENT SHALL NOT USED FOR CONSTRUCTION HEATING.
- INSTALL ALL MECHANICAL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- EQUIPMENT AND MATERIAL TO BE CANADIAN GAS ASSOCIATION (CGA) CERTIFIED. WHERE THERE IS NO ALTERNATIVE TO SUPPLYING EQUIPMENT WHICH IS NOT CGA CERTIFIED, OBTAIN TSSA FIELD APPROVAL.
- LOCATE ALL EQUIPMENT WITH CLEARANCES, AS REQUIRED BY THE MANUFACTURER, THE FUEL CODES, AND ALL OTHER CODES AND REGULATIONS, INCLUDING THE FOLLOWING CLEARANCES:
 - TO PERMIT PROPER EQUIPMENT OPERATION;
 - TO PERMIT SUFFICIENT AIRFLOW AROUND EQUIPMENT;
 - FOR EQUIPMENT SERVICE;
 - SUFFICIENT DISTANCE FROM COMBUSTIBLE MATERIAL;
 - WITH SUFFICIENT VENT CLEARANCES;
 - EQUIPMENT DISTANCE FROM ROOF EDGES OR OTHER HAZARDS.

5 EQUIPMENT SUPPLIED BY OTHERS:

- GENERAL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COORDINATING MECHANICAL SERVICES AND CONNECTIONS FOR ALL EQUIPMENT, SUPPLIED BY MECHANICAL OR ANY OTHER TRADES.
- MAKE ALL MECHANICAL SERVICE CONNECTIONS TO EQUIPMENT SUPPLIED BY OTHERS.
- CONFIRM ALL SERVICE CONNECTIONS WITH MANUFACTURER AND SUPPLIER, PRIOR TO INSTALLATION. THIS SHALL INCLUDE ALL CONNECTION SIZES, LOCATIONS AND DETAILS, AND SHALL TAKE INTO ACCOUNT EQUIPMENT CLEARANCES AND INSTALLATION REQUIREMENTS.

6 PIPING AND ESCUTCHEONS:

- PROVIDE DIELECTRIC UNIONS AT ALL PIPING LOCATIONS WHERE DISSIMILAR METALS ARE JOINED.
- PROVIDE ESCUTCHEONS ON ALL PIPES PASSING THROUGH WALLS, PARTITIONS, FLOORS AND CEILINGS, CHROME, NICKEL PLATED BRASS OR TYPE 302 STAINLESS STEEL.

7 ACCESS DOORS:

- SUPPLY ACCESS DOORS, AS REQUIRED IN DUCTWORK AND WALL/CEILING ASSEMBLIES, TO ALL CONCEALED MECHANICAL EQUIPMENT AND OPERATING DEVICES. ACCESS DOORS IN WALL/CEILING ASSEMBLIES TO BE INSTALLED BY OTHER TRADES.
- ACCESS DOORS SHALL BE FIRE-RATED TYPE, WHERE USED IN FIRE-RATED ASSEMBLIES, AND SHALL MATCH THE RATING OF THE ASSEMBLY.

8 PIPE INSULATION:

- INSTALL IN ACCORDANCE WITH THERMAL INSULATION ASSOCIATION OF CANADA (TIAC) NATIONAL STANDARDS.
- MAX. FLAME SPREAD RATING: 25.
- MAX. SMOKE DEVELOPED RATING: 50.
- DOMESTIC COLD WATER (DCW):
 - 1" RIGID MOULDED MINERAL FIBRE WITH VAPOUR RETARDER JACKET.
- INSULATE ALL PIPING IN FLOORS, WALLS AND CEILINGS, TO POINT OF FIXTURE CONNECTIONS.
- DOMESTIC HOT WATER (DHW):
 - 1" RIGID MOULDED MINERAL FIBRE FOR PIPING UP TO 1-1/4" SIZE
 - 1-1/2" RIGID MOULDED MINERAL FIBRE FOR PIPING 1-1/2" TO 3" SIZE
 - INSULATE ALL PIPING IN FLOORS, WALLS AND CEILINGS, TO POINT OF FIXTURE CONNECTIONS.
- OUTER JACKET:
 - CONCEALED LOCATIONS: ALL SERVICE JACKET.
 - EXPOSED LOCATIONS: PVC JACKET.
 - MECHANICAL/SERVICE ROOMS: PVC JACKET.

9 WATER SERVICE AND WATER SUPPLY PIPING:

- COORDINATE WATER SERVICE INSTALLATION WITH SUPPLY AUTHORITY:
 - MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE WATER ENTRY INSTALLATION, FROM A POINT 1m BEYOND THE BUILDING EXTERIOR.
 - OBTAIN, SUPPLY AND INSTALL ALL WATER METER(S) IN ACCORDANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY, INCLUDING REMOTE READING DEVICES AND WIRING.
 - SUPPLY AND INSTALL THRUST RESTRAINT (OBC 7.3.4.9) FOR ALL WATER SERVICE PIPES 4" OR MORE IN SIZE.
 - SUPPLY AND INSTALL PREMISE ISOLATION BACKFLOW PREVENTER IN ACCORDANCE WITH OBC 7.6.2.6, AND CSA B64.10.
 - BURIED OR EMBEDDED: COPPER TUBE, SOTT, ANNEALED, TYPE L, IN LONG LENGTHS AND WITH NO BURIED JOINTS. CANADIAN OR US MANUFACTURED, INCLUDING FITTINGS.
 - ABOVE GROUND: COPPER TUBE, HARD DRAWN, TYPE L, CAN, OR US MANUFACTURE, INCLUDING FITTINGS. LEAD-FREE SOLDER.
 - WATER SUPPLY PIPING IS SHOWN SCHEMATICALLY. ALL PIPING SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
 - INSTALL TUBING CLOSE TO BUILDING STRUCTURE TO MINIMIZE FURRING, CONSERVE HEADROOM AND SPACE. GROUP EXPOSED PIPING AND RUN PARALLEL TO WALLS.
 - ISOLATE ALL EQUIPMENT, FIXTURES AND BRANCHES WITH VALVES.
 - TEST WATER SYSTEM AT 1½ TIMES SYSTEM OPERATING PRESSURE OR MINIMUM 860 KPA, WHICHEVER IS GREATER. TEST PRESSURE AND TIMEFRAME SHALL BE AS REQUIRED BY OBC 7.3.7.2.
 - FLUSH OUT, DISINSECT AND RINSE SYSTEM, PRIOR TO CONSTRUCTION COMPLETION.
- WATER HEATERS:
 - SHALL BE PIPED WITH HEAT TRAPS ON THE INLET AND OUTLET PIPING, AS CLOSE AS PRACTICAL TO THE TANK, IN ACCORDANCE WITH OBC 12.3.1.4.
 - TEMPERATURE AND PRESSURE RELIEF VALVES:
 - MAXIMUM TEMPERATURE SETTING OF 210F (99F);
 - MAXIMUM PRESSURE SETTING OF 150 PSI;
 - DISCHARGE PER OBC 7.6.1.2.2:
 - TERMINATE WITH AN INDIRECT CONNECTION PIPED TO FLOOR DRAIN, SUMP OR OTHER SAFE LOCATION, WITH A 300mm AIR BREAK; OR
 - TERMINATE AT A DISTANCE NOT LESS THAN 150mm AND NOT MORE THAN 300mm FROM A FLOOR AND DISCHARGE VERTICALLY DOWN.
- TRAP SEAL PRIMERS AND ACCESS TO THEM SHALL BE LOCATED IN THE WASHROOM OR AREA THAT THEY SERVE.
- SUPPLY AND INSTALL WATER HAMMER ARRESTORS AT THE MIDPOINT AND END OF RUNS OF WATER SUPPLY PIPING AS REQUIRED BY OBC 7.6.1.1.4.

10 DRAINAGE, WASTE AND VENT PIPING:

- COORDINATE SANITARY AND STORM SERVICE INSTALLATIONS WITH SUPPLY AUTHORITY.
- APPROXIMATE SUB-FLOOR PIPING ELEVATIONS HAVE BEEN INDICATED ON THE DRAWINGS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING FINAL INVERTS BASED ON SITE CONDITIONS.
- BELOW GROUND/FLOOR:
 - PVC DWV, TYPE SDR26 SDR35.
- ABOVE GROUND:
 - PVC DWV SOLID WALL SCHEDULE 40, CERTIFIED TO CAN/CSA STANDARD B181.2, FOR NONCOMBUSTIBLE CONSTRUCTION (FLAME-SPREAD RATING NOT MORE THAN 25 PER CAN/ULC-S102.2).
 - PVC DWV SOLID WALL SCHEDULE 40, CERTIFIED TO CAN/CSA STANDARD B181.2, FOR NONCOMBUSTIBLE CONSTRUCTION (FLAME-SPREAD RATING NOT MORE THAN 25 AND SMOKE DEVELOPED CLASSIFICATION NOT MORE THAN 50 PER CAN/ULC-S102.2).
- PROVIDE CLEANOUTS AS REQUIRED BY THE ONTARIO BUILDING CODE.
- VENT COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH THE ONTARIO BUILDING CODE.

11 PROPANE GAS PIPING:

- STEEL PIPE, SCHEDULE 40, SEAMLESS, SCREWED FITTINGS.
- SLOPE PIPING DOWN IN DIRECTION OF FLOW TO LOW POINTS.
- ALL GAS PIPING AND FITTINGS SHALL BE:
 - CLEANED AFTER ASSEMBLY;
 - PAINTED WITH ONE BASE LAYER OF METAL PRIMER;
 - PAINTED WITH ONE TOP COAT OF EXTERIOR ENAMEL PAINT;
 - COLOUR ON EXTERIOR WALL - TO MATCH WALL
 - COLOUR ON ROOF - YELLOW.
- TEST SYSTEM IN ACCORDANCE WITH NATURAL GAS AND PROPANE INSTALLATION CODE.

12 DUCTWORK:

- RECTANGULAR DUCT:
 - RIGID GALVANIZED STEEL, LOCK FORMING QUALITY TO ASTM A653/A653M
 - THICKNESS, FABRICATION, REINFORCEMENT AND SUPPORT/ATTACHMENT TO ASHRAE OR SMACNA.
- ROUND DUCT:
 - RIGID GALVANIZED STEEL, LOCK FORMING QUALITY TO ASTM A653/A653M
 - THICKNESS, FABRICATION, REINFORCEMENT AND SUPPORT/ATTACHMENT TO ASHRAE OR SMACNA.
 - FLEXIBLE BRANCH DUCT (PERMITTED WITHIN 2m/6H FROM OUTLET):
 - ALL METAL TYPE: TYPE L, RIGID, ALUMINUM CORRUGATED DUCT, MANUFACTURED USING AN ALUMINUM STRIP, WHICH IS SPIRALLY WOUND AND MECHANICALLY JOINED TOGETHER FORMING AN AIR TIGHT AND LEAKPROOF SEAM.
- SEAL CLASSIFICATION:
 - CLASS A: LONGITUDINAL SEAMS, TRANSVERSE JOINTS, DUCT WALL PENETRATIONS AND CONNECTIONS MADE AIRTIGHT WITH SEALANT AND TAPE.
- FITTINGS:
 - FABRICATION: TO SMACNA.
 - RADIUSSED ELBOWS:
 - RECTANGULAR: STANDARD WITH CENTRELINE RADIUS 1.5 TIMES DUCT DIMENSION, WITH SINGLE THICKNESS TURNING VANES.
 - ROUND: FIVE PIECE WITH CENTRELINE RADIUS 1.5 TIMES DIAMETER.
 - MITRED ELBOWS, RECTANGULAR: WITH DOUBLE THICKNESS TURNING VANES.
- BRANCHES:
 - RECTANGULAR MAIN AND BRANCH: WITH RADIUS ON BRANCH 1.5 TIMES WIDTH OF DUCT 45 DEGREES ENTRY ON BRANCH.
 - ROUND MAIN AND BRANCH: ENTER MAIN DUCT AT 45 DEGREES WITH CONICAL CONNECTION.
 - PROVIDE VOLUME CONTROL DAMPER IN BRANCH DUCT NEAR CONNECTION TO MAIN DUCT.
 - MAIN DUCT BRANCHES: WITH SPLITTER DAMPER.
- TRANSITIONS:
 - DIVERGING: 20 DEGREES MAXIMUM INCLUDED ANGLE.
 - CONVERGING: 30 DEGREES MAXIMUM INCLUDED ANGLE.
- FIRE STOPPING:
 - RETAINING ANGLES AROUND DUCT, ON BOTH SIDES OF FIRE SEPARATION IN ACCORDANCE WITH SECTION.
 - FIRE STOPPING MATERIAL AND INSTALLATION MUST NOT DISTORT DUCT.
- DAMPERS:
 - MANUFACTURE TO SMACNA STANDARDS.

SPEC NOTE: SMACNA strongly recommends against the use of splitter dampers for balancing purposes.
 - SINGLE BLADE DAMPERS:
 - FABRICATE FIRE-RESISTANT MATERIAL AS DUCT, BUT ONE SHEET METAL THICKNESS HEAVIER, V-GROOVE STIFFENED.
 - SIZE AND CONFIGURATION TO RECOMMENDATION OF SMACNA.
 - LOCKING QUADRANT (WITH SHAFT EXTENSION TO ACCOMMODATE INSULATION THICKNESS, IF REQUIRED).
 - INSIDE AND OUTSIDE NYLON END BEARINGS.
 - CHANNEL FRAME OF SAME MATERIAL, AS ADJACENT DUCT, COMPLETE WITH ANGLE STOP.
- DUCT LEAKAGE: IN ACCORDANCE WITH SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL.
- ALL DUCT AND SEAL MATERIALS TO HAVE A FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE DEVELOPED CLASSIFICATION OF LESS THAN 50.
- PROVIDE FLEXIBLE CONNECTIONS AT ALL EQUIPMENT DUCT CONNECTION POINTS.

13 DUCT INSULATION:

- REFER TO DRAWING FOR DUCT THAT IS IDENTIFIED TO BE INSULATED.
- INSTALL IN ACCORDANCE WITH THERMAL INSULATION ASSOCIATION OF CANADA (TIAC) NATIONAL STANDARDS.
- MAX. FLAME SPREAD RATING: 25.
- MAX. SMOKE DEVELOPED RATING: 50.
- THERMAL INSULATION - RECTANGULAR DUCT:
 - 1" (R4.3) RIGID MINERAL FIBRE BOARD WITH VAPOUR RETARDER JACKET.
- ALUMINUM JACKET WITH MOISTURE BARRIER.
- THERMAL INSULATION - ROUND DUCT:
 - 1" (R3.1) MINERAL FIBRE BLANKET WITH VAPOUR RETARDER JACKET.
 - ALUMINUM JACKET WITH MOISTURE BARRIER.

14 MECHANICAL FIRE PROTECTION:

- MECHANICAL CONTRACTOR RESPONSIBILITY:
 - REFER TO ARCHITECTURAL DRAWINGS, TO VERIFY LOCATION OF ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
 - PROVIDE DRAWINGS FROM HILT AND/OR 3M FOR FIRE PROTECTION OF ALL PIPING, DUCT AND MECHANICAL ITEMS PENETRATING OR PASSING THROUGH A FIRE SEPARATION OR FIRE-RATED ASSEMBLY, FOR REVIEW BY ARCHITECT AND ENGINEER.
 - ALL PIPING, DUCT AND MECHANICAL ITEMS SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
- ALL PIPING SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
- FIRE DAMPERS:
 - FIRE DAMPERS SHALL BE CAN/ULC-S112 (STANDARD METHOD OF FIRE TEST OF FIRE DAMPER ASSEMBLIES) LISTED AND LABELLED.
 - FIRE DAMPERS SHALL BE NFPA 80 (STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES), NFPA 90A (STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATING SYSTEMS), AND NFPA 101 (LIFE SAFETY CODE) COMPLIANT.
 - DUCTWORK SHALL BE FITTED WITH FIRE DAMPERS AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
 - SUPPLY AND INSTALL ACCESS DOORS IN ARCHITECTURAL FINISH (WALL, CEILING OR FLOOR) TO ACCESS DUCT, IN COMMON AREA WHERE POSSIBLE.
 - SUPPLY AND INSTALL TIGHTLY-FITTED ACCESS DOOR IN DUCT TO ACCESS, INSPECT AND RESET FIRE DAMPER.
 - TYPES:
 - DYNAMIC - FOR USE IN AIR HANDLING SYSTEMS THAT DO NOT SHUTDOWN UPON FIRE ALARM.
 - RATING:
 - 1-1/2 R (30MIN TO 2HR FIRE RESISTANCE RATING).
- FIRE DAMPER AND DUCT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS, AND SHALL BE SEALED WITH FIRESTOPPING MATERIAL.
- ALL MECHANICAL MATERIALS USED WITHIN CEILING RETURN AIR PLENUMS SHALL FLAME-SPREAD RATING NOT MORE THAN 25 AND SMOKE DEVELOPED CLASSIFICATION NOT MORE THAN 50 PER CAN/ULC-S102.2.
- MOCK-UPS:
 - PREPARE MOCK-UPS OF TYPICAL FIRESTOP INSTALLATION OF THE FOLLOWING, FOR REVIEW AND APPROVAL BY THE OWNER, ENGINEER AND MUNICIPAL BUILDING INSPECTOR:
 - SANITARY PIPING - WALL AND CEILING/FLOOR FIRE SEPARATION;
 - DCW AND DHW PIPING - WALL AND CEILING/FLOOR FIRE SEPARATION;
 - FIRE DAMPER INSTALLATION - WALL AND CEILING/FLOOR FIRE SEPARATION.
 - ALL FIRESTOP INSTALLATIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROPRIATE PRODUCT INSTALLATION INSTRUCTIONS, AND THE REFERENCED UL/ULC LISTING AND/OR TEST STANDARD.
 - SUPPLY A COPY OF THE PRODUCT INSTALLATION INSTRUCTIONS WITH UL/ULC LISTING AND/OR TEST STANDARD REFERENCE, FOR EACH INSTALLATION.
 - MOCK-UP MAY REMAIN AS PART OF WORK.

15 COMMERCIAL KITCHEN EXHAUST AND FIRE PROTECTION:

- SYSTEM SHALL BE CONFIGURED FOR COMMERCIAL KITCHEN EXHAUST SYSTEM.
- DESIGN AND INSTALLATION SHALL CONFORM TO NFPA 96 - STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS.
- HOOD TYPES (ASHRAE HVAC APPLICATIONS, CHAPTER 33):
 - DUTY: MEDIUM DUTY (400F) - RANGES, GRIDDLES, FRYERS.
 - CONFIGURATION:
 - WALL MOUNTED CANOPY: MEDIUM DUTY - 200 TO 300 CFM PER LINEAL FOOT;
- HOOD:
 - SHALL BE UL/ULC LISTED: TYPE I - OVER EQUIPMENT THAT PRODUCES GREASE VAPORS OR SMOKE.
 - SHALL HAVE A 6" MINIMUM OVERHANG ON ALL SIDES OF COOKING EQUIPMENT.
 - SHALL HAVE A UL/ULC LISTED GREASE COLLECTOR AND GREASE FILTERS, LOCATED NOT LESS THAN 18" FROM THE COOKING SURFACE, OR NOT LESS THAN 48" FROM CHARCOAL TYPE COOKING SURFACES.
 - LIGHTING UNITS IN HOODS SHALL BE UL/ULC LISTED FOR USE OVER COMMERCIAL COOKING APPLICATIONS.
- EXHAUST DUCT AND FAN:
 - EXHAUST FANS SHALL BE UL/ULC LISTED, FOR COMMERCIAL KITCHEN / RESTAURANT EXHAUST USE.
 - EXHAUST FANS SHALL HAVE A MINIMUM OF 3.05m (10 Ft.) OF CLEARANCE FROM THE OUTLET TO ADJACENT BUILDINGS, PROPERTY LINES, GRADE LEVEL PERMITTED TO BE LOWERED IN A SECURE AREA IF ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION), COMBUSTIBLE CONSTRUCTION, ELECTRICAL EQUIPMENT OR LINES, AND THE CLOSEST POINT OF ANY AIR INTAKE OR OPERABLE DOOR OR WINDOW.
 - EXHAUST DUCT AIR VELOCITY SHALL BE NOT LESS THAN 1200 FT/MIN.
 - HOOD EXHAUST FAN(S) SHALL CONTINUE TO OPERATE AFTER THE FIRE EXTINGUISHING SYSTEM HAS BEEN ACTIVATED UNLESS FAN SHUTDOWN IS REQUIRED BY A LISTED COMPONENT OF THE VENTILATION SYSTEM OR BY THE DESIGN OF THE EXTINGUISHING SYSTEM.
 - ALL DUCTWORK SHALL BE PITCHED TO DRAIN THE GREASE BACK INTO THE HOOD.
 - EXHAUST AND REPLACEMENT AIR FANS SHALL BE INTER-LOCKED, AND SHALL HAVE VARIABLE SPEED CONTROL.
- ACCESS PANELS:
 - ACCESS OR ACCESS PANELS SHALL BE PROVIDED IN HOOD, DUCT, AND EXHAUST FAN FOR COMPLETE ACCESS, INSPECTION AND CLEANING OF THE SYSTEM.
 - OPENINGS SHALL BE PROVIDED AT THE SIDES OR AT THE TOP OF THE DUCT, WHICHEVER IS MORE ACCESSIBLE, AND AT CHANGES OF DIRECTION.
 - ACCESS PANELS SHALL BE OF THE SAME MATERIAL AND THICKNESS AS THE DUCT, WITH A GASKET OR SEALANT THAT IS RATED FOR 815.6C (1500F) AND SHALL BE GREASE-TIGHT.
 - FASTENERS, SUCH AS BOLTS, WELD STUDS, LATCHES, OR WING NUTS, USED TO SECURE THE ACCESS PANELS SHALL BE CARBON STEEL OR STAINLESS STEEL AND SHALL NOT PENETRATE DUCT WALLS.
- REPLACEMENT AIR:
 - WHEN ITS FIRE-EXTINGUISHING SYSTEM DISCHARGES, MAKEUP AIR SUPPLIED INTERNALLY TO A HOOD SHALL BE SHUT OFF.
- CLEARANCE REQUIREMENTS:
 - THE CLEARANCE REQUIREMENTS OR CLEARANCE REDUCTION SYSTEMS FOR HOODS, GREASE REMOVAL DEVICES, EXHAUST FANS AND DUCTS, OUTLINED IN CHAPTER 4 OF NFPA 96 SHALL BE FOLLOWED.
 - THE CLEARANCE REQUIREMENTS FROM DUCT TO THE INTERIOR SURFACE OF ENCLOSURES OUTLINED IN CHAPTER 7 OF NFPA 96 SHALL BE FOLLOWED.

8 AUTOMATIC FIRE-EXTINGUISHING SYSTEM:

- GENERAL:
 - FIRE-EXTINGUISHING EQUIPMENT, WITH BOTH AUTOMATIC AND MANUAL ACTIVATION, SHALL BE INSTALLED IN THE COMMERCIAL KITCHEN EXHAUST HOOD.
 - THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM SHALL COMPLY WITH STANDARD UL 300, STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF RESTAURANT COOKING AREAS, OR OTHER EQUIVALENT STANDARDS AND SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LISTING.
 - SYSTEM SHALL BE PRE-ENGINEERED TYPE, WITH A FIXED NOZZLE EXTINGUISHING AGENT DISTRIBUTION.
- FUEL SHUT-OFF:
 - UPON ACTIVATION OF THE FIRE-EXTINGUISHING SYSTEM, ALL SOURCES OF FUEL AND ELECTRIC POWER TO ALL EQUIPMENT UNDER THE HOOD SHALL AUTOMATICALLY SHUT OFF.
 - SHUTOFF DEVICES SHALL REQUIRE MANUAL RESET.
- ACTIVATION:
 - EXTINGUISHING AGENT SHALL BE DELIVERED THROUGH REGULATED RELEASE NOZZLES.
 - AUTOMATIC ACTIVATION SHALL BE BY FUSIBLE LINK DETECTION.
 - A READILY ACCESSIBLE MEANS FOR MANUAL ACTIVATION SHALL BE LOCATED BETWEEN 1067mm AND 1219mm (42in AND 48in) ABOVE THE FLOOR, BE ACCESSIBLE IN THE EVENT OF A FIRE, BE LOCATED IN A PATH OF EGRESS, AND CLEARLY IDENTIFY THE HAZARD PROTECTED.
 - THE AUTOMATIC AND MANUAL MEANS OF SYSTEM ACTIVATION EXTERNAL TO THE CONTROL HEAD OR RELEASING DEVICE SHALL BE SEPARATE AND INDEPENDENT OF EACH OTHER SO THAT FAILURE OF ONE WILL NOT IMPAIR THE OPERATION OF THE OTHER. THE MANUAL MEANS OF SYSTEM ACTIVATION SHALL BE PERMITTED TO BE COMMON WITH THE AUTOMATIC MEANS IF THE MANUAL ACTIVATION DEVICE IS LOCATED BETWEEN THE CONTROL HEAD OR RELEASING DEVICE AND THE FIRST FUSIBLE LINK.
 - THE MEANS FOR MANUAL ACTIVATION SHALL BE MECHANICAL. ELECTRICAL POWER SHALL BE PERMITTED TO BE USED FOR MANUAL ACTIVATION IF A STANDBY POWER SUPPLY IS PROVIDED OR IF SUPERVISION IS PROVIDED.
- SYSTEM ANNUNCIATION:
 - UPON ACTIVATION OF THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM, AN AUDIBLE ALARM OR VISUAL INDICATOR SHALL BE PROVIDED TO SHOW THAT THE SYSTEM HAS ACTIVATED.
 - WHERE A FIRE ALARM SYSTEM IS INSTALLED, THE ACTIVATION OF THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM SHALL ACTIVATE THE FIRE ALARM SYSTEM.
- SYSTEM SUPERVISION:
 - WHERE ELECTRICAL POWER IS REQUIRED TO OPERATE THE AUTOMATIC FIRE-EXTINGUISHING SYSTEM, IT SHALL BE MONITORED BY A SUPERVISORY ALARM, WITH A STANDBY POWER SUPPLY PROVIDED.
- SYSTEM SHALL BE TESTED TO VERIFY THAT THE EXHAUST AIR AND REPLACEMENT AIR VOLUMES, AND NEGATIVE PRESSURE CREATED IN THE COOKING AREA MEET THE REQUIREMENTS OF NFPA 96. TEST REPORT SHALL BE SUBMITTED UPON THE COMPLETION OF THE INSTALLATION.

16 MECHANICAL IDENTIFICATION:

- IDENTIFY MECHANICAL EQUIPMENT WITH LAMICOID NAMEPLATES.
- LABEL ALL PIPING AT LEAST ONCE IN EVERY ROOM, AND AT NO MORE THAN 25 FT CENTERS.

17 EARTHQUAKE LOAD:

- ALL MECHANICAL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE EARTHQUAKE LOAD AND EFFECTS REQUIRED BY THE ONTARIO BUILDING CODE.
- MECHANICAL ELEMENTS AND COMPONENTS (EQUIPMENT, PIPES, DUCTS, ETC.), AND THEIR CONNECTIONS TO THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SMACNA/ANSI SEISMIC RESTRAINT MANUAL OR OTHER GUIDELINE REFERENCED IN THE ONTARIO BUILDING CODE.
- FOLLOWING PROJECT COMPLETION, SEISMIC ENGINEER SHALL PROVIDE A LETTER OF FINAL SITE REVIEW.
- CONTRACTOR SHALL CARRY THE COST OF THE SEISMIC ENGINEERING, INCLUDING SITE REVIEWS, DESIGN AND SHOP DRAWING PREPARATION.

18 EQUIPMENT AND MATERIALS SUPPLY:

- ALL MECHANICAL EQUIPMENT, PIPING, DUCTWORK, AND RELATED ITEMS SHALL BE SECURELY SUPPORTED, ATTACHED AND FASTENED TO BUILDING STRUCTURE, AND SHALL NOT BE FASTENED TO THE ROOF DECK.
- PIPE HANGERS AND SUPPORTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MSS STANDARD SP-58, PIPE HANGERS AND SUPPORTS - MATERIALS, DESIGN, MANUFACTURE, SELECTION, APPLICATION, AND INSTALLATION.
- PLATFORMS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL MEETING THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, INCLUDING CSA STANDARD W59 WELDED STEEL CONSTRUCTION, AND THE REQUIREMENTS OF THE CANADIAN WELDING BUREAU.
- ZIP TIES ARE NOT PERMITTED.

19 COORDINATION:

- INFORMATION INVOLVING ACCURATE DIMENSIONING OF THE BUILDING SHALL BE TAKEN FROM SITE BY CONTRACTOR.
- DRAWINGS ARE IN DIAGRAMMATIC FORM, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL ARRANGEMENT FOR EQUIPMENT. COORDINATE PHYSICAL LOCATION OF ALL EQUIPMENT WITH OTHER TRADES AND ALLOW FOR ANY ADDITIONAL PIPING, DUCTING, FITTINGS, SUPPORTS, ETC., IN ORDER TO AVOID INTERFERENCE AND FACILITATE THE WORK.
- CONTRACTOR TO MAKE ANY NECESSARY MODIFICATIONS OR ADDITIONS, WITHOUT CHARGE, TO ACCOMMODATE SITE CONDITIONS AND COORDINATION.
- COORDINATE ALL MECHANICAL EQUIPMENT WIRING, INCLUDING LOW VOLTAGE CONTROL WIRING, WITH ELECTRICAL TRADES.
- WALLS HAVE BEEN SHOWN TO BE CONSTRUCTED ABOVE THE CEILING TO THE UNDERSIDE OF ROOF STRUCTURE, TO CREATE A CEILING RETURN AIR PLENUM. THESE WALLS AND ALL OPENINGS SHALL BE INDICATED ON THE ARCHITECTURAL DRAWINGS.

20 START-UP, COMMISSIONING AND TRAINING:

- COMMISSIONING:
 - START-UP AND COMMISSION THE FOLLOWING SYSTEMS:
 - PLUMBING FIXTURES;
 - HVAC;
 - COMMERCIAL KITCHEN EXHAUST AND FIRE PROTECTION.
 - PERFORM SYSTEMATIC TESTS, PROCEDURES AND CHECKS ON SYSTEMS, AS FOLLOWS:
 - TO VERIFY OPERATION IN ACCORDANCE WITH CONTRACT DOCUMENTS, DESIGN CRITERIA AND INTENT, AND MANUFACTURER'S REQUIREMENTS.
 - TO ENSURE APPROPRIATE DOCUMENTATION IS PROVIDED;
 - TO EFFECTIVELY TRAIN BUILDING OPERATIONAL STAFF.
 - SYSTEMS ARE TO BE OPERATED AT FULL CAPACITY, WITH CORRECTION OF ALL DEFICIENCIES AND ADJUSTMENTS TO MEET OPTIMUM PERFORMANCE.
 - PROVIDE WRITTEN REPORT AT END OF COMMISSIONING OUTLINING EQUIPMENT OPERATIONAL CONDITIONS AND PARAMETERS.
- TESTING, ADJUSTING AND BALANCING:
 - TEST, ADJUST AND BALANCE (TAB) ALL PLUMBING AND HVAC EQUIPMENT AND SYSTEMS, INCLUDING THE FOLLOWING:
 - FANCOIL UNITS;
 - HEAT PUMP UNITS;
 - ENERGY RECOVERY VENTILATORS.
 - TAB PROCEDURE SHALL BE COMPLETED IN ACCORDANCE WITH ASHRAE STANDARD 111, MEASUREMENT, TESTING, ADJUSTING AND BALANCING OF BUILDING HVAC SYSTEMS.
 - EXTERNAL STATIC PRESSURES SHALL BE MEASURED AFTER FILTER ON RETURN AIR AND BEFORE AC COIL AND SUPPLY AIR.
 - PROVIDE DETAILED REPORT AT END OF TAB, IN ACCORDANCE WITH THE REPORTING PROCEDURES OF ASHRAE STANDARD 111.
- DEMONSTRATION AND TRAINING:
 - DEMONSTRATE OPERATION AND MAINTENANCE OF EQUIPMENT AND SYSTEMS TO OWNER'S PERSONNEL ONE WEEK PRIOR TO DATE OF FINAL INSPECTION.
 - PRIOR TO DEMONSTRATION AND TRAINING, ENSURE THAT EQUIPMENT HAS BEEN INSPECTED AND PUT INTO OPERATION, INCLUDING COMPLETION OF COMMISSIONING AND TESTING, ADJUSTING, AND BALANCING.
 - DEMONSTRATE START-UP, OPERATION, CONTROL, ADJUSTMENT, TROUBLE-SHOOTING, SERVICING, AND MAINTENANCE OF EACH ITEM OF EQUIPMENT.
 - INSTRUCT PERSONNEL IN PHASES OF OPERATION AND MAINTENANCE USING OPERATION AND MAINTENANCE MANUALS AS BASIS OF INSTRUCTION. REVIEW CONTENTS OF MANUAL IN DETAIL TO EXPLAIN ASPECTS OF OPERATION AND MAINTENANCE.

HVAC LEGEND

SA RA EA MA OA Ex.	SUPPLY AIR RETURN AIR EXHAUST AIR MAKE-UP AIR OUTDOOR AIR EXISTING		ELBOW, WITH VANES, RECTANGULAR(r= 1.5W)		FIRE DAMPER
					WALL SUPPLY GRILLE OR REGISTER
					WALL EXHAUST/RETURN GRILLE OF REGISTER
					FLOOR OR CEILING SUPPLY GRILLE OR REGISTER
					FLOOR OR CEILING EXHAUST/RETURN GRILLE OR REGISTER
					CEILING SUPPLY DIFFUSER
					CEILING RETURN GRILLE
					CEILING OR REGISTER DESIGNATION
					SIZE
					CFM
					TYPE
					THERMOSTAT
					THERMOSTAT REMOTE SENSOR
					HUMIDISTAT
					CONTROLLER, AS INDICATED
					TEE, RECTANGULAR MAIN AND TAP
					TEE, RECTANGULAR MAIN AND TAP, WITH DAMPER
					TEE RECTANGULAR
					WYE, RECTANGULAR
					VOLUME DAMPER
					ACOUSTICAL INSULATION LINING
					ACOUSTICAL INSULATION LINING
					FLEXIBLE CONNECTION
					ELBOW, RECTANGULAR(r= 1.5W)

PLUMBING LEGEND

ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT	DESCRIPTION	AIR FLOW		ENERGY PERF.		ELECTRICAL				ACCEPTABLE PRODUCT	NOTES
		SUPPLY (cfm)	ESP (in)	TEMP (deg.F)	EFF (%)	VOLT	PHASE	MCA	MOCP		
ERV-1	HEAT RECOVERY VENTILATOR HORIZONTAL	170	0.5	32	85	120	1	<12	15	LIFEBREATH #170 ERVD	PROGRAMMABLE CONTROL BUILT-IN INTERFACE TO FANCOIL UNIT
ERV-2	HEAT RECOVERY VENTILATOR									OR APPROVED EQUAL	
ERV-3	HORIZONTAL	240	0.5	32	62	120	1	<12	15	LIFEBREATH #330 ERV	3 SPEED/2 MODE PROGRAMMABLE CONTROL
ERV-4	COMMERCIAL									OR APPROVED EQUAL	BUILT-IN INTERFACE TO FANCOIL UNIT

REGISTER, GRILLE & DIFFUSER SCHEDULE

UNIT	DESCRIPTION	CONSTRUCTION	CONFIGURATION			DEFLECTION		FRAME		FINISH	ACCEPTABLE PRODUCT	NOTES
			PATTERN	BLADE SPACING								
S1	SA DIFFUSER CEILING SQUARE CONE	STEEL	4 CONE FIXED AIR PATTERN	-	-	-	-	LAY-IN INVERTED T DRYWALL FLANGE		WHITE	EH PRICE #SCD STEEL	
S2	SA DIFFUSER CEILING ROUND CONE	STEEL	4 CONE FIXED AIR PATTERN	-	-	-	-	SCREW FASTEN TO DUCT		WHITE	EH PRICE #RCD #RCD STEEL	
R1	EGG CRATE RA CEILING	ALUMINUM	FIXED GRID	12x12x25mm 1/2x1/2x1in	0	-	-	LAY-IN INVERTED T DRYWALL FLANGE		WHITE	EH PRICE #B1	
R2	LOUVRED RA GRILLE CEILING/WALL	STEEL	SINGLE DEFLECTION ADJUSTABLE	19mm, 3/4 in PARALLEL TO LONG DIM	ADJUSTABLE	-	-	STANDARD - 32mm, 1.25in		WHITE	EH PRICE #530 STEEL SINGLE	
											OR APPROVED EQUAL	

FANCOIL SCHEDULE

UNIT	DESCRIPTION	FAN			COOLING		HEATING	ELECTRICAL				ACCEPTABLE PRODUCT	NOTES
		CFM	ESP	HP	NOM (ton)	ELEC (kW)		VOLT	PHASE	MCA	MOCP		
FC-1	FAN COIL UNIT UPFLOW	1200	0.5	1/2	3	15	240	1		80	80	CARRIER #FB4C	MULTI-SPEED FAN MULTI-STAGE HEAT THERMOSTAT WITH ROOM TEMP SENSOR - 7-DAY DIGITAL PROGRAMMABLE THERMOSTAT TO MEET ASHRAE 90.1 - 7 DAY SCHEDULE - 10 HR POWER LOSS - 2 HR MANUAL OVERRIDE - SETBACK TO 55F (13C) - SETUP TO 90F (32C)
FC-2	FAN COIL UNIT UPFLOW	1800	0.6	3/4	4	15	240	1		85	90		
FC-3 FC-4	FAN COIL UNIT UPFLOW	1800	0.6	3/4	5	15	240	1		85	90		

HEAT PUMP UNIT SCHEDULE

UNIT	DESCRIPTION	COOLING			SEER	CONNECTIONS		ELECTRICAL				ACCEPTABLE PRODUCT	NOTES
		EWB (deg.F)	OAT (deg.F)	TC (Mbtuh)		SUCTION (in)	LIQUID (in)	VOLT	PHASE	MCA	MOCP		
HP-1	HEAT PUMP	67	95	36	16.0	AS REQ'D TO SUIT LINE LENGTH	AS REQ'D TO SUIT LINE LENGTH	240	1	16.2	25	CARRIER #25HCB6	TWO STAGE - LOW AMBIENT COOLING - LONG LINE APPLICATION - COMPRESSOR START ASSIST
HP-2	HEAT PUMP	67	95	48	16.0	AS REQ'D TO SUIT LINE LENGTH	AS REQ'D TO SUIT LINE LENGTH	240	1	29.8	50		- CRANKCASE HEATER - EVAPORATOR FREEZE THERMOSTAT - HARD SHUT-OFF TXV - ISOLATION RELAY - LOW AMBIENT PRESSURE SWITCH - SUPPORT FEET
HP-3 HP-4	HEAT PUMP	67	95	60	16.0	AS REQ'D TO SUIT LINE LENGTH	AS REQ'D TO SUIT LINE LENGTH	240	1	37.5	60		
NOTES: 1. CONTRACTOR TO VERIFY THAT UNIT SELECTED MATCHES FANCOIL UNIT.													

COMMERCIAL KITCHEN EXHAUST SCHEDULE

UNIT	DESCRIPTION	FAN			HEATING		ELECTRICAL			ACCEPTABLE PRODUCT	NOTES
		CFM	ESP	DRIVE	INPUT (Mbtu/hr)	OUTPUT (Mbtu/hr)	VOLT	PH	HP		
EF-1	EXHAUST FAN CENTRIFUGAL ROOF MOUNTED RESTAURANT MODEL	1600	0.6	BELT	-	-	240	1	3/4	CAPTIVEAIRE OR APPROVED EQUAL	EXHAUST FAN: - VARIABLE SPEED CONTROL - BACKDRAFT DAMPER - UL705 AND UL762 - AMCA SOUND AND AIR CERTIFIED - WIRING FROM ELECTRICAL DISCONNECT SWITCH TO MOTOR - WEATHERPROOF DISCONNECT SWITCH - HIGH HEAT OPERATION 300F (149C) - GREASE CLASSIFICATION TESTING - OPERATES WITH NORMAL AND ABNORMAL FLARE-UP TEMPERATURE TESTS - GREASE BOX - SAFETY DISCONNECT SWITCH
HOOD	COMMERCIAL KITCHEN EXHAUST HOOD	8' LENGTH FIELD WRAPPER BACKSPLASH END PANELS SUPPLY PLENUM								CAPTIVEAIRE OR APPROVED EQUAL	HOOD: - STAINLESS STEEL CONSTRUCTION 304SS - SUPPLY AIR PLENUM ALONG LENGTH OF HOOD AT FRONT - GREASE EXTRACTION FILTER AND GREASE TROUGH - UL LISTED PRE-WIRED LIGHTS - FIRE SUPPRESSION SYSTEM - CONTROL PANEL
MUA	MAKE-UP AIR DUCT WITH MOTORIZED DAMPER	INTERLOCK DAMPER WITH HOOD CONTROL TO CLOSE DAMPER WHEN: - FAN IS NOT OPERATIONAL - UPON ACTIVATION OF FIRE SUPPRESSION SYSTEM									
NOTES: 1. SYSTEM SHALL BE CONFIGURED FOR COMMERCIAL KITCHEN EXHAUST SYSTEM, AND SHALL MEET ALL REQUIREMENTS OF ULC AND NFPA 96. 2. CONTROL SYSTEM: - FAN SYSTEM - ON/OFF SWITCH - LIGHTS - ON/OFF SWITCH - DUCT TEMPERATURE SENSOR - EXHAUST FAN - ON IN FIRE SUPPRESSION - SUPPLY FAN - OFF IN FIRE SUPPRESSION - MUA AIR DAMPER - CLOSED IN FIRE SUPPRESSION - LIGHTS - OFF IN FIRE SUPPRESSION - EXHAUST AND SUPPLY FAN MODULATE BASED ON DUCT TEMPERATURE											

BACKFLOW PREVENTER SCHEDULE

TYPE	DESCRIPTION	ACCEPTABLE PRODUCT	NOTES
MODERATE HAZARD	DOUBLE CHECK VALVE ASSEMBLY BACK PRESSURE & BACK SIPHONAGE	WATTS #LF007QT (1/2" TO 2")	SIZE AS INDICATED IN DRAWING LEAD FREE

GREASE INTERCEPTOR SCHEDULE

UNIT	DESCRIPTION	CAPACITY			DIMENSIONS			ACCEPTABLE PRODUCT	NOTES
		INLET OUTLET (in)	FLOW RATE (gpm)	OIL/GREASE CAPACITY (gal/lb)	LENGTH (in)	WIDTH (in)	DEPTH (in)		
INT-1	GREASE INTERCEPTOR	3.00	20.00	40	20.25	19.25	19.50	ZURN #Z-1170 OR APPROVED EQUAL	EXTENSION FOR RECESSED INSTALLATION TO SUIT DEPTH HEAVY DUTY REINFORCED COVER FLOW CONTROL FITTING PROVIDE VENTING TO MEET ONTARIO BUILDING CODE AND MANUFACTURER'S REQUIREMENTS

PUMP SCHEDULE

UNIT	DESCRIPTION	FLOW (gpm)	CAPACITY HEAD (ft)	CONN. (in)	VOLT	ELECTRICAL PHASE	POWER	ACCEPTABLE PRODUCT	NOTES
RP-1	DHW RECIRCULATION PUMP	9.00	6.00	3/4	120	1	1/25HP	GRUNDFOS #UP15 ARMSSTRONG	BRONZE ATTACHED LINE CORD PROGRAMMABLE TIMER OR APPROVED EQUAL

WATER HEATER SCHEDULE

UNIT	DESCRIPTION	CAPACITY			CONNECTIONS		ELECTRICAL			ACCEPTABLE PRODUCT	NOTES
		VOLUME (US Gal)	TEMP RISE (deg.F)	RECOVERY (gph)	DCW IN (in)	DHW OUT (in)	VOLT	PHASE	MOCP (kW)		
WH-1	WATER HEATER ELECTRIC, POINT-OF-USE 15.75" D x 23"H	10.0	80	8-30	3/4	3/4	120	1	1.4 kW	RHEEM #RE JOHN WOOD OR APPROVED EQUAL	WITH UNION CONNECTIONS TEMP/PRESS RELIEF VALVE MIXING VALVE
WH-2	WATER HEATER ELECTRIC, MODERATE USE	50	80	15-61	3/4	3/4	240	1	6 kW	RHEEM #ELD JOHN WOOD OR APPROVED EQUAL	WITH UNION CONNECTIONS TEMP/PRESS RELIEF VALVE MIXING VALVE

PLUMBING FIXTURE SCHEDULE

UNIT	DESCRIPTION	PIPE SIZE					ACCEPTABLE PRODUCT	NOTES
		TRAP (in) (mm)	WASTE (in) (mm)	VENT (in) (mm)	DCW (in) (mm)	DHW (in) (mm)		
MV-1	MIXING VALVE				1" 25	1" 25	WATTS #LF1170	80-120 deg F. RANGE
WC-1	WATER CLOSET - TANK	INT	3" 75	2" 50	1/2" 13	-	WATERCLOSET - AMERICAN STANDARD #2462 (CADET) SEAT - CENTOCO #500S TSCC SEAT OR APPROVED EQUAL	PRESSURE ASSISTED, ELONGATED WHITE HEAVY DUTY, OPEN FRONT SEAT (LESS COVER) SS HINGE MAX WATER CONSUMPTION - 6.0 Lpt, 1.6 gpf DIM L x W x H - 768 x 521 x 781 mm, 30.25 x 20.5 x 29.25 in RIM HEIGHT - 381 mm, 15 in FLOOR FLANGE, FLANGE BOLTS & GASKET ISOLATING VALVE - BRASS W CHROME FINISH, WALL-MOUNTED, SCREWDRIVER STOP
WC-2	WATERCLOSET - TANK BARRIER FREE	INT	3" 75	2" 50	1/2" 13	-	WATERCLOSET - AMERICAN STANDARD #2467 016 (CADET) SEAT - CENTOCO #820STS OR APPROVED EQUAL	PRESSURE ASSISTED, ELONGATED WHITE HEAVY DUTY, OPEN FRONT SEAT & COVER, SS HINGE MAX WATER CONSUMPTION - 6.0 Lpt, 1.6 gpf DIM L x W x H - 768 x 521 x 781 mm, 30.25 x 20.5 x 30.75 in RIM HEIGHT - 419 mm, 16.5 in SEAT HEIGHT - 430 to 485 mm, 17 to 19 in (OBC 3.8.3.9) FLOOR FLANGE, FLANGE BOLTS & GASKET ISOLATING VALVE - BRASS W CHROME FINISH, WALL-MOUNTED, SCREWDRIVER STOP
UR-1	URINAL FLUSH VALVE	INT	2" 50	1-1/2" 38	3/4" 19	-	AMERICAN STANDARD #6501 (WASHBROOK) URINAL #6045 MANUAL FLUSH VALVE (TOP SPUD) OR APPROVED EQUAL	WHITE, TOP/BACK SPUD MAX WATER CONSUMPTION - 1.9 Lpt, 0.5 gpf DIM H x W x D - 664 x 480 x 360 mm, 26.125 x 18.875 x 14-125 in RIM HEIGHT - 387 to 610 mm, 15.25 to 24 in SECOND URINAL - 430 mm, 16.9 in (OBC 3.8.3.10)
LA-1	LAVATORY COUNTERTOP BARRIER FREE	1-1/2" 38	1-1/2" 38	1-1/4" 32	1/2" 13	1/2" 13	AMERICAN STANDARD #9494 LAVATORY #7385 SINGLE LEVER FAUCET OR APPROVED EQUAL	WHITE, POP-UP DRAIN OVERALL DIM - W x FTB x D - 533 x 445 x 165mm, 21 x 17.5 x 6.5 in BOWL DIM - W x FTB x D - 441 x 279 x 133mm, 17.375 x 11 x 5.25 in MAX WATER CONSUMPTION - 8.35 Lpm, 2.2 gpm INSULATE AND COVER ALL SAN, DCW & DHW PIPE
SK-1	SINK HAND WASH	1-1/2" 38	1-1/2" 38	1-1/4" 32	1/2" 13	1/2" 13	AMERICAN STANDARD #0321 (DECLYN) LAVATORY #7385 SINGLE LEVER FAUCET OR APPROVED EQUAL	WHITE, POP-UP DRAIN OVERALL DIM - W x FTB x D - 470 x 432 x 197mm, 18.5 x 17 x 7.75 in BOWL DIM - W x FTB x D - 362 x 273 x 152mm, 14.25 x 10.75 x 6 in MAX WATER CONSUMPTION - 8.35 Lpm, 2.2 gpm
SK-2	KITCHEN SINK TRIPLE BOWL WITH LEDGE	1-1/2" 38	1-1/2" 38	1-1/4" 32	1/2" 13	1/2" 13	FRANKE KINDRED #LBT6407 #LBT6410 SINK AMERICAN STANDARD #7270 FAUCET OR APPROVED EQUAL	COMPARTMENT - 16"x14"x7"or 10"DP OVERALL - 20.5"x46.1"
SS-1	SERVICE SINK FLOOR MOUNTED	3" 75	3" 75	2" 50	1/2" 13	1/2" 13	FIAT #M5B-2424 SINK, #830-AA TRIM, #889-CC MOP BRACKET #E-77-AA BUMPER GUARDS #832-AA HOSE AND BRACKET OR APPROVED EQUAL	24"x24"x10" DP MOULDED STONE, WHITE MOP BRACKET VINYL BUMPER GUARDS HOSE AND BRACKET SUPPLIED BY OWNER
DW	DISHWASHER	1-1/2" 38	1-1/2" 38	1-1/4" 32	-	3/4" 19	COMMERCIAL UNIT	
HY-1	NON-FREEZE WALL HYDRANT	-	-	-	1/2" 13	-	WATTS #HY420	AUTOMATIC DRAINING BACKFLOW PREVENTER
FD-1	FLOOR DRAIN ROUND HEAVY DUTY	3" 75	3" 75	1-1/2" 38	1/2" 13	-	WATTS FD-100 ZURN MIFAB #MIR-500-NPB PRESSURE DROP TRAP SEAL PRIMER MIFAB #MI-GAP-NPB AIR GAP FITTING OR APPROVED EQUAL	SUIT FLOOR FINISH CAST IRON BODY NICKEL BRONZE STRAINER TRAP SEAL PRIMER INSTALLED IN WASHROOM WALL WITH ACCESS DOOR AUTOMATIC TRAP SEAL PRIMER SUIT FLOOR FINISH CAST IRON BODY NICKEL BRONZE TOP, GASKET BRASS CLEANOUT PLUG, GASKET
FCO	FLOOR CLEANOUT ROUND	-	SIZE PER PIPE	-	-	-	WATTS CO-200 ZURN OR APPROVED EQUAL	SUIT WALL FINISH CAST IRON FERRULE BRASS PLUG STAINLESS STEEL COVER
WCO	WALL CLEANOUT ROUND	-	SIZE PER PIPE	-	-	-	WATTS CO-380 ZURN OR APPROVED EQUAL	

MORRIS

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Brockville, Ontario

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Project Title:

NORTH STORMONT TOWNSHIP
MOOSE CREEK
COMMUNITY HALL
Munroe St, Moose Creek, Ontario
K0C 1W0

Drawing Title:
**MECHANICAL
SCHEDULES**

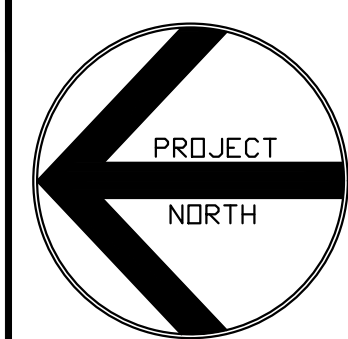
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Drawn	MP	Checked		Date	2022-01-04	Contract No.	
Scale:				Drawing No.:			
Horizontal: AS SHOWN			M2				
Vertical: AS SHOWN			REV DATE: 3/18/2022				

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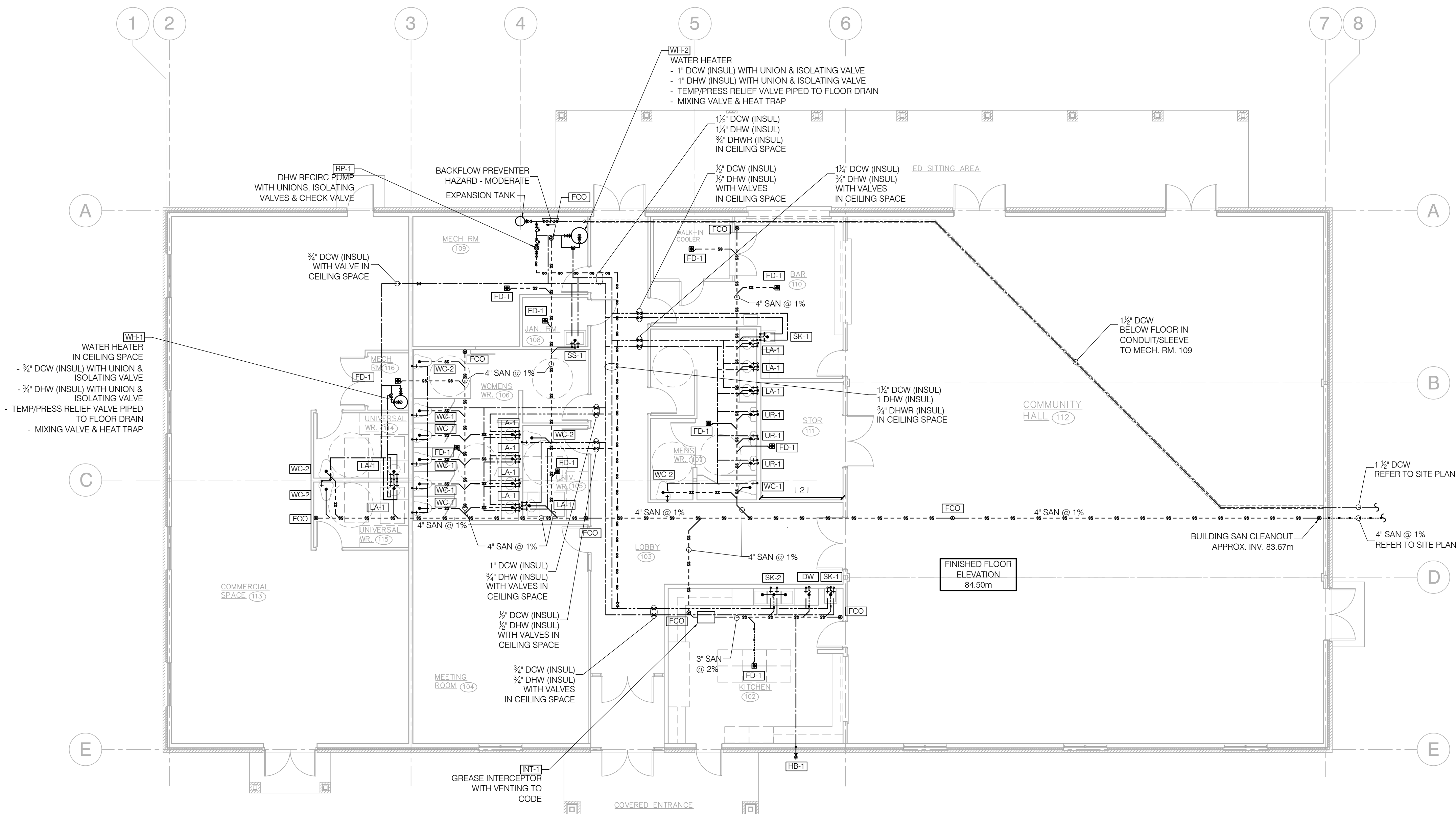


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Project Title:
**NORTH STORMONT TOWNSHIP
MOOSE CREEK
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Munroe St, Moose Creek, Ontario
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Drawing Title:
**PLUMBING
FLOOR PLAN**

Design: MM	Checked:	Approved: MM	Project No.: 9657
Drawn: MP	Checked:	Date: 2022-01-04	Contract No.:
Scale: Horizontal: AS SHOWN	Drawing No.: M3		
Vertical: AS SHOWN	REV DATE: 3/18/2022		



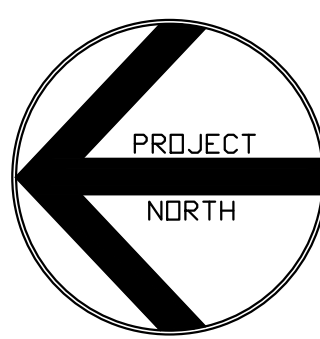
FLOOR PLAN - PLUMBING
SCALE: 1/8" = 1'-0"

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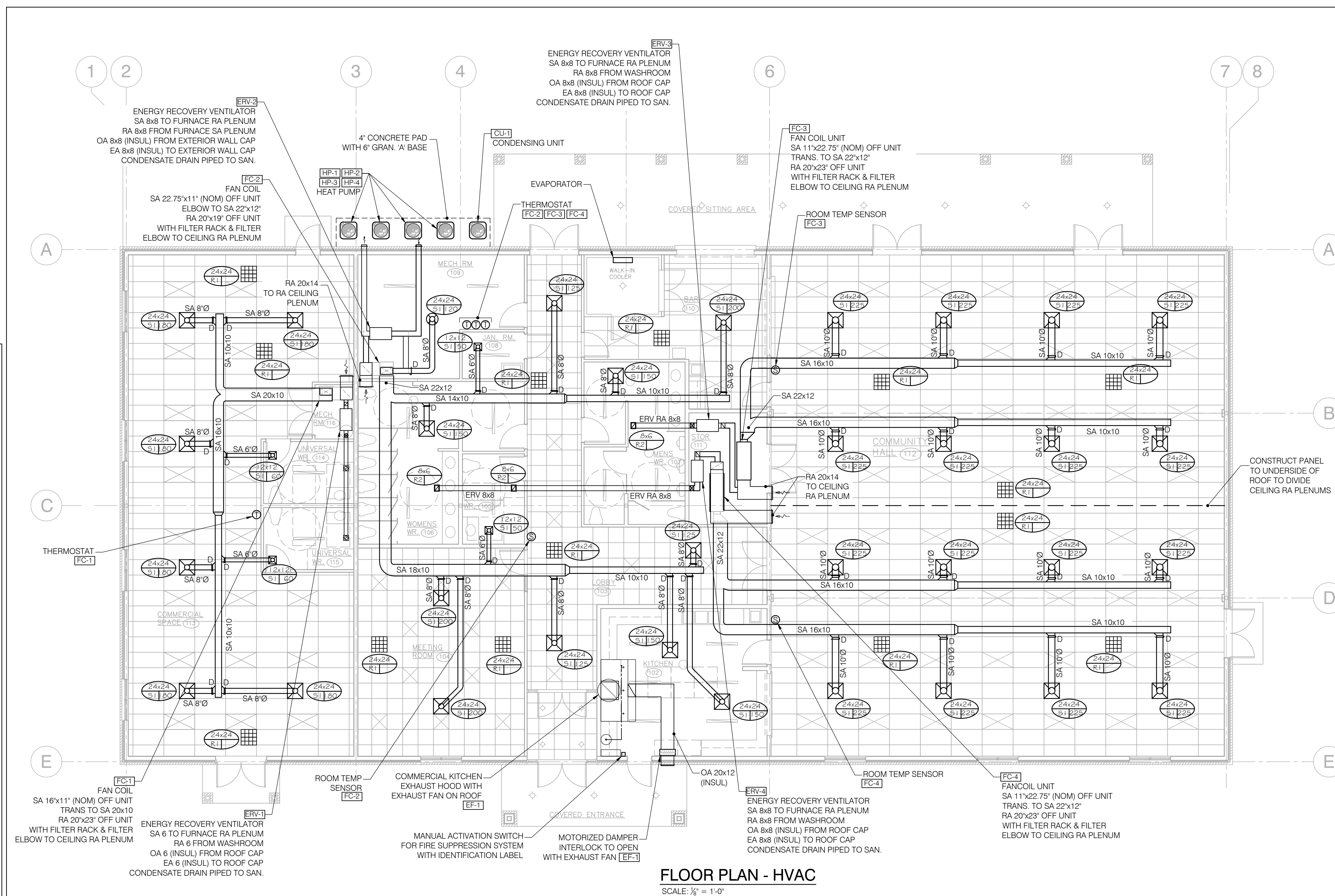
Project Title:
**NORTH STORMONT TOWNSHIP
MOOSE CREEK
COMMUNITY HALL**
Munroe St, Moose Creek, Ontario
K0C 1W0

Drawing Title:
**HVAC
FLOOR PLAN**

Design: MM	Checked:	Approved: MM	Project No.: 9657
Drawn: MP	Checked:	Date: 2022-01-04	Contract No.:
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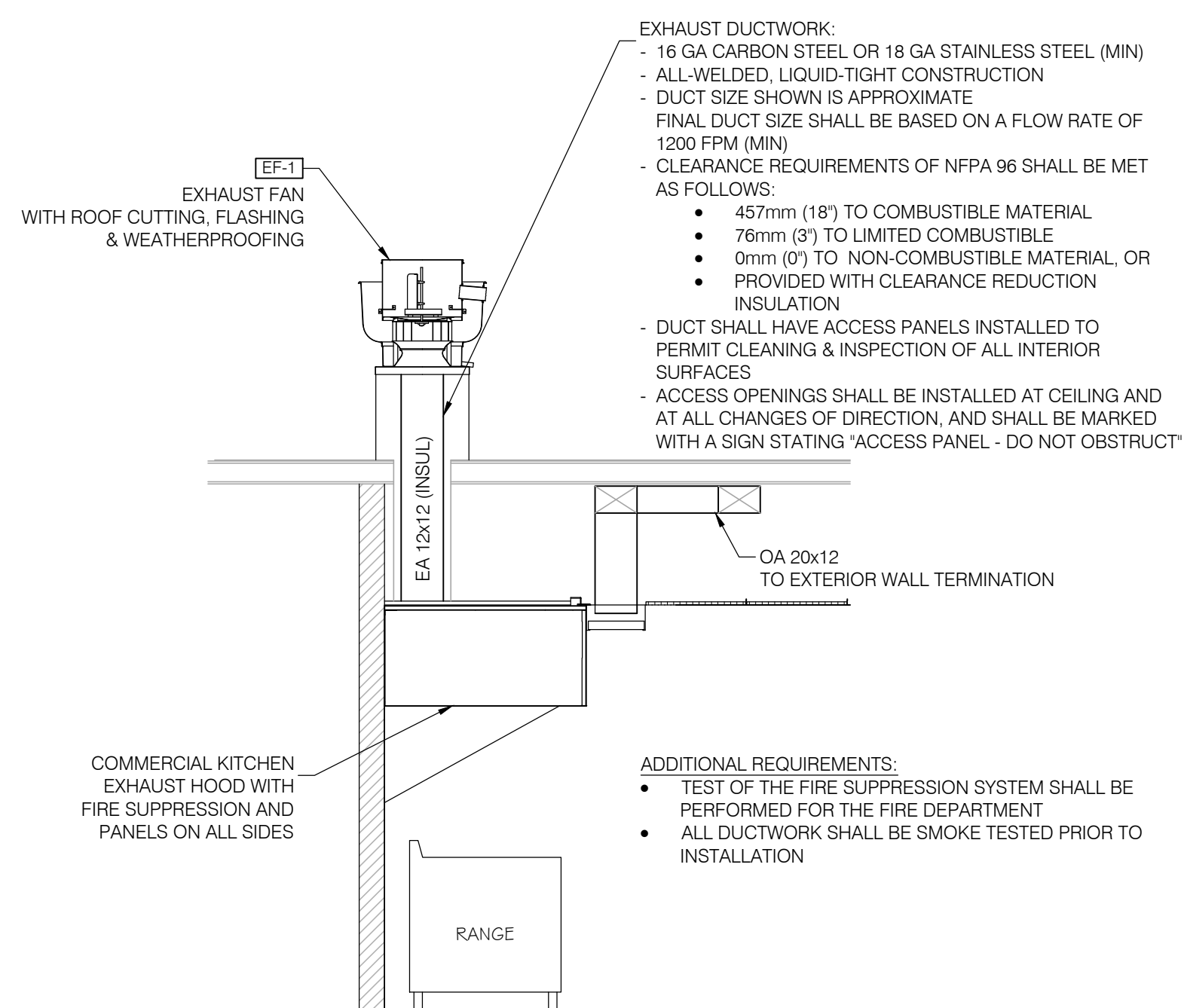
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FLOOR PLAN - HVAC

SCALE: 3/8" = 1'-0"



**COMMERCIAL KITCHEN EXHAUST HOOD
SIDE ELEVATION**

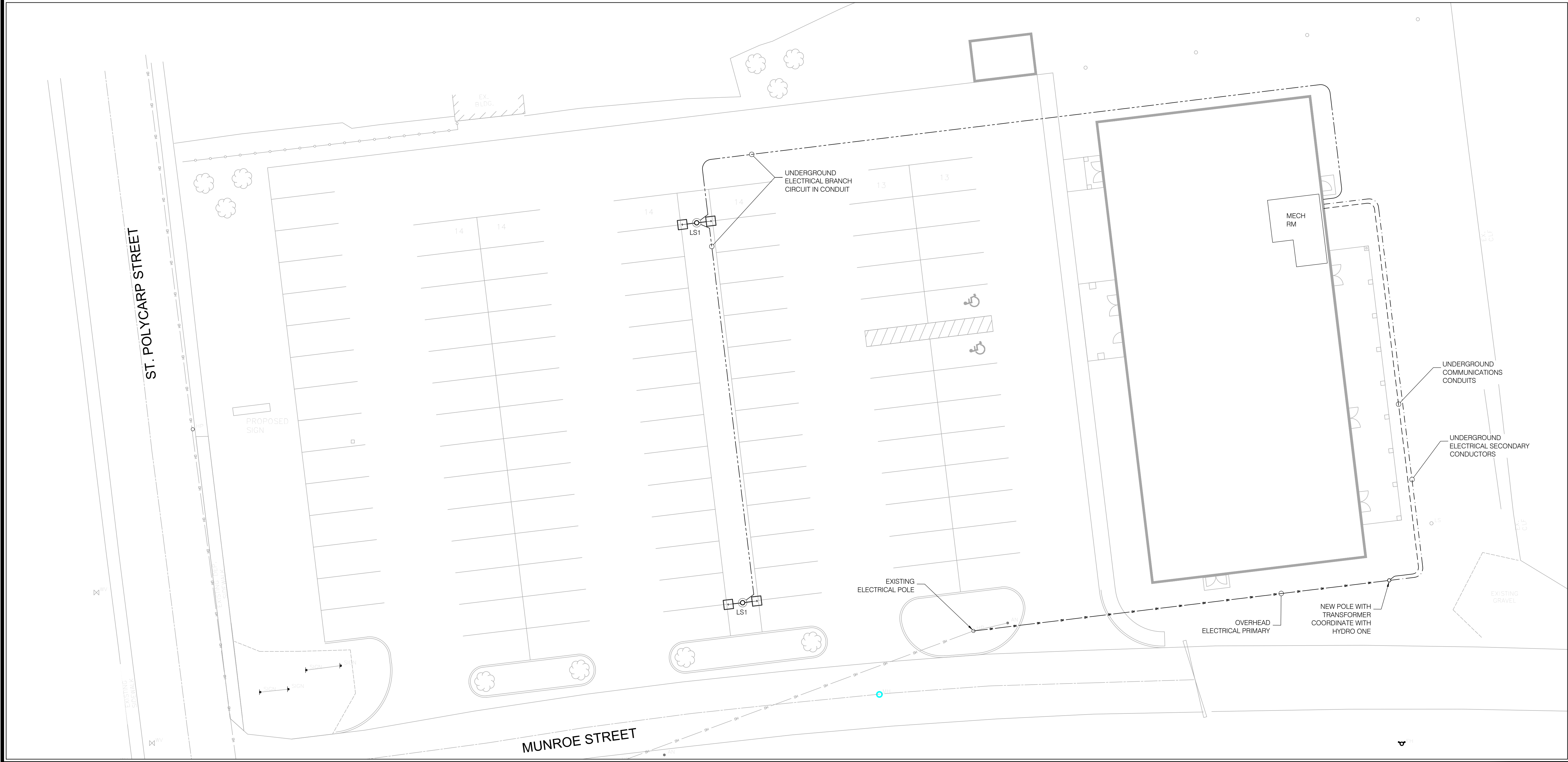
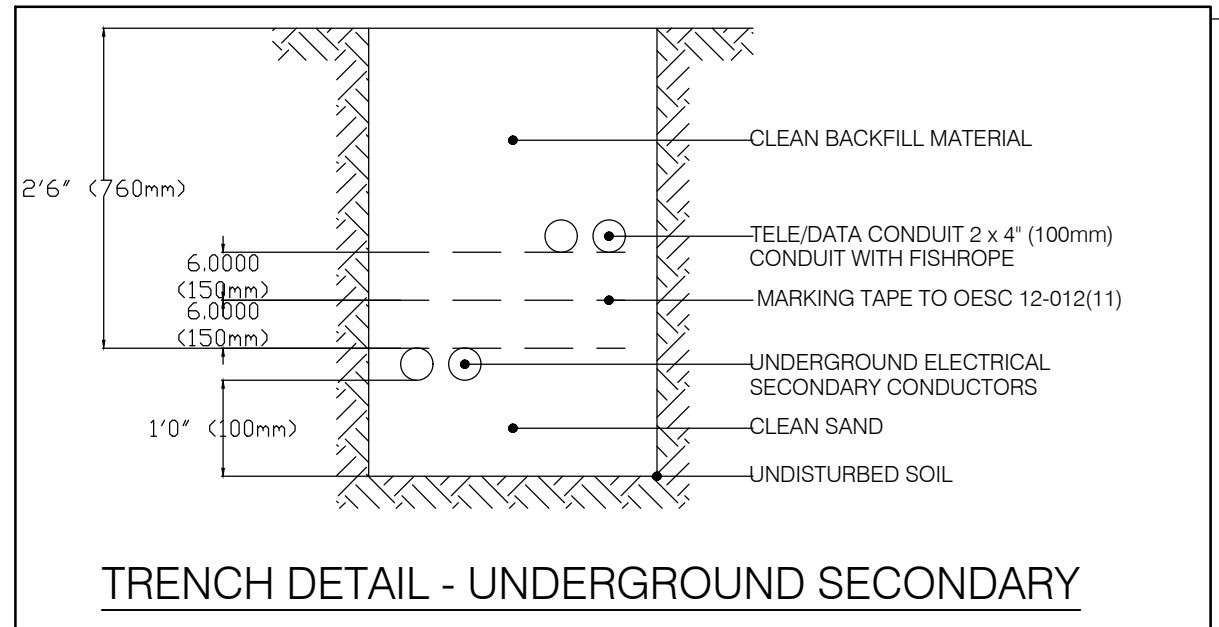
- EXHAUST DUCTWORK:
- 16 GA CARBON STEEL OR 18 GA STAINLESS STEEL (MIN)
 - ALL-WELDED, LIQUID-TIGHT CONSTRUCTION
 - DUCT SIZE SHOWN IS APPROXIMATE
 - FINAL DUCT SIZE SHALL BE BASED ON A FLOW RATE OF 1200 FPM (MIN)
 - CLEARANCE REQUIREMENTS OF NFPA 96 SHALL BE MET AS FOLLOWS:
 - 457mm (18") TO COMBUSTIBLE MATERIAL
 - 76mm (3") TO LIMITED COMBUSTIBLE
 - 0mm (0") TO NON-COMBUSTIBLE MATERIAL, OR
 - PROVIDED WITH CLEARANCE REDUCTION INSULATION
 - DUCT SHALL HAVE ACCESS PANELS INSTALLED TO PERMIT CLEANING & INSPECTION OF ALL INTERIOR SURFACES
 - ACCESS OPENINGS SHALL BE INSTALLED AT CEILING AND AT ALL CHANGES OF DIRECTION, AND SHALL BE MARKED WITH A SIGN STATING 'ACCESS PANEL - DO NOT OBSTRUCT'

- ADDITIONAL REQUIREMENTS:
- TEST OF THE FIRE SUPPRESSION SYSTEM SHALL BE PERFORMED FOR THE FIRE DEPARTMENT
 - ALL DUCTWORK SHALL BE SMOKE TESTED PRIOR TO INSTALLATION

LIGHT FIXTURE SCHEDULE - SITE							
UNIT	DESCRIPTION	LAMP	WATTS	MEAN LUMENS	VOLTAGE	ACCEPTABLE PRODUCT	NOTES
LS1	LED POLE MOUNTED DOUBLE HEAD	LED	2 x 150	20500 (each)	240	LIGHT FIXTURE: PREMISE #FL4 POLE BASE: UTILITY STRUCTURES INC. #P-59	FULL CUT-OFF (NO UPLIGHT) SHIELDED ON LOT AND STREET LINES TO MINIMIZE THROW BEYOND LINE
						PRECAST CONCRETE 45 Mpa at 28 DAYS, 5-8% AIR ENTRAINMENT EXPOSED CONCRETE FINISH 22" (560mm) DIA 12' (3.6m) HEIGHT 36" (914mm) ABOVE GRADE GALV. STEEL ANCHOR BOLTS BOLT CIRCLE DIA. TO SUIT POLE WITH CONDUIT/DUCT ENTRY	
						POLE: DYNAPOLE	STEEL POLE 20 FT HEIGHT 5" SQUARE
NOTES: ELECTRICAL CONTRACTOR SHALL PROVIDE PHOTOMETRIC LAYOUT FOR SITE LIGHTING, TO BE SUBMITTED WITH SHOP DRAWINGS.							

LEGEND:

— * — * —	OVERHEAD ELECTRICAL PRIMARY
— · — · —	UNDERGROUND ELECTRICAL SECONDARY
— - - - -	UNDERGROUND ELECTRICAL BRANCH CIRCUIT
— - - - -	UNDERGROUND COMMUNICATIONS

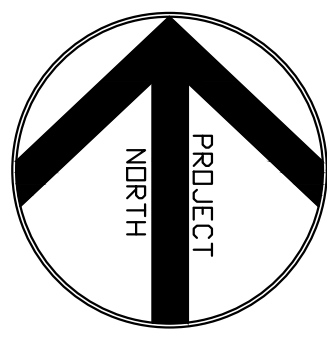


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Project Title:
**NORTH STORMONT TOWNSHIP
MOOSE CREEK
COMMUNITY HALL**
Munroe St, Moose Creek, Ontario
K0C 1W0

Drawing Title:
**ELECTRICAL
SITE PLAN**

Design:	Checked:	Approved:	Project No.:
		MM	9657
Drawn:	Checked:	Date:	Contract No.:
MP		2022-01-03	
Scale:	Drawing No.:		
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Vertical: AS SHOWN	REV DATE: 3/18/2022		

ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS FOR THIS PROJECT

1. CONFORM WITH APPLICABLE REQUIREMENTS OF THE MINISTRY OF LABOUR, AND THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
2. DO COMPLETE INSTALLATION IN ACCORDANCE WITH THE FOLLOWING:
 1. ONTARIO ELECTRICAL SAFETY CODE;
 2. ELECTRICAL SAFETY AUTHORITY;
 3. ELECTRICAL SUPPLY AUTHORITY.
3. SUBMIT TO ELECTRICAL SAFETY AUTHORITY AND SUPPLY AUTHORITY NECESSARY NUMBER OF DRAWINGS AND SPECIFICATIONS FOR APPROVAL PRIOR TO COMMENCEMENT OF WORK.
4. GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COORDINATING AND OBTAINING NECESSARY ELECTRICAL SERVICE LAYOUT FROM THE SUPPLY AUTHORITY.
5. PAY ALL ELECTRICAL PERMIT AND INSPECTION FEES.
6. GROUND COMPLETE SYSTEM IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND ELECTRICAL SAFETY AUTHORITY.
7. IDENTIFICATION AND LABELLING:
 1. IDENTIFY ELECTRICAL EQUIPMENT WITH LAMICOID NAMEPLATES, INCLUDING AMPERAGE, VOLTAGE, PHASE AND POWER SOURCE.
 2. PROVIDE TYPEWRITTEN PANEL DIRECTORY.
 3. PROVIDE ADHESIVE LABEL ON ALL SWITCH, RECEPTACLE AND DEVICE COVER PLATES INDICATING SUPPLY CIRCUIT DESIGNATION.
8. PROVIDE DIGITAL AND HARD COPY OF COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS FOR EQUIPMENT FURNISHED UNDER THIS CONTRACT. BID INSTRUCTIONS IN 3-RING BINDERS. INCLUDE THE FOLLOWING:
 1. SCHEMATIC DIAGRAM OF ELECTRICAL SYSTEMS.
 2. CONTROL SHOP DRAWINGS AND OPERATING SEQUENCE INCLUDING WIRING OF COMPONENTS.
 3. WIRING DIAGRAMS OF CONTROL PANELS.
 4. OPERATING INSTRUCTIONS, INCLUDING START-UP AND SHUT-DOWN PROCEDURE.
 5. MAINTENANCE INSTRUCTIONS INCLUDING PREVENTIVE MAINTENANCE INSTRUCTIONS FOR COMPONENTS OF THE EQUIPMENT.
9. COMPLETE PARTS LIST OF ASSEMBLIES AND THEIR COMPONENT PARTS, SHOWING MANUFACTURER'S NAME, CATALOGUE NUMBER, AND NEAREST REPLACEMENT SOURCE.
10. LIST OF RECOMMENDED SPARE PARTS AND QUANTITY OF EACH ITEM TO BE STOCKED.
11. MANUFACTURER'S WARRANTIES AND GUARANTEES.
12. CLEAN ALL ELECTRICAL SYSTEMS AT PROJECT COMPLETION.
13. COMPLETE AS-BUILT DRAWINGS SHOWING ALL CHANGES AS WORK PROGRESSES.

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE "TRADES QUALIFICATION AND APPRENTICESHIP ACT" AND REGULATIONS, BY PERSONS WHO HOLD THE FOLLOWING CERTIFICATES OF QUALIFICATION (AS APPLICABLE):

1.1 ELECTRICIAN: CONSTRUCTION & MAINTENANCE.

1. **REPAIR AND PROTECT ALL EXISTING EXTERIOR SITE SERVICES.**
2. **RETAIN AND PROTECT ALL EXISTING INTERIOR SERVICES AND BUILDING FABRIC. MAKE GOOD ANY AND ALL DAMAGE RESULTING FROM THIS WORK.**
3. **CUTTING AND PATCHING.**
 1. **EXECUTE CUTTING, FITTING AND PATCHING REQUIRED TO MAKE THE WORK FIT PROPERLY TOGETHER. CUT AND PATCH FOR PROCESS, MECHANICAL AND ELECTRICAL WORK.**
 2. **COORDINATE WORK WITH OTHER TRADES SO THAT THERE IS A MINIMUM OF CUTTING, FITTING AND PATCHING.**
 3. **CUTTING, CUTTING, PATCHING AND MAKING GOOD WHERE NECESSARY DUE TO FAILURE TO DELIVER ITEMS TO BE BUILT IN TIME OR INSTALLATION IN WRONG LOCATION, SHALL BE EXECUTED AS DIRECTED AT NO COST TO THE OWNER.**
 4. **DRILLING AND CUTTING OF LOAD BEARING STRUCTURAL MEMBERS SHALL BE DONE ON PRIOR EXPRESS WRITTEN PERMISSION OF THE ENGINEER FOR EACH INSTANT.**
 5. **CUT Holes ACCURATELY, WITH SMOOTH, TRUE, CLEAN EDGES. FIT UNITS TO TOLERANCES TO BEST STANDARD PRACTICE FOR APPLICABLE WORK.**
 6. **HOLES IN BLOCK AND CONCRETE WORK SHALL BE SAWCUT OR CORE-DRILLED, AND SHALL NOT BE MADE WITH A HAMMER GUN.**
 7. **PATCHED WORK SHALL BE INVISIBLE, SITE HOLES AND OPENINGS FOR PIPES SO AS TO ALLOW FOR EXPANSION AND CONTRACTION OF SUCH PIPES.**

1. PROVIDE SHOP DRAWINGS AND PRODUCT DATA FOR ALL ELECTRICAL FIXTURES AND EQUIPMENT FOR APPROVAL, PRIOR TO PROCUREMENT.
2. INSTALL ALL ELECTRICAL FIXTURES AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. EQUIPMENT AND MATERIAL TO BE CSA CERTIFIED. WHERE THERE IS NO ALTERNATIVE TO SUPPLYING EQUIPMENT WHICH IS NOT CSA CERTIFIED, OBTAIN SPECIAL APPROVAL FROM ELECTRICAL SAFETY AUTHORITY.

1. GENERAL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR COORDINATING ELECTRICAL SERVICES AND CONNECTIONS FOR ALL EQUIPMENT, INCLUDING EQUIPMENT SUPPLIED BY TRADES OTHER THAN ELECTRICAL.
2. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ELECTRICAL SERVICE CONNECTIONS TO EQUIPMENT SUPPLIED BY OTHERS, INCLUDING:
 1. REVIEW OF ALL SHOP DRAWINGS FOR EQUIPMENT SUPPLIED BY OTHERS, WHICH REQUIRE ELECTRICAL CONNECTIONS.
 2. VERIFY AND CONFIRM ALL SERVICE CONNECTIONS WITH MANUFACTURER, SUPPLIER AND OTHER TRADES, PRIOR TO PROCUREMENT OF ELECTRICAL PANELS, BREAKERS, WIRE/CABLE, DISCONNECT SWITCHES, MOTOR STARTERS, RECEPTACLES AND RELATED EQUIPMENT.
 3. REVIEW OF EQUIPMENT SPECIFICATIONS BY OTHERS, SHALL INCLUDE ALL CONNECTION SIZES, LOCATIONS AND DETAILS, AND SHALL TAKE INTO ACCOUNT EQUIPMENT CLEARANCES AND INSTALLATION REQUIREMENTS.

- .1 RIGID GALVANIZED STEEL, WITH THREADED FITTINGS, WHERE SUBJECT TO MECHANICAL INJURY, IN SERVICE AREAS ONLY.
- .2 ELECTRICAL METALLIC TUBING (EMT), HOT DIPPED GALVANIZED STEEL, WITH THREADED CONNECTORS AND COUPLINGS, WHERE NOT SUBJECT TO MECHANICAL INJURY, IN SERVICE AREAS ONLY.
- .3 RIGID PVC CONDUIT BELOW FLOOR AND IN CORROSIVE AREAS.

1. VOLTAGE DROP:
 - a. FEEDER CONDUCTORS SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 2% AT DESIGN LOAD.
 - b. BRANCH CIRCUIT CABLES SHALL BE SIZED FOR A MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD.
2. BUILDING WIRES:
 - a. ALL ELECTRICAL PROJECTS - IN CORDU SYSTEMS TO BE STRANDED COPPER CONDUCTORS FOR 10 AWG AND LARGER MINIMUM SIZE 12 AWG, TYPE RW90.
3. BUILDING WIRES IN CONCEALED LOCATIONS TO BE COPPER, MINIMUM SIZE 12 AWG, TYPE AS FOLLOWS:
 - a. WOOD FRAMED STRUCTURES - TYPE NM90;
 - b. STEEL STUD OR STEEL FRAMED STRUCTURES - TYPE AC90;
 - c. CEILING RETURN AIR PLenums - TYPE AC90.
4. ALL WIRING, CABINETS AND BOXES SHALL BE CONCEALED IN WALLS AND CEILINGS, UNLESS OTHERWISE NOTED OR APPROVED. SURFACE-MOUNTED WIRING IS NOT PERMITTED.

1. SUPPLY AND INSTALL 2 RUNS, 4" CONDUIT FROM SITE TELEPHONE SERVICE LOCATION TO MAIN ELECTRICAL ROOMS.
2. SUPPLY AND INSTALL TELEPHONE BACKBOARD.
3. DATA/TELEPHONE:
 1. DATA AND TELEPHONE WIRES CAT 6.
 2. DATA AND TELEPHONE OUTLETS SHALL BE PROVIDED IN SEPARATE OUTLET BOXES AND SEPARATE CONDUIT.
 3. DATA AND TELEPHONE TERMINATE DATA AND TELEPHONE OUTLETS, AS FOLLOWS:
 1. 1 PORT WALL PLATE - PANDUIT RCF61W;H
 2. FACE PLATE JACK - PANDUIT HC5E887G, 2 COLOURS, COLOURS SELECTED BY OWNER'S IT REPRESENTATIVE;
 3. PATCH PANEL - TERMINATION BOX - PANDUIT HC5E887G, 2 COLOURS, COLOURS SELECTED BY OWNER'S IT REPRESENTATIVE.
 4. SUPPLY, INSTALL AND TERMINATE DATA AND TELEPHONE CABLES IN IT ROOM.
 5. DATA AND TELEPHONE CABLES SHALL BE TERMINATED IN SEPARATE PATCH PANELS, AS FOLLOWS:
 1. PATCH PANEL - PANDUIT HC2P4810 (SUPPLY SUFFICIENT QUANTITY TO SEPARATE DATA AND TELEPHONE, AND SUIT NUMBER OF PORTS).
 2. PATCH PANEL JACK - PANDUIT HC5E887G, 2 COLOURS, COLOURS SELECTED BY OWNER'S IT REPRESENTATIVE
 6. ALL TELEPHONE AND DATA CABLEING AND TERMINATIONS SHALL BE TESTED IN ACCORDANCE WITH ANSI/EIA/TIA CATEGORY 3 REQUIREMENTS, TWISTED-PAIR TELECOMMUNICATIONS CABLEING AND COMPONENTS STANDARD BY A THIRD PARTY TESTING AGENCY

1. ELECTRICAL SERVICE EQUIPMENT, PANELBOARDS AND DISCONNECT SWITCHES SHALL BE PRODUCT OF ONE MANUFACTURER THROUGHOUT PROJECT.
2. CIRCUIT BREAKERS:
 1. SUPPLY AND INSTALL GROUND FAULT & ARC-FAULT CIRCUIT PROTECTION, AS REQUIRED BY THE OESC.
3. WORKING SPACE ABOUT ELECTRICAL EQUIPMENT SHALL BE PROVIDED IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE, INCLUDING THE FOLLOWING:
 1. WORKING SPACE OF 3'4" (1m) WITH SECURE FOOTING;
 2. MINIMUM HEADROOM OF 7'3" (2.2m).

1. WIRING DEVICES OF ONE MANUFACTURER THROUGHOUT PROJECT - HUBBELL OR LEVITON:
 1. OUTLET BOXES:
 1. GANG BOXES WHERE WIRING DEVICES ARE GROUPED.
 2. BLANK COVER PLATES FOR BOXES WITHOUT WIRING DEVICES.
 2. SWITCHES:
 1. HEAVY DUTY, 20A/120V;
 2. SINGLE POLE, AND THREE-WAY, AS APPLICABLE;
 3. COLOUR: SELECTED BY OWNER/ARCHITECT.
 3. DUPLEX RECEPTACLES:
 1. EXTRA HARD USE, CSA TYPE S-15 R, 15A/125V;
 2. GFI (GROUND FAULT CIRCUIT INTERRUPTER) WITH DETECT AND TRIP ON GROUND FAULT, STATUS INDICATOR LIGHT AND TEST SWITCH;
 3. TAMPER-RESISTANT WHERE REQUIRED BY CODE;
 4. COLOUR: SELECTED BY OWNER/ARCHITECT.
 4. COVER PLATES:
 1. STAINLESS STEEL.

GENERAL LIGHTING:

- 1. SUPPLY ALL LIGHTING IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE AND BULLETINS.
- 2. LIGHT FIXTURES SUPPORTED BY SUSPENDED CEILING SYSTEMS SHALL HAVE ADDITIONAL SUPPORT TO BUILDING STRUCTURE IN ACCORDANCE WITH ONTARIO ELECTRICAL SAFETY CODE BULLETIN #30-4-11.
- 3. FUNCTIONAL TESTING OF LIGHTING CONTROL, IN ACCORDANCE WITH ASHRAE 90.1 (9.4.3).
- 4. ALL LIGHTING CONTROL SYSTEMS SHALL BE TESTED TO VERIFY THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED, AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 5. EXIT AND EMERGENCY LIGHTING SHALL:
 - 1. CONNECT DC CIRCUIT FROM EMERGENCY LIGHT BATTERY PACK TO ALL EXIT AND EMERGENCY LIGHTS.
 - 2. SIZE EMERGENCY LIGHTING POWER PACK TO PROVIDE FULL LOAD POWER FOR 1 HR PERIOD.
 - 3. EMERGENCY LIGHT BATTERY PACKS (UNIT EQUIPMENT) SHALL BE INSTALLED IN SUCH A MANNER THAT IT WILL AUTOMATICALLY ACTUATED UPON FAILURE OF THE POWER SUPPLY TO THE NORMAL LIGHTING IN THE AREA COVERED BY THAT UNIT EQUIPMENT PER OESC 46-30(4).

- .1 SYSTEM SHALL BE CONFIGURED FOR COMMERCIAL KITCHEN EXHAUST SYSTEM.
- .2 DESIGN AND INSTALLATION SHALL CONFORM TO NFPA 96 - STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING OPERATIONS.
- .3 REFER TO MECHANICAL DRAWINGS FOR NOTES & DETAILS.

1. ELECTRICAL CONTRACTOR RESPONSIBILITY:
 1. REFER TO ARCHITECTURAL DRAWINGS, TO VERIFY LOCATION OF ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
 2. PROVIDE DRAWINGS FROM HILTI AND/OR 3M FOR FIRE PROTECTION OF ALL ELECTRICAL MATERIALS, INCLUDING PANELS, BOXES, CABLE, WIRE, CONDUIT AND OUTLETS PENETRATING OR PASSING THROUGH A FIRE SEPARATION OR FIRE-RATED ASSEMBLY, FOR REVIEW BY ARCHITECT AND ENGINEER.
 3. ALL ELECTRICAL MATERIALS, INCLUDING PANELS, BOXES, CABLE, WIRE, CONDUIT AND OUTLETS SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
 4. ALL CABLES AND CONDUIT SHALL BE TIGHTLY FITTED AND SEALED WITH FIRESTOPPING MATERIAL AT ALL FIRE SEPARATIONS AND FIRE-RATED MEMBRANES.
 5. THE FOLLOWING CONDUCTORS SHALL BE PROTECTED IN ACCORDANCE WITH CBC 3.27.10(2), AND SHALL CONFORM TO UL-5139 "FIRE TEST EVALUATION OF INTEGRITY OF ELECTRICAL CABLES", TO PROVIDE A CIRCUIT INTEGRITY RATING OF NOT LESS THAN 1 HOUR (2 HOUR FOR TALL BUILDINGS OR CONTAINED USE AREAS OR INTERCONNECTED FLOOR SPACES):
 1. ELECTRICAL FEEDER CONDUCTORS WHICH SERVE THE COMMERCIAL ELECTRICAL PANELS,
 2. BRANCH CIRCUIT CONDUCTORS WHICH SERVE EXIT AND EMERGENCY LIGHTING.
 6. PENUMS (CBC 3.6.4.3):
 1. ALL MATERIALS WITHIN THE PENUM SHALL A FLAME-SPREAD RATING NOT MORE THAN 25 AND A SMOKE DEVELOPMENT CLASSIFICATION NOT MORE THAN 50.
 2. WIRE AND CABLE WITH AN FTS RATING TO CSA C22.2 NO. 0.3, TEST METHODS FOR ELECTRICAL WIRES AND CABLES.
 3. NON-METALLIC RACEWAYS WITH AN FTS RATING TO CAN/ULC - 5102.4, FIRE AND SMOKE CHARACTERISTICS OF ELECTRICAL WIRING AND CABLES.
5. MOCK-UPS:
 1. PREPARE MOCK-UPS OF TYPICAL FIRESTOP INSTALLATION OF THE FOLLOWING, FOR REVIEW AND APPROVAL BY THE OWNER, ENGINEER AND MUNICIPAL BUILDING INSPECTOR:
 1. ELECTRICAL PANELS, BOXES AND OUTLETS - FIRESTOPPED WALL;
 2. CONDUIT AND CABLEING - WALL AND CEILING/FLOOR FIRE SEPARATION.
 2. ALL FIRESTOP INSTALLATIONS SHALL BE COMPLETED IN ACCORDANCE WITH THE APPROPRIATE PRODUCT INSTALLATION INSTRUCTIONS, AND THE REFERENCED U/LC LISTING AND/OR TEST STANDARD.
 3. SUPPLY A COPY OF THE PRODUCT INSTALLATION INSTRUCTIONS WITH U/LC LISTING AND/OR TEST STANDARD REFERENCE, FOR EACH INSTALLATION.
 4. MOCK-UP MAY REMAIN AS PART OF WORK.

1. ALL ELECTRICAL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE EARTHQUAKE LOAD AND EFFECTS REQUIRED BY THE ONTARIO BUILDING CODE.
2. ELECTRICAL ELEMENTS AND COMPONENTS (FIXTURES, EQUIPMENT, CONDUIT, ETC.), AND THEIR CONNECTIONS TO THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SMACNA/ANSI SEISMIC RESTRAINT MANUAL OR OTHER GUIDELINE REFERENCED IN THE ONTARIO BUILDING CODE AND ONTARIO ELECTRICAL SAFETY CODE.
3. FOLLOWING PROJECT COMPLETION, SEISMIC ENGINEER SHALL PROVIDE A LETTER OF FINAL SITE REVIEW.
4. CONTRACTOR SHALL CARRY THE COST OF THE SEISMIC ENGINEERING, INCLUDING SITE REVIEWS, DESIGN AND SHOP DRAWING PREPARATION.

1. MEASURE PHASE CURRENT TO PANELBOARDS WITH NORMAL LOADS (LIGHTING) OPERATING AT TIME OF ACCEPTANCE. ADJUST BRANCH CIRCUIT CONNECTIONS AS REQUIRED TO OBTAIN BEST BALANCE OF CURRENT BETWEEN PHASES AND RECORD CHANGES.
2. SUBMIT, AT COMPLETION OF WORK, REPORT LISTING PHASE AND NEUTRAL CURRENTS ON PANELBOARDS, OPERATING UNDER NORMAL LOAD. STATE HOUR AND DATE ON WHICH EACH LOAD WAS MEASURED, AND VOLTAGE AT TIME OF TEST.

1. ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING, LIGHTING, DEVICES, AND RELATED ITEMS SHALL BE SECURELY SUPPORTED, ATTACHED AND FASTENED TO BUILDING STRUCTURE.
2. HANGERS AND SUPPORTS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH MSS STANDARD SP-58, PIPE HANGERS AND SUPPORTS - MATERIALS, DESIGN, MANUFACTURE, SELECTION, APPLICATION, AND INSTALLATION.
3. PLATFORMS SHALL BE FABRICATED FROM STRUCTURAL GRADE STEEL MEETING THE REQUIREMENTS OF THE ONTARIO BUILDING CODE, INCLUDING CSA STANDARD W59 WELDED STEEL CONSTRUCTION, AND THE REQUIREMENTS OF THE CANADIAN WELDING BUREAU.

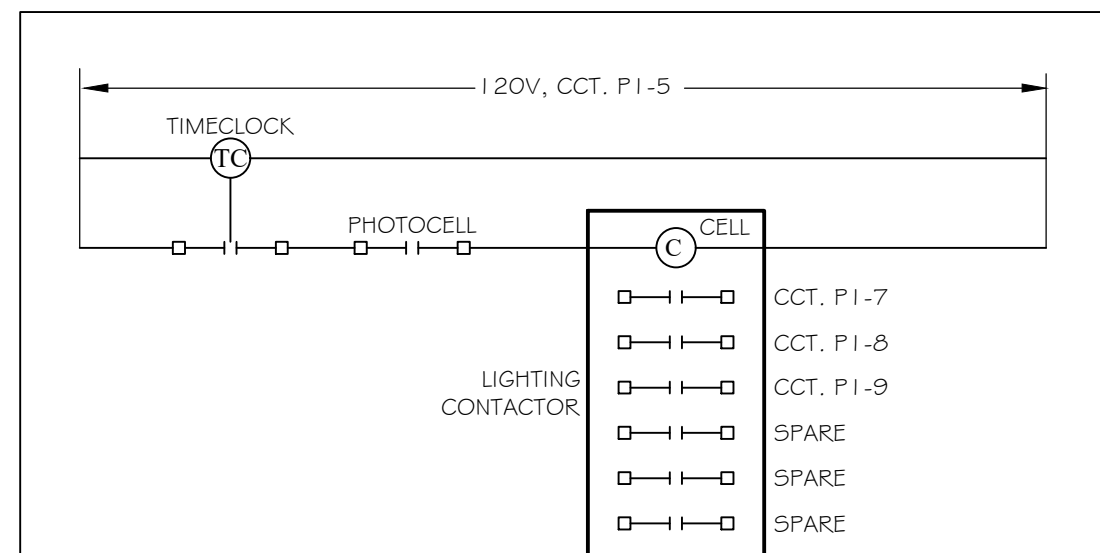
1. INFORMATION INVOLVING ACCURATE DIMENSIONING OF THE BUILDING SHALL BE TAKEN FROM SITE BY CONTRACTOR.
2. DRAWINGS ARE IN DIAGRAMMATIC FORM, INTENDED TO CONVEY THE SCOPE OF WORK AND GENERAL CONCEPTS. CONTRACTOR SHALL COORDINATE PHYSICAL LOCATION OF ALL EQUIPMENT WITH OTHER TRADES AND ALLOW FOR ANY ADDITIONAL CONDUIT, WIRING, FITTINGS, SUPPORTS, ETC., IN ORDER TO AVOID INTERFERENCE AND FACILITATE THE WORK.
3. CONTRACTOR TO MAKE ANY NECESSARY MODIFICATIONS OR ADDITIONS, WITHOUT CHARGE, TO ACCOMMODATE SITE CONDITIONS AND/OR ELECTRICAL REQUIREMENTS.
4. COORDINATE AND VERIFY ALL ELECTRICAL BRANCH CIRCUIT REQUIREMENTS FOR EQUIPMENT SUPPLIED BY OTHERS, PRIOR TO MATERIAL PROCUREMENT OR INSTALLATION.
5. PROVIDE ALL WIRING TO ALL MECHANICAL EQUIPMENT, INCLUDING WIRING BELOW 50V. COORDINATE ALL MECHANICAL EQUIPMENT WIRING WITH MECHANICAL TRADES.
6. ALL DEVICES AND/OR EQUIPMENT SHALL BE CAREFULLY COORDINATED WITH THE GENERAL CONTRACTOR OR OWNER, TO ACCOMMODATE ALL FEATURES, INCLUDING PLUMBING FIXTURES, EQUIPMENT AND MILLWORK.

1. START-UP AND COMMISSION THE FOLLOWING SYSTEMS:
 1. MAIN ELECTRICAL SERVICE EQUIPMENT;
 2. GENERAL LIGHTING;
 3. EXIT AND EMERGENCY LIGHTING;
 4. ELECTRIC HEATING UNITS.
2. PERFORM SYSTEMATIC TESTS, PROCEDURES AND CHECKS ON SYSTEMS, AS FOLLOWS:
 1. TO VERIFY OPERATION IN ACCORDANCE WITH CONTRACT DOCUMENTS, DESIGN CRITERIA AND INTENT, AND MANUFACTURER'S REQUIREMENTS;
 2. TO ENSURE APPROPRIATE DOCUMENTATION IS PROVIDED;
 3. TO EFFECTIVELY TRAIN BUILDING OPERATIONAL STAFF.
3. SYSTEMS ARE TO BE OPERATED AT FULL CAPACITY, WITH CORRECTION OF ALL DEFICIENCIES AND ADJUSTMENTS TO MEET OPTIMUM PERFORMANCE.
4. PROVIDE WRITTEN REPORT AT END OF COMMISSIONING OUTLINING EQUIPMENT OPERATIONAL CONDITIONS AND PARAMETERS.

NOTE: HEIGHT IS FROM FINISHED FLOOR TO CENTRE LINE OF EQUIPMENT, UNLESS OTHERWISE NOTED.

GFCI	GROUND FAULT CIRCUIT INTERRUPTER
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
CD	CLOTHES DRYER
CW	CLOTHES WASHER
WH	WATER HEATER
WP	WEATHERPROOF

DISTRIBUTION PANEL		7271/825mm (TOP)
	SINGLE POLE TOGGLE SWITCH - 20A/120V	35.5" / 900mm
	3-WAY TOGGLE SWITCH - 20A/120V	" TO
	MOTION SENSOR CONTROL - (SWITCH)	43.3 / 1100mm
	MOTION SENSOR CONTROL - (CEILING)	
	DUPLEX RECEPTACLE (WALL) - 15A/120V	
	DUPLEX RECEPTACLE (SPLIT) - 15A/120V	12"300mm
	NON-STANDARD RECEPTACLE	12"300mm
	DIRECT EQUIPMENT CONNECTION	AS NOTED
	NON-FUSED DISCONNECT SWITCH	AS NOTED
	FUSED DISCONNECT SWITCH	54"1 370mm
	MOTOR STARTER	54"1 370mm
	BRANCH CIRCUIT	
	BRANCH CIRCUIT, SWITCHED	
	BRANCH CIRCUIT, HOMERUNS TO PANEL	

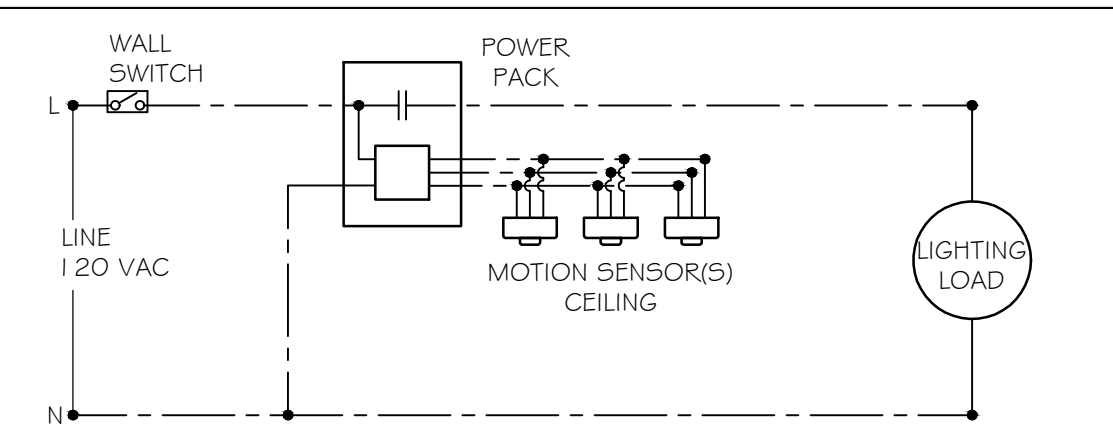


EXTERIOR LIGHTING CONTROL SCHEMATIC

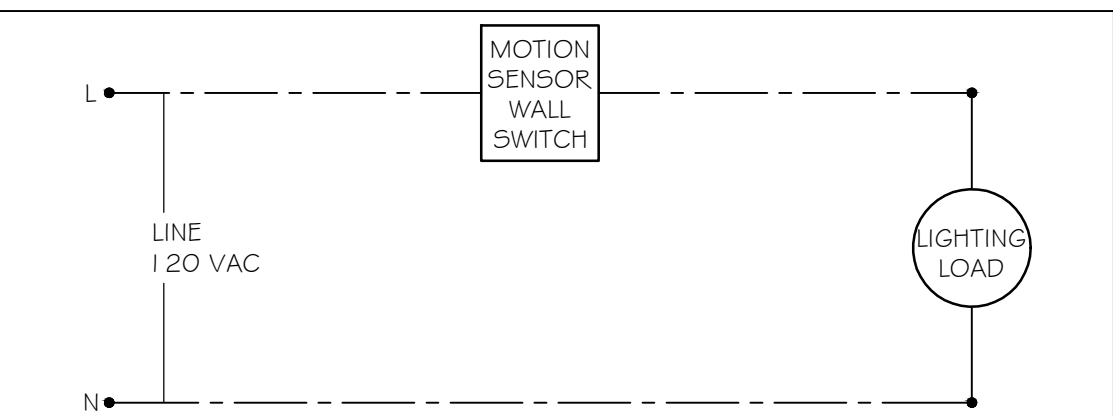
	FLUORESCENT LIGHT FIXTURE - RECESSED
	FLUORESCENT LIGHT FIXTURE - SURFACE
	LIGHT FIXTURE
	F - FLUORESCENT
	H - HIGH INTENSITY DISCHARGE
	L - INCANDESCENT

	TELEPHONE OUTLET (WALL)		1 2"/300mm
	TELEPHONE OUTLET (FLOOR)		
	DATA OUTLET (WALL)		1 2"/300mm
	DATA OUTLET (FLOOR)		
	DATA & TELEPHONE OUTLET (WALL)		1 2"/300mm
	TELEVISION OUTLET (WALL)		1 2"/300mm
	TELEVISION OUTLET (FLOOR)		

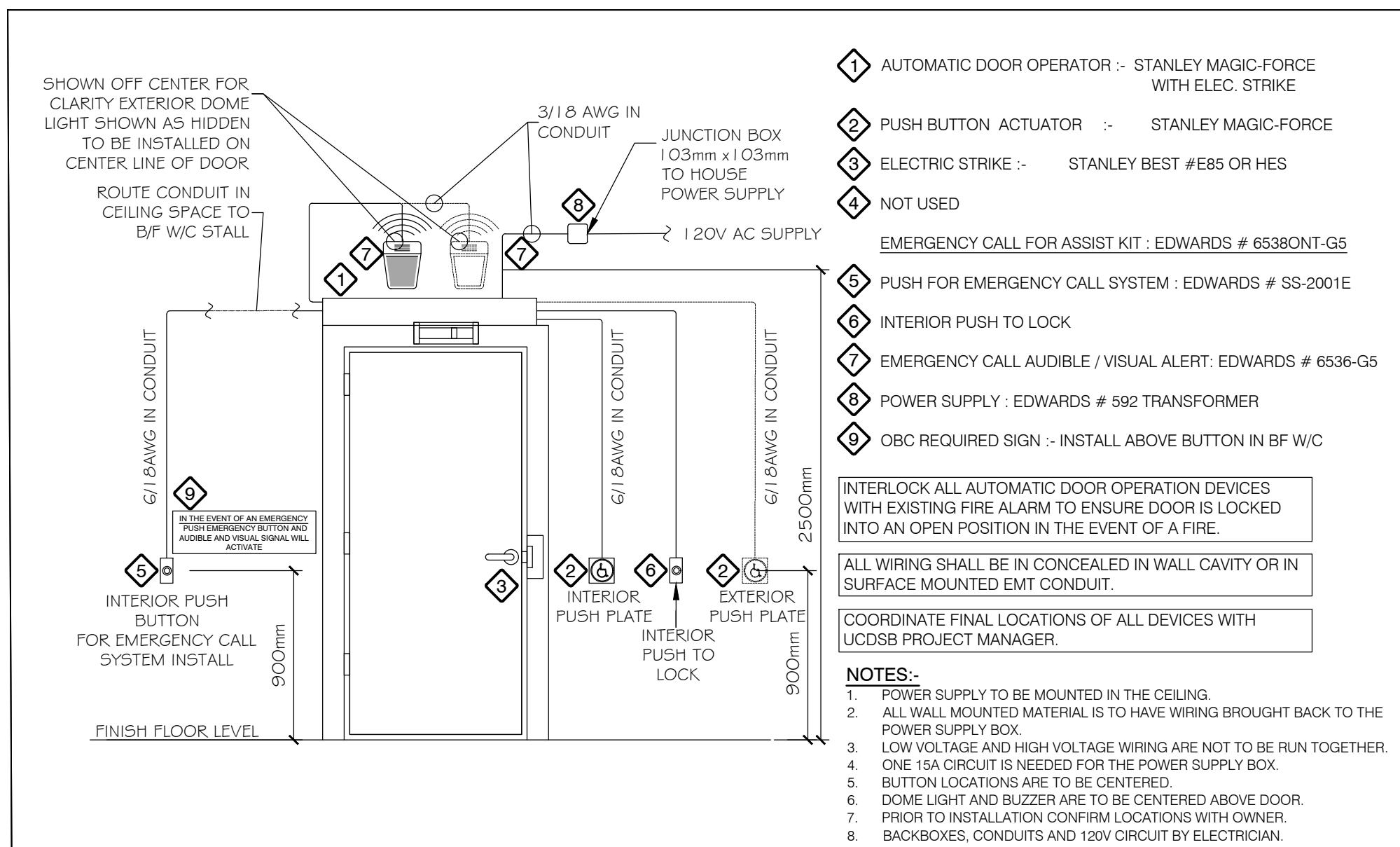
	EXIT LIGHT, SURFACE MOUNTED, SINGLE FACE	90°/2300mm
	EXIT LIGHT, END OR CEILING MOUNTED, SINGLE FACE	90°/2300mm
	EXIT LIGHT, END OR CEILING MOUNTED, DOUBLE FACE	90°/2300mm
	COMBINATION EXIT & EMERGENCY LIGHT	
	EMERGENCY LIGHT, BATTERY PACK	90°/2300mm
	EMERGENCY LIGHT, DOUBLE REMOTE	90°/2300mm
	EMERGENCY LIGHT, SINGLE REMOTE	90°/2300mm



MOTION SENSOR - CEILING TYPICAL WIRING DIAGRAM



MOTION SENSOR - WALL SWITCH



EMERGENCY CALL ASSIST & AUTO DOOR OPERATOR SCHEMATIC

Brockville, Ontario Telephone: (613) 349-0555

2	MP	2022-03-17	FOR TENDER
1	MP	2022-02-11	FOR PERMIT
0	MP	2022-02-07	FOR REVIEW
No.	By	Date	Revisions

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DRAWINGS ARE NOT TO BE SCALED



Project Title: **NORTH STORMONT TOWNSHIP
MOOSE CREEK
COMMUNITY HALL**
Munroe St, Moose Creek, Ontario
K0C 1W0

Drawing Title:

ELECTRICAL
NOTES & LEGEND

Design:	Checked:	Approved:	Project No.:
Drawn:	Checked:	Date:	Contract No.:
Scale:	Drawing No.:		
 Horizontal: AS SHOWN			
 Vertical: AS SHOWN			
REV DATE: 3/18/2022			

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Telephone: (613) 349-0555

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Project Title:

**NORTH STORMONT TOWNSHIP
MOOSE CREEK
COMMUNITY HALL**
Munroe St, Moose Creek, Ontario
K0C 1W0

Drawing Title:

ELECTRICAL
SCHEDULES

Design:	Checked:	Approved:	Project No:
		MM	9657
Drawn:	Checked:	Date:	Contract No.:
MP		2022-01-03	
Scale:		Drawing No.:	
 Horizontal AS SHOWN  Vertical AS SHOWN			
		REV DATE: 3/18/2022	

OTHER TYPES OF OCCUPANCY (OESC 8-210)	
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NOTES:									
1.	ELECTRICAL LOAD CALCULATION IS BASED ON THE CALCULATION PROCEDURES FOR MINIMUM CIRCUIT AMPACITY OF THE SERVICE, AS OUTLINED IN THE ONTARIO ELECTRICAL SAFETY CODE, SECTION 8, SERVICE AND FEEDERS.								

Location: KITCHEN RM 102					Mounting: RECESSED						
Rated Amp: 200 A					Mains Amp: 200 A MAIN BREAKER						
Voltage: 120/240V					Phase, Wire: 1 PH, 3W						
Manufacturer: Square D, Siemens, Cutler-Hammer					Bus: Aluminum						
Cabinet: Trim, Lockable Door					Breakers: Bolt-On						
TVSS: -					Isolated Ground: -						
Load		Description	Breaker			Breaker			Description	Load	
Watts	Description		Amp	Pole	No.	No.	Pole	Amp		Description	Watts
240	6F1	LIGHTS - RM 102	15	1	1	2	1	15	LIGHTS - RM 112	14F3	560
500	REC	RECEP - RM 102 COUNTER	15	1	3	4	1	15	LIGHTS - RM 112	14F3	560
500	REC	RECEP - RM 102 COUNTER	15	1	5	6	1	15	LIGHTS - RM 112	14F3	560
500	REC	RECEP - RM 102 COUNTER	15	1	7	8	1	15	LIGHTS - RM 112	14F3	560
500	REC	RECEP - RM 102 COUNTER	15	1	9	10	1	15	SPARE		
500	REC	RECEP - RM 102 COUNTER	15	1	11	12	1	15	RECEP - RM 112	5REC	1000
500	REC	RECEP - RM 102 COUNTER	15	1	13	14	1	15	RECEP - RM 112	6REC	1200
500	REC REF	RECEP - RM 102 REFRIG.	15	1	15	16					
500	REC REF	RECEP - RM 102 REFRIG.	15	1	17	18					
					19	20					
					21	22					
					23	24					
					25	26					
					27	28					
					29	30					
					31	32					
					33	34					
					35	36					
					37	38					
					39	40	2	80	DISHWASHER		15000
					41	42					
4.24	KW	CONNECTED LOAD							CONNECTED LOAD	KW	19.44
									TOTAL CONNECTED LOAD	KW	23.68

ELECTRICAL PANEL NOTES

1.0 DEVICES:	DEVICE QUANTITIES ARE APPROXIMATE DEVICES SHOWN ON FLOOR PLANS SHALL SUPERSEDE.
2.0 IDENTIFICATION:	PERMANENT PANEL LABEL INDICATING NAME, AMP, VOLT, PHASE, WIRE TYPEWRITTEN CIRCUITING DIRECTORY
3.0 EQUIPMENT SUPPLIED BY OTHERS:	ELECTRICAL CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR SERVICING REQUIREMENTS FOR ALL EQUIPMENT SUPPLIED BY OTHERS ELECTRICAL CONTRACTOR SHALL COORDINATE ALL EQUIPMENT WIRING WITH OTHER TRADES. ELECTRICAL CONTRACTOR SHALL VERIFY AND CONFIRM ALL CIRCUITING, AND SHALL PROVIDE A NEW CIRCUITING LEGEND FOR APPROVAL BY OWNER AND ENGINEER, PRIOR TO PROCEEDING WITH WIRING OF PANEL. THIS CIRCUITING STUDY SHALL INCLUDE ALL EXISTING, ALTERED AND NEW CIRCUITS.
NOTATIONS:	W/P WEATHERPROOF T&D TO BE DETERMINED AND VERIFIED WITH OTHER TRADES

LIGHT FIXTURE SCHEDULE

LIGHTING CONTROL SCHEDULE

EXTERIOR LIGHTING CONTROL SCHEDULE

ELECTRIC HEATER SCHEDULE

UNIT	DESCRIPTION	FAN CFM	DIMN	ELECTRICAL			ACCEPTABLE PRODUCT	NOTES
				WATTS	VOLT	PHASE		
EUH-1	FAN FORCED HEATER COMMERCIAL GRADE	160	16.75W 21.5H	1000	240	1	DIMPLEX #RFI STELPRO OR APPROVED EQUAL	WHITE CONTROL: - BUILT-IN TSTAT RECESSED MOUNT BO

Engineering Ltd.

telephone: (613) 349-0555

Design: MM	Checked:	Approved: MM	Project No.: 9657
Drawn: MP	Checked:	Date: 2022-01-04	Contract No.:
Scale:  Horizontal: AS SHOWN  Vertical: AS SHOWN		Drawing No.: E3	
		REV DATE: 3/18/2022	