

ONTARIO BUILDING CODE DATA MATRIX											
PART 9 - HOUSING AND SMALL BUILDINGS								OBC REFERENCE ⁽¹⁾			
9.00	BUILDING CODE VERSION		O.Reg. 332/12		LAST AMENDMENT O.Reg. 209/20						
9.01	PROJECT TYPE	NEW CONSTRUCTION							[A] 1.1.2.		
		ELECTRICAL ENGINEERING OFFICE AND WAREHOUSE									
9.02	OCCUPANCY CLASSIFICATION	OCCUPANCY				USE			9.10.2.		
		F3	LOW HAZARD INDUSTRIAL			WAREHOUSE					
		D	BUSINESS & PERSONAL SERVICES			OFFICE					
9.03	SUPERIMPOSED MAJOR OCCUPANCIES	NO							9.10.2.3.		
9.04	BUILDING AREA (m²)	DESCRIPTION				EXISTING	NEW	TOTAL	[A] 1.4.1.2.		
		ENTIRE BUILDING				0.0	418.1	418.1			
9.05	MEZZANINE AREA (m²)	DESCRIPTION				EXISTING	NEW	TOTAL	9.10.4.1.		
		WAREHOUSE				0.0	28.0	28.0			
9.06	GROSS AREA (m²)	DESCRIPTION				EXISTING	NEW	TOTAL	[A] 1.4.1.2.		
		ENTIRE BUILDING				0.00	446.10	446.1			
9.07	BUILDING HEIGHT	1	STOREYS ABOVE GRADE				7.90	(m) ABOVE GRADE	[A] 1.4.1.2. &		
		0	STOREYS BELOW GRADE						9.10.4.		
9.08	NUMBER OF STREETS/ FIRE FIGHTER ACCESS	1	STREET(S)						9.10.20.		
9.09	SPRINKLER SYSTEM	NOT REQUIRED		Provided:	NONE			9.10.8.2-4.			
9.10	FIRE ALARM SYSTEM	NOT REQUIRED		TYPE PROVIDED			N/A		9.10.18.		
9.11	WATER SUPPLY IS ADEQUATE	YES	DRILLED WELL								
9.12	CONSTRUCTION TYPE	RESTRICTIONS	COMBUSTIBLE PERMITTED				9.10.6.				
		ACTUAL	COMBUSTIBLE	EAVY TIMBER CONSTRUCTION			NO				
9.12	POST-DISASTER BUILDING	NO							[A] 1.1.2.2.(2)		
9.13	OCCUPANT LOAD	FLOOR LEVEL/AREA	OCCUPANCY TYPE		BASED ON			OCCUPANT LOAD (PERSONS)		3.1.17.	
		GROUND FLOOR	WAREHOUSE		m² PER PERSON			8			
		GROUND FLOOR	OFFICE		m² PER PERSON			20			
		TOTAL						28			
9.14	BARRIER-FREE DESIGN	YES							9.5.2.		
9.15	HAZARDOUS SUBSTANCES	NO							9.10.1.3.		
9.16	REQUIRED FIRE RESISTANCE RATINGS	HORIZONTAL ASSEMBLY				FIRE RESISTANCE RATING (H)		SUPPORTING ASSEMBLY (H)		9.10.8.	
		FLOORS EXCEPT CRAWLSPACE				0.75		0.75			
		MEZZANINE				0		N/A			
		ROOF				0		N/A			
9.17	SPATIAL SEPARATION	WALL	EBF AREA (m²)	LIMITING DISTANCE (m)	MAX. AREA OF UPO (%)	REQUIRED FRR (H)	CONSTRUCTION TYPE	CLADDING TYPE	9.10.14.		
		NORTH	55.7	35.0	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
		EAST	73.4	15.2	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
		NORTHERN									
		EAST	55.1	15.2	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
		SOUTHERN									
		SOUTH	55.7	39.8	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
		WEST	73.4	50.4	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
		NORTHERN									
		WEST	55.1	50.4	100.0	-	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED			
9.18	PLUMBING FIXTURE REQUIREMENTS	FLOOR LEVEL/AREA		OCC. LOAD		OBC REF.		FIXTURES REQUIRED		9.31. & 3.7.4.	
								FEMALE	MALE		
		WAREHOUSE		8.00		3.7.4.9.(2)		1 UNISEX			
		OFFICE (14 PERSONS/m2)		14.00		3.7.4.7.(1)		1.00	1.00		
9.19	ENERGY EFFICIENCY	NONRESIDENTIAL	COMPLIANCE OPTION:			SB-10, PRESCRIPTIVE, DIV.3				12.2.1.	
			CLIMATIC ZONE			ZONE 2 (≥ 5000 DEGREE DAYS)					
			CLASSIFICATION			NON-RESIDENTIAL					
			OPAQUE ELEMENTS			MAX. U / MIN. R (I-P)		PROVIDED U-VALUE (I-P)			
			ROOF W/ ATTIC			R-71		R-71			
			WALLS, ABOVE GRADE			U-0.046		U-0.046			
			SLAB-ON-GRADE FLOORS - HEATED			R-10, FULL SLAB		R-10, FULL SLAB			
			WINDOWS			U-0.29		U-0.29			
9.20	NOTES	1	ALL REFERENCES ARE TO DIVISION B OF THE OBC UNLESS PRECEDED BY [A] FOR DIVISION A AND [C] FOR DIVISION C								

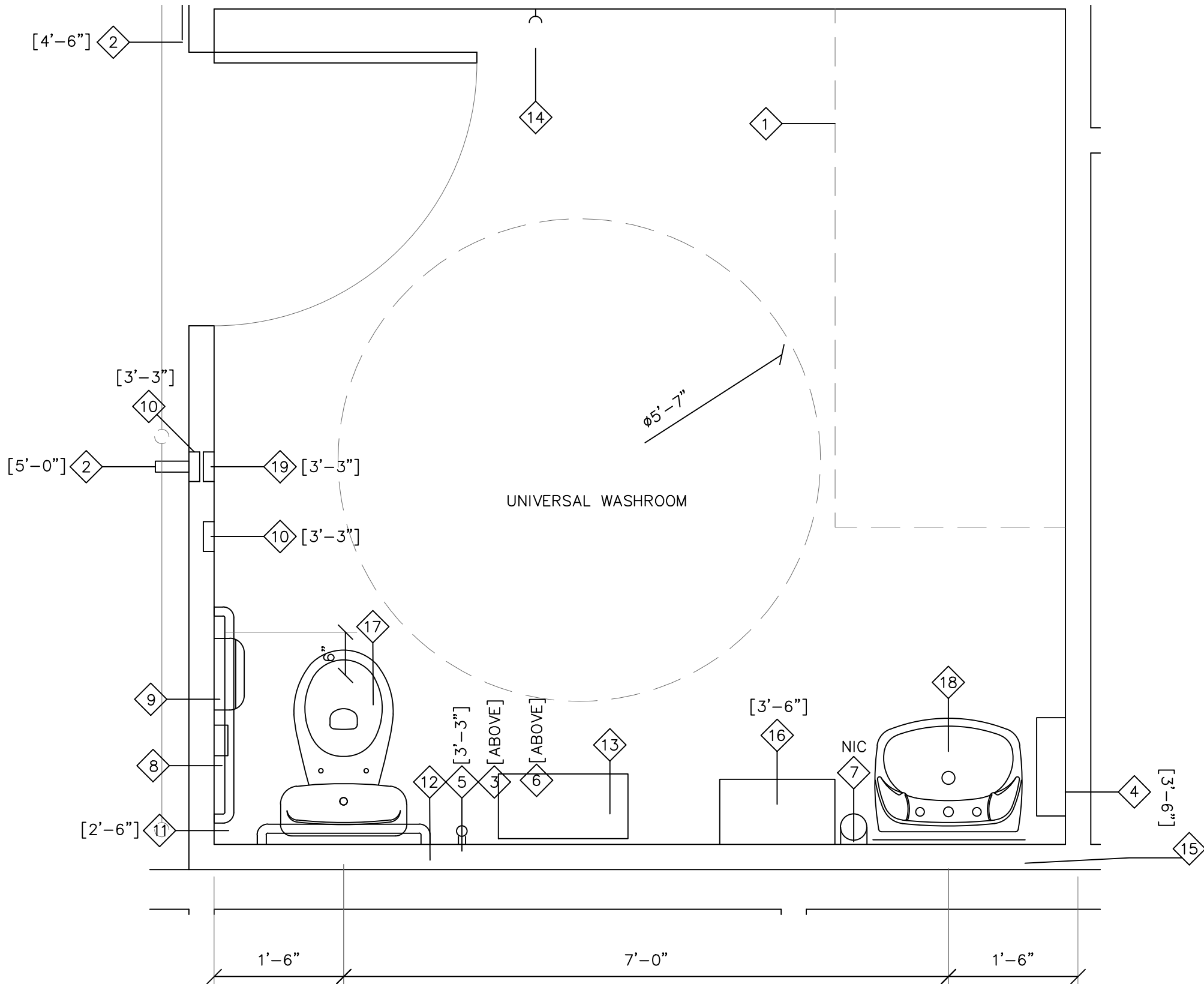
DOOR SCHEDULE:					
MARK:	QTY:	SIZE:	DESCRIPTION:	LOCATION:	LINTEL:
A	14	38"x84"	INTERIOR DOOR	OFFICES, CONFERENCE ROOM, FILING ROOM, STORAGE ROOM, PARTS ROOM, WASHROOMS, MECHANICAL ROOM	2PLY 2X6
B	1	72"x84"	EXTERIOR DOUBLE DOOR	FRONT ENTRANCE	3PLY 2X10
C	3	38"x84"	EXTERIOR DOOR	NORTH WALL, EAST WALL, WEST WALL	LVL 2900Fb-2.0E 5½"x9½" C/W 4 JACK STUDS EACH SIDE
D	1	38"x84"	FIRE DOOR MINIMUM 20 MIN.	WAREHOUSE ENTRANCE	2PLY 2X10
E	2	144"x144"	OVERHEAD DOOR	WAREHOUSE	3PLY 2X10

VERIFY ALL WINDOW AND DOOR ROUGH OPENINGS WITH OWNER PRIOR TO CONSTRUCTION. ALL WINDOW LINTELS TO HAVE 1 JACK STUD EACH SIDE UNLESS NOTED OTHERWISE

WINDOW SCHEDULE:					
MARK:	QTY:	SIZE (WxH):	DESCRIPTION:	LOCATION:	LINTEL:
1	2	60"x60"	DOUBLE PANE, ARGON FILLED, LOW-E, CASEMENT MAX U-VALUE TO BE 0.29 (I-P)		2PLY 2X10
2	6	60"x60"	DOUBLE PANE, ARGON FILLED, LOW-E, AWNING MAX U-VALUE TO BE 0.29 (I-P)		LVL 2900Fb-2.0E 5½"x9½" C/W 4 JACK STUDS EACH SIDE
3	6	72"x24"	DOUBLE PANE, ARGON FILLED, LOW-E, FIXED MAX U-VALUE TO BE 0.29 (I-P)		LVL 2900Fb-2.0E 5½"x9½" C/W 4 JACK STUDS EACH SIDE

VERIFY ALL WINDOW AND DOOR ROUGH OPENINGS WITH OWNER PRIOR TO CONSTRUCTION. ALL WINDOW LINTELS TO HAVE 1 JACK STUD EACH SIDE UNLESS NOTED OTHERWISE

WALL SCHEDULE:			DRAWING:
MARK:	DESCRIPTION:	CONSTRUCTION:	
W1	EXTERIOR <div><div>1</div></div>	-METAL CLADDING -1X4 STRAPPING @ 24" O.C. -1" EXPANDED POLYSTYRENE INSUL. -WEATHER-RESISTIVE BARRIER -7/16" OSB WALL SHEATHING FASTENED WITH 8d NAILS @ 6" O.C. -2X8 @ 16" O.C. C/W HORIZONTAL BLOCKING @ 48" O.C. -R28 BATT INSULATION -6MIL POLY VAPOUR BARRIER -1/2" GYPSUM BOARD	
W2	INTERIOR 2X6 3/4H FRR MMAH SB-3 W1B	-1/2" TYPE "X" GYPSUM BOARD -2X6 @ 16" O.C. C/W BLOCKING @ 48" O.C. -R20 BATT INSULATION -1/2" TYPE "X" GYPSUM BOARD	
W3	INTERIOR 2X4	-1/2" GYPSUM BOARD -2X4 @ 16" O.C. C/W BLOCKING @ 48" O.C. -1/2" GYPSUM BOARD	
W4	INTERIOR 2X4 3/4H FRR MMAH SB-3 W1E	-1/2" TYPE "X" GYPSUM BOARD -2X4 @ 16" O.C. C/W BLOCKING @ 48" O.C. -1/2" TYPE "X" GYPSUM BOARD	



*PROVIDE SOLID BACKING FOR ALL ACCESSORIES AND FIXTURES

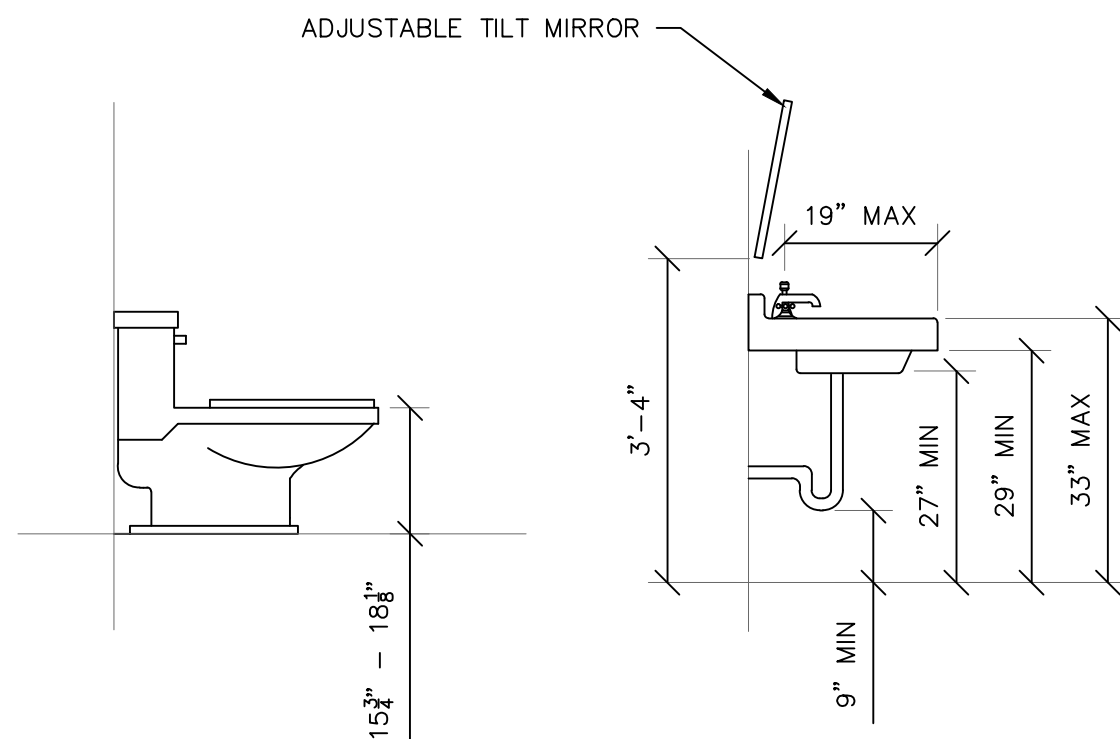
DETAIL
3/4"=1'-0"

*ALL AUDIO AND VISUAL SIGNALS SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE OBC

UNIVERSAL WASHROOM

WASHROOM ACCESSORIES

- ADULT CHANGE TABLE.
- WASHROOM SIGNAGE.
- "ASSISTANCE REQUIRED" LED ANNUNCIATION C/W SOUNDER
- "ASSISTANCE REQUIRED" DOME LIGHT WITH SOUNDER
- "PUSH FOR ASSISTANCE" BUTTON
- EMERGENCY SIGN
- SOAP DISPENSER
- NAPKIN DISPOSAL
- TOILET PAPER DISPENSER
- DOOR ACTIVATION SWITCH
- GRAB BAR "L" SHAPED, 30" HORIZONTAL & VERTICAL
- GRAB BAR HORIZONTAL 24" LONG 6" ABOVE TANK
- WASTE RECEPTACLE
- COAT HOOK
- MIRROR
- SHELF
- TOILET
- LAVATORY
- PUSH TO LOCK BUTTON



FIXTURE DETAILS

NOTES:

DESIGN NOTES:

GENERAL:

- ALL DIMENSIONS ARE IN FEET AND INCHES.
 - CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS PRIOR TO FABRICATION.
 - THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISION COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
 - READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
 - UNDER NO CIRCUMSTANCES ARE THESE DRAWINGS TO BE SCALED, INCLUDING FOR PREPARATION OF SHOP DRAWINGS, CONSTRUCTION LAYOUT, OR BIDDING PURPOSES. ERRORS MADE BY PERSONS SCALING THESE DRAWINGS SHALL NOT BE THE RESPONSIBILITY OF ALPHA ENGINEERING.
 - CONTRACTOR SHALL SUBMIT ANY SHOP DRAWINGS FOR REVIEW BY THE CONSULTANT PRIOR TO FABRICATION.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE ONTARIO BUILDING CODE (2012).
 - REINFORCING STEEL MUST BE INSPECTED BY ENGINEER PRIOR TO POURING CONCRETE, GIVE 48 HOURS NOTICE.
- WOOD:
- ALL FRAMING LUMBER SHALL COMPLY WITH PERTINENT PROVISIONS OF CSA 086 AND CSA 0141, AND TO THE NATIONAL LUMBER GRADES AUTHORITY, STANDARD GRADING RULE.
 - FRAMING MATERIAL, UNLESS OTHERWISE NOTED, SHALL BE KILN DRIED LUMBER.
 - ALL WOOD MEMBERS SHALL BE SPF GRADE NO. 2 OR BETTER.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL BY-LAWS.
 - ENGINEER TO REVIEW ALL SHOP DRAWINGS. LVL, TRUSSES ETC.

SITE PREPARATION:

- EXCAVATION SHALL BE CLEAR OF ALL DELETERIOUS MATERIALS.
- BACK FILL UNDERNEATH THE FOOTINGS SHALL BE GRANULAR B; TYPE 1 ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). BACKFILL SHALL BE PLACED IN 12" LIFTS.
- COMPACTION TESTING SHALL BE PERFORMED TO ENSURE COMPACTION HAS BEEN ACHIEVED PRIOR TO PLACEMENT OF THE NEXT LIFT.
- FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING CAPACITY OF 100KPa. OWNER SHALL BE RESPONSIBLE FOR PROVIDING CONFIRMATION OF ALL COMPACTION TESTING REQUIRED TO ACHIEVE THE DESIGN BEARING CAPACITY.
- PROTECT ALL SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOUNDATIONS.

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No.	DATE	REVISION

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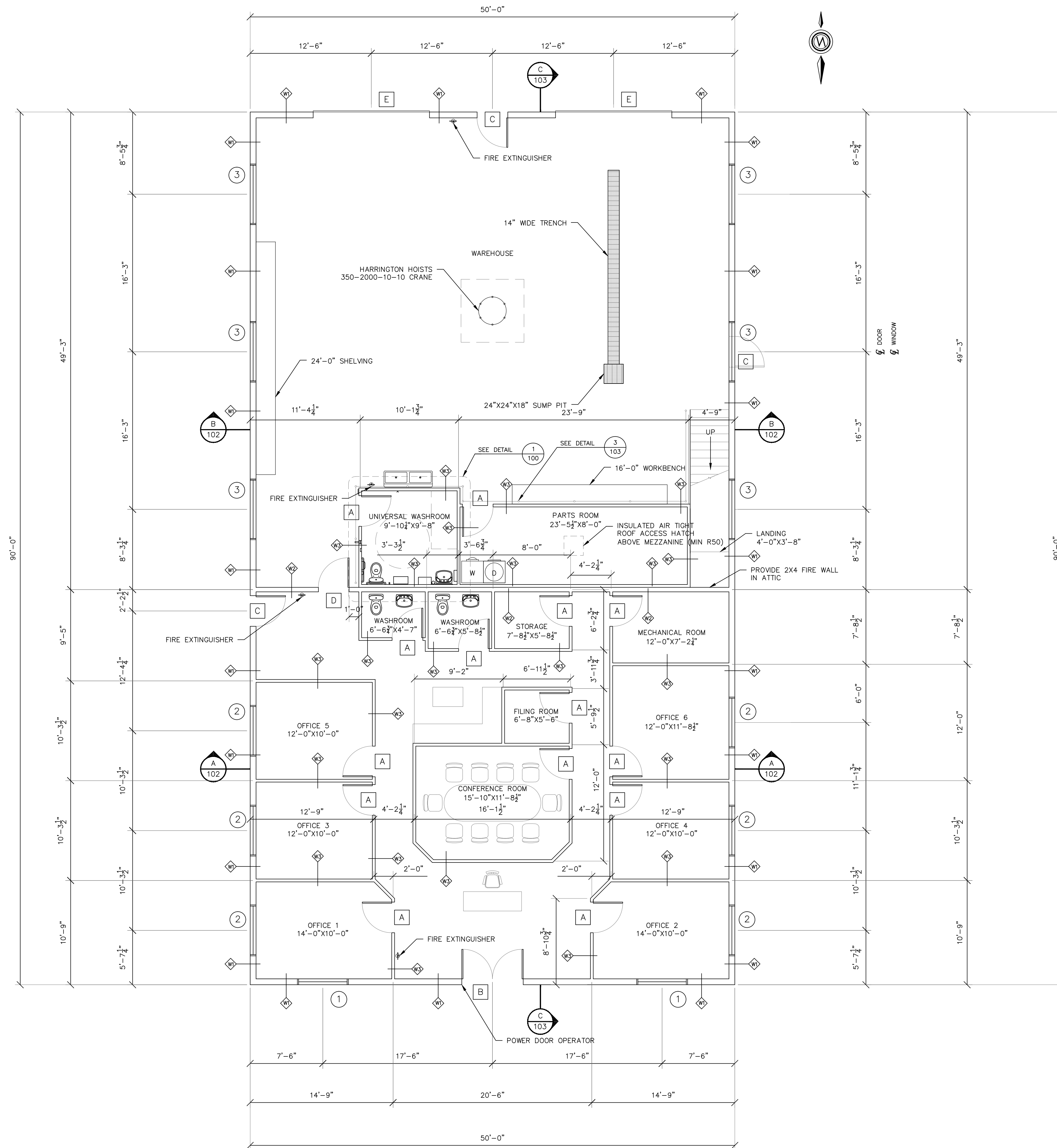
PROPOSED OLIVER PAIPOONGE BUILDING

OBC MATRIX GENERAL NOTES AND UNIVERSAL WASHROOM

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 3/4"=1'-0"

DWG No: AE-20079-100






PLAN VIEW

NOTES:

- FOUNDATION:
1. FORM WORK AND TOLERANCES SHALL CONFORM TO CSA-A23.1.
 2. CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 25MPa AT 28 DAYS.
 3. CONCRETE PLACING, CURING AND TESTING SHALL CONFORM TO CSA-A23.1 AND A23.2.
 4. ALL REINFORCING BARS SHALL CONFORM TO THE LATEST CSA STANDARD G30.18 HAVING A MINIMUM YIELD STRENGTH OF 400MPa.
 5. DETAILING AND PLACING OF ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL OF STANDARD PRACTICE".
 6. CLEAR CONCRETE COVER TO REINFORCING STEEL SHALL BE:
A) CONCRETE POURED AGAINST EARTH: 3"
B) CONCRETE EXPOSED TO EARTH OR WEATHER: 1 1/2"
C) SLAB OR WALLS NOT EXPOSED TO EARTH OR WEATHER: 3/4"
 7. GIVE ENGINEER A MINIMUM OF 48 HRS NOTICE PRIOR TO POURING CONCRETE. TO PERFORM REINFORCING STEEL INSPECTION IN WALLS AND FOOTINGS. DO NOT POUR WITHOUT APPROVAL FROM ENGINEER.
 8. SAW CUTTING OF SLABS IS RECOMMENDED AT 20'-0" INTERVALS, HOWEVER; OWNER SHOULD DISCUSS THIS WITH CONCRETE CONTRACTOR.
 9. VERIFY ROUGH OPENINGS PRIOR TO FORMING.

DESIGN LOADS:
SNOW LOAD: VARIES SEE SNOW LOAD DIAGRAM
ROOF DEAD LOAD: 1kPa
MEZZANINE = 4.8 KPa
SA (0.2) = 0.095
SA (0.5) = 0.057
SA (1.0) = 0.026
SA (2.0) = 0.008

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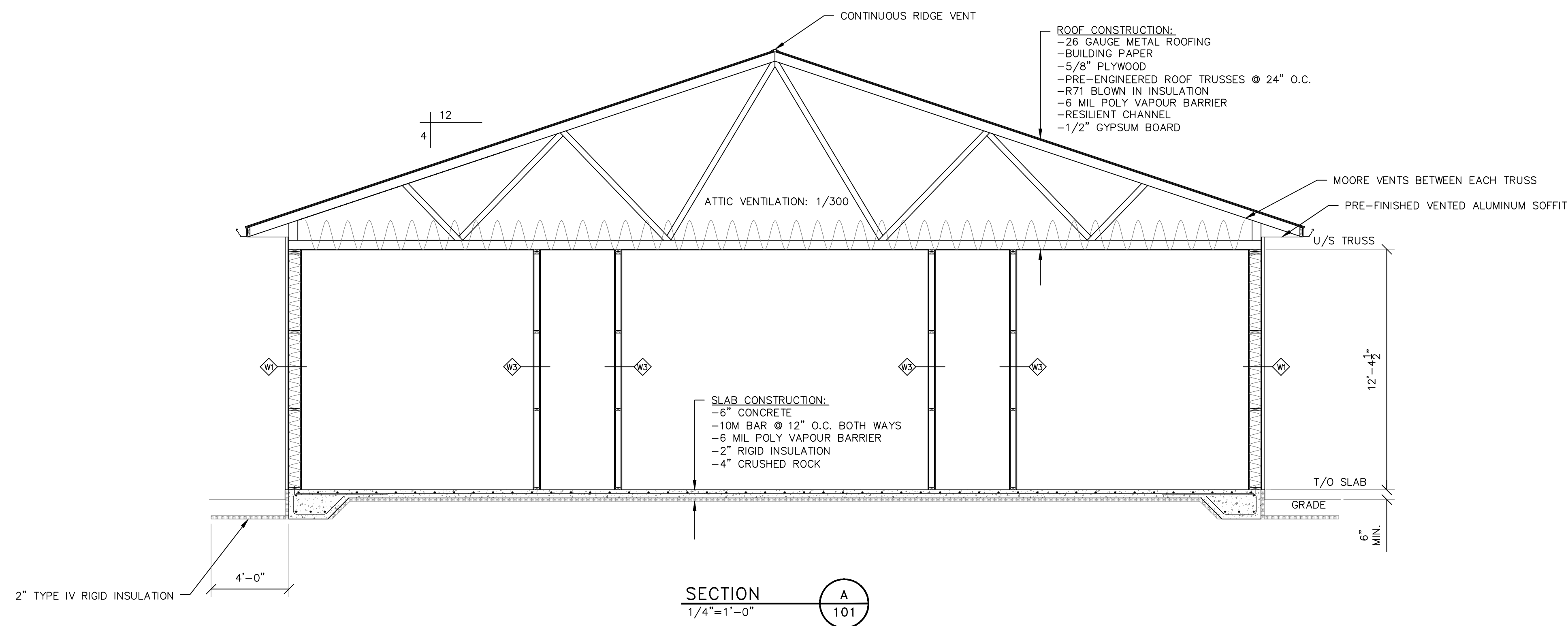
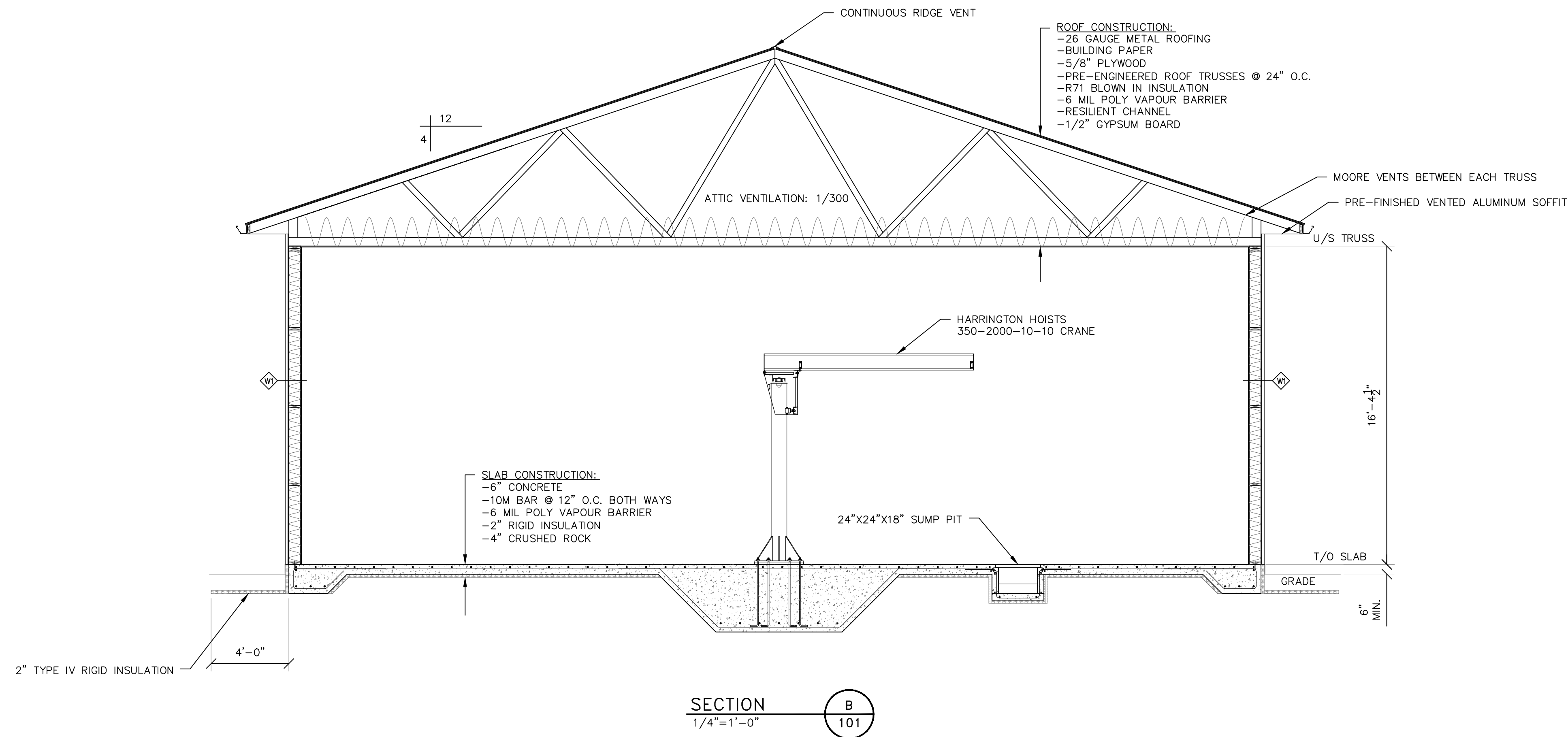
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PROPOSED OLIVER PAIPOONGE
BUILDING

PLAN VIEW

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 3/16"=1'-0"
DWG No: AE-20079-101	



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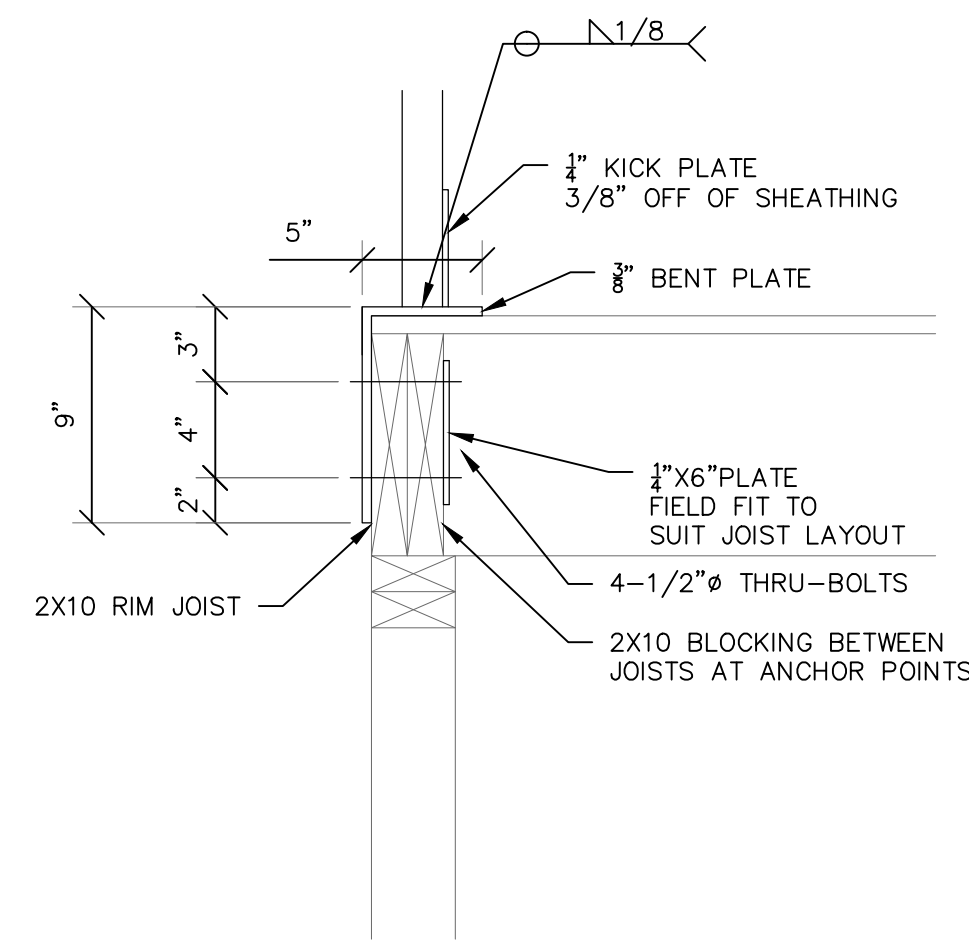
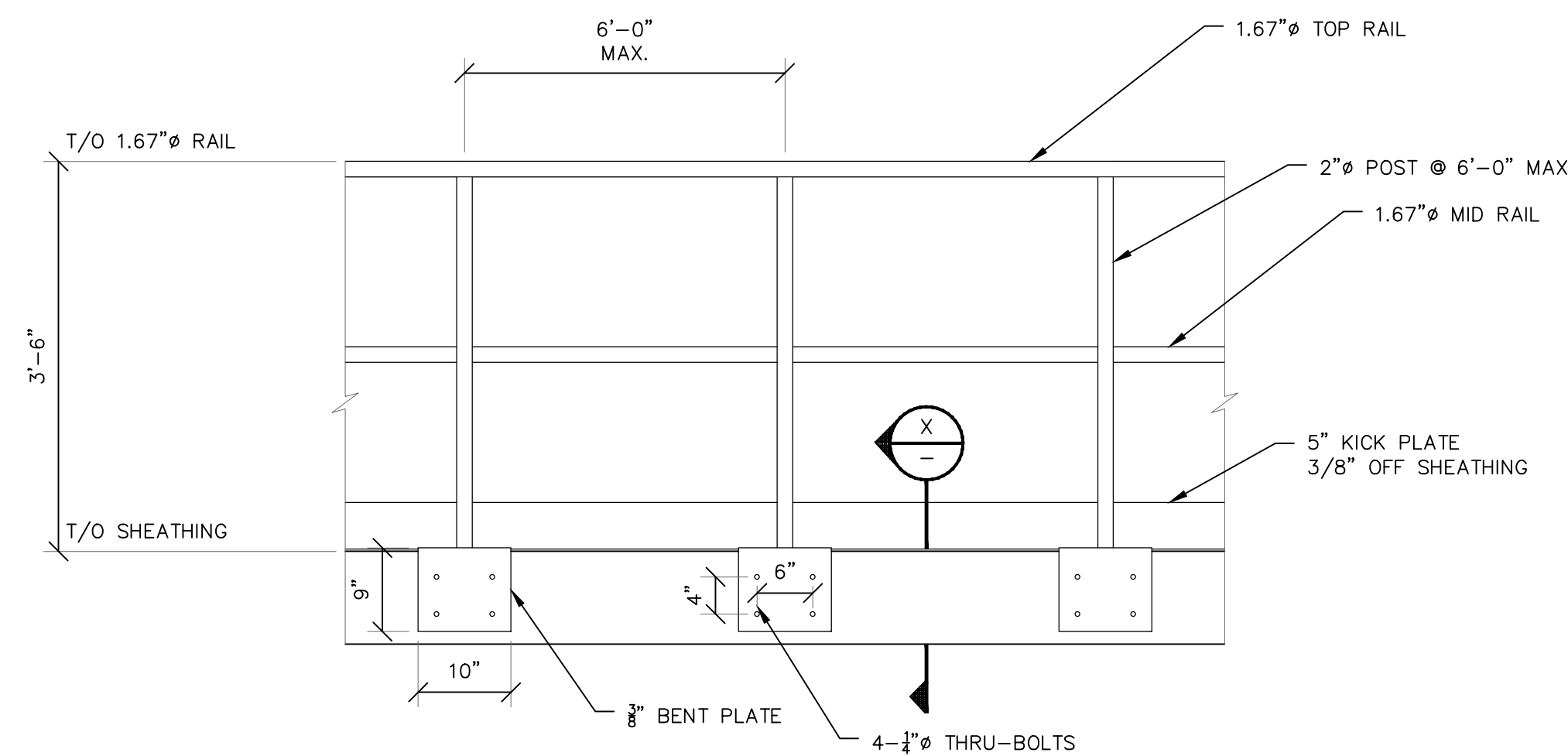
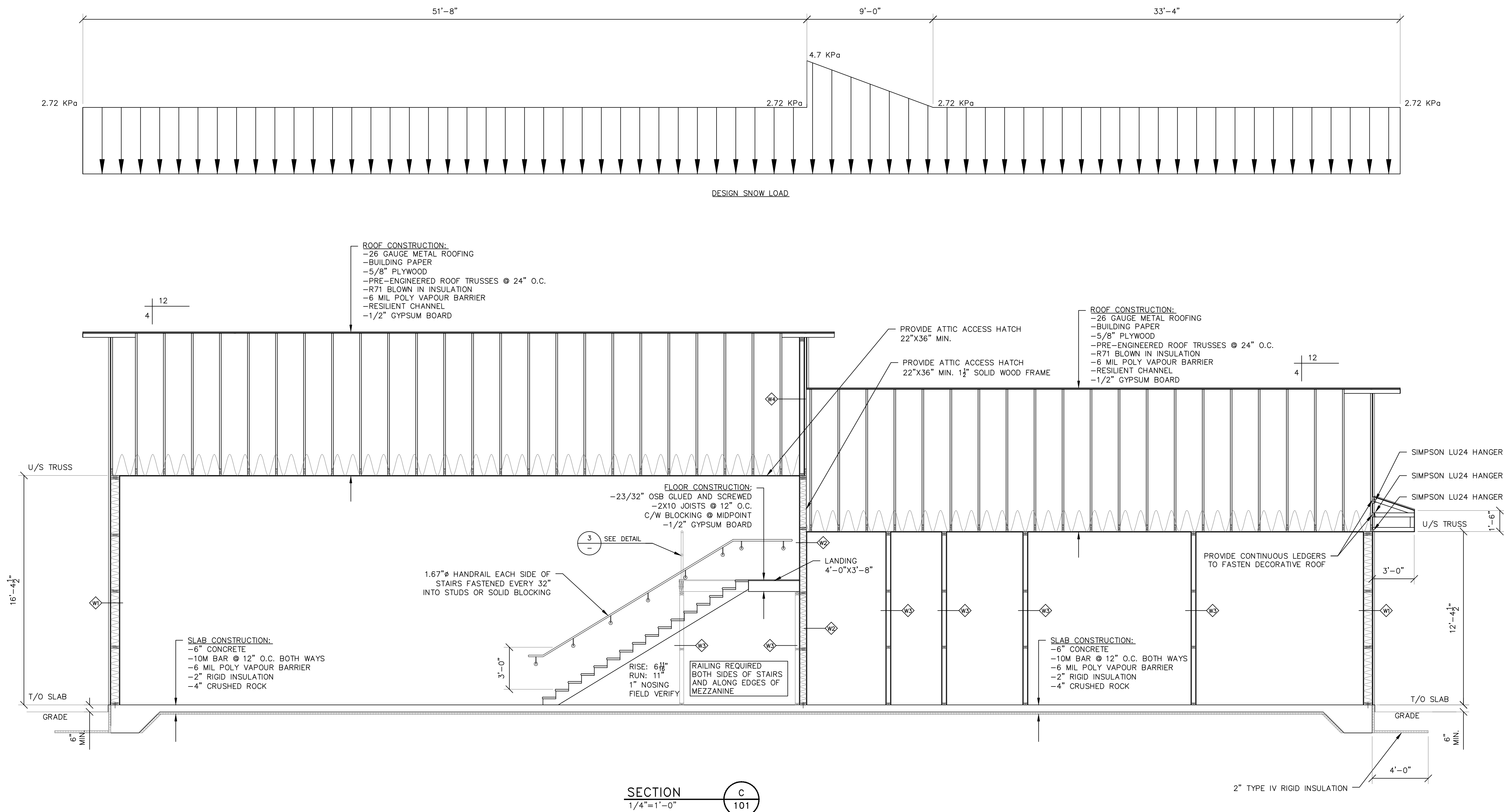


**PROPOSED OLIVER PAIPOONGE
BUILDING**


SECTIONS

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 1/4"=1'-0"

DWG No: AE-20079-102



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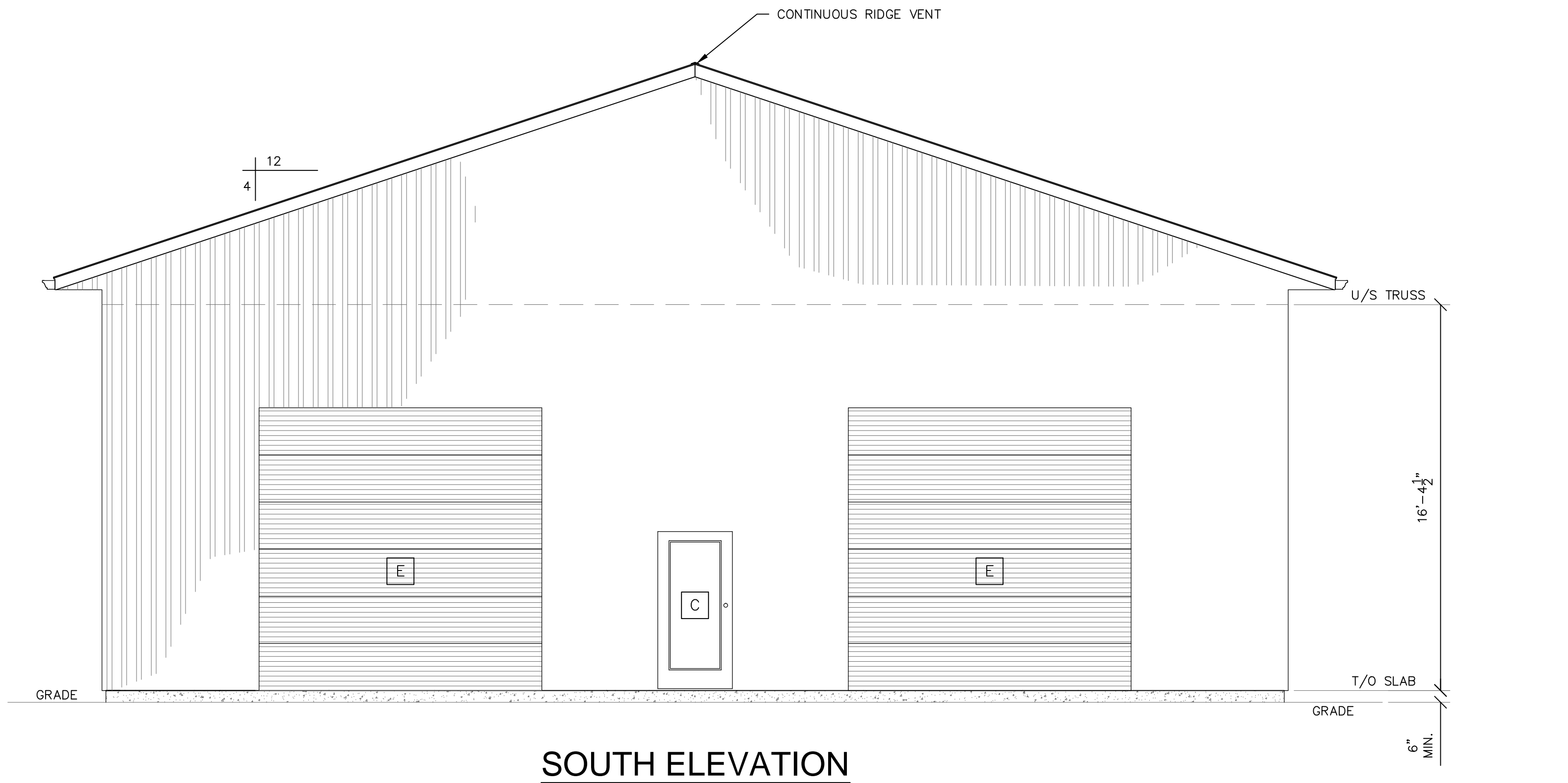


PROPOSED OLIVER PAIPOONGE
BUILDING

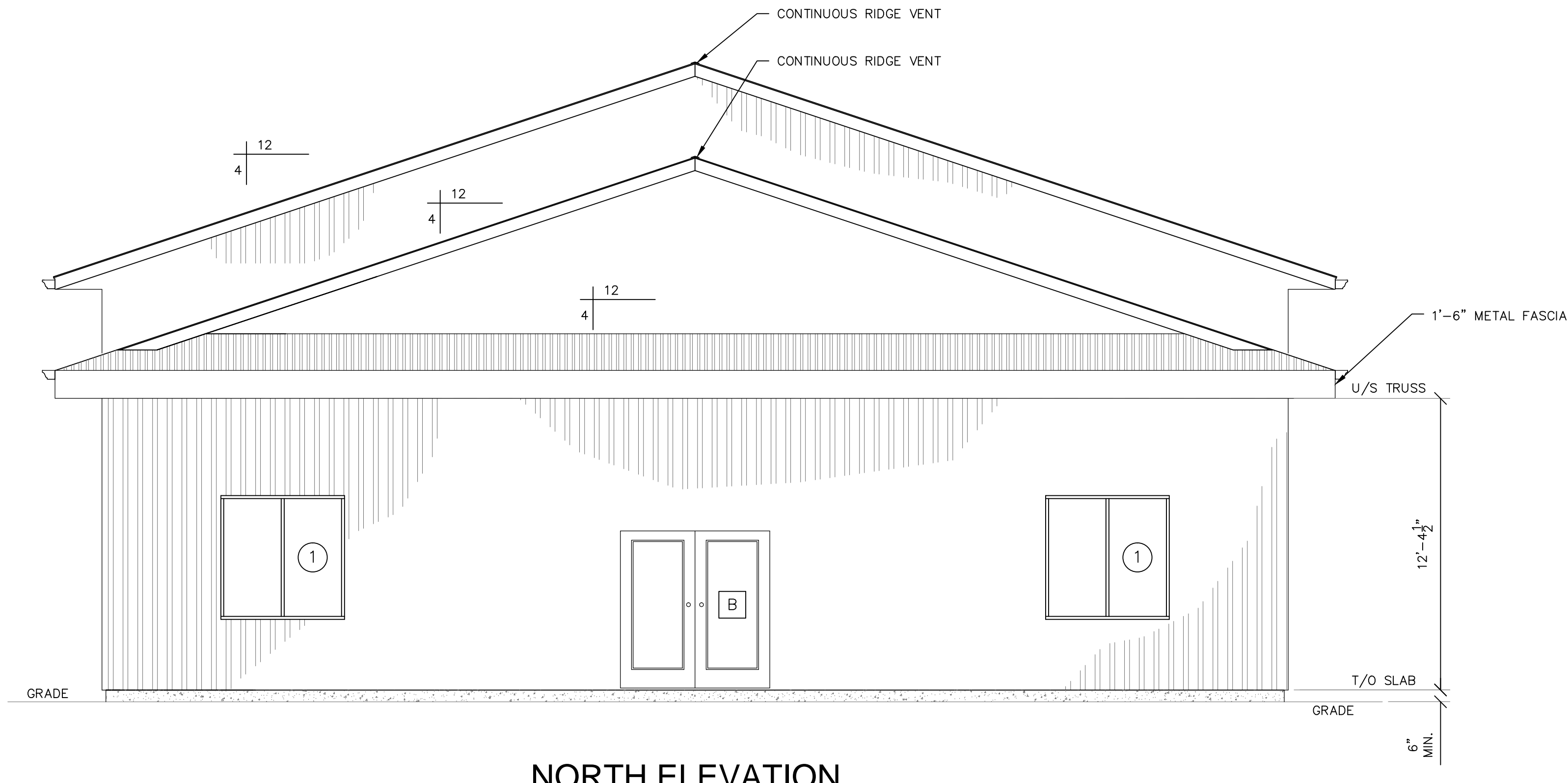
SECTION

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DATE: 26/5/2020	SCALE: 1/4"=1'-0"

DWG No: AE-20079-103




SOUTH ELEVATION




NORTH ELEVATION

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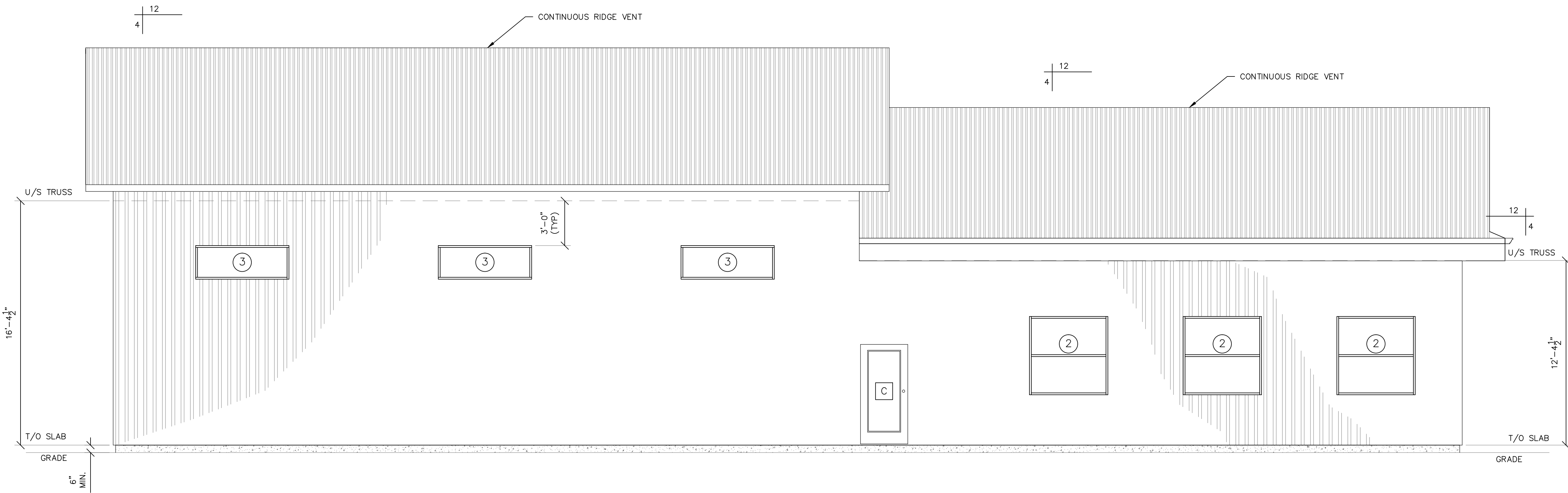


PROPOSED OLIVER PAIPOONGE
BUILDING

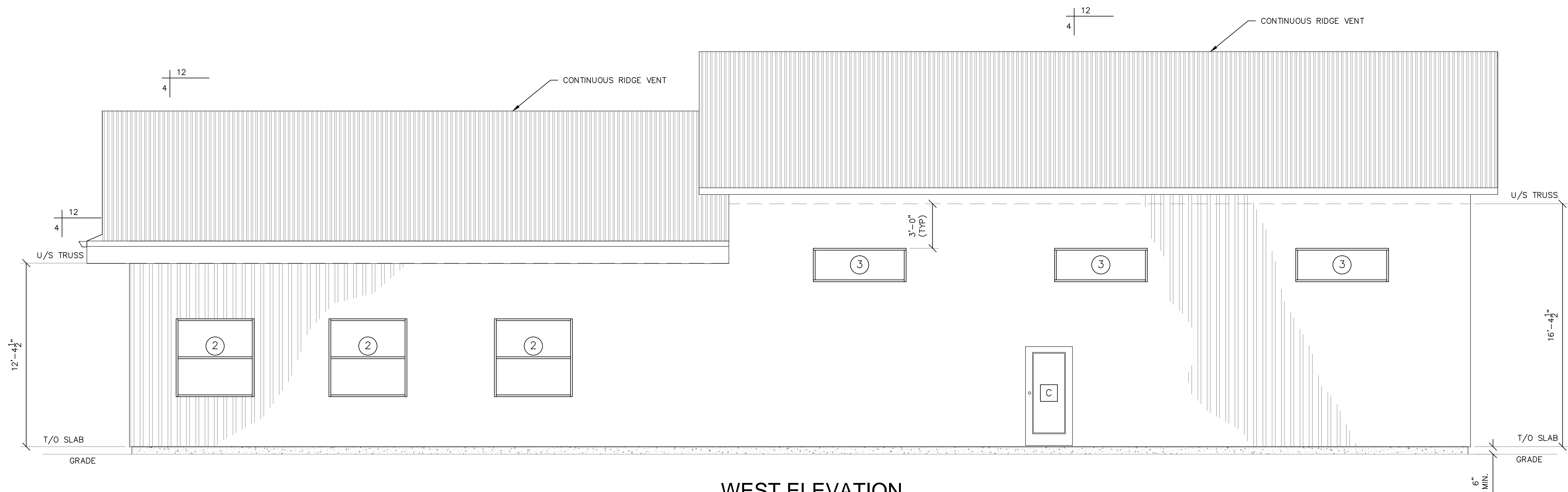
NORTH AND SOUTH ELEVATIONS

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 1/4"=1'-0"
DWG No: AE-20079-104	





EAST ELEVATION

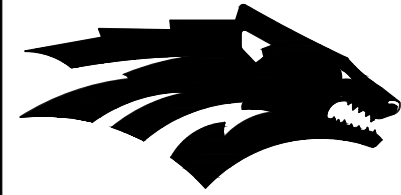


WEST ELEVATION

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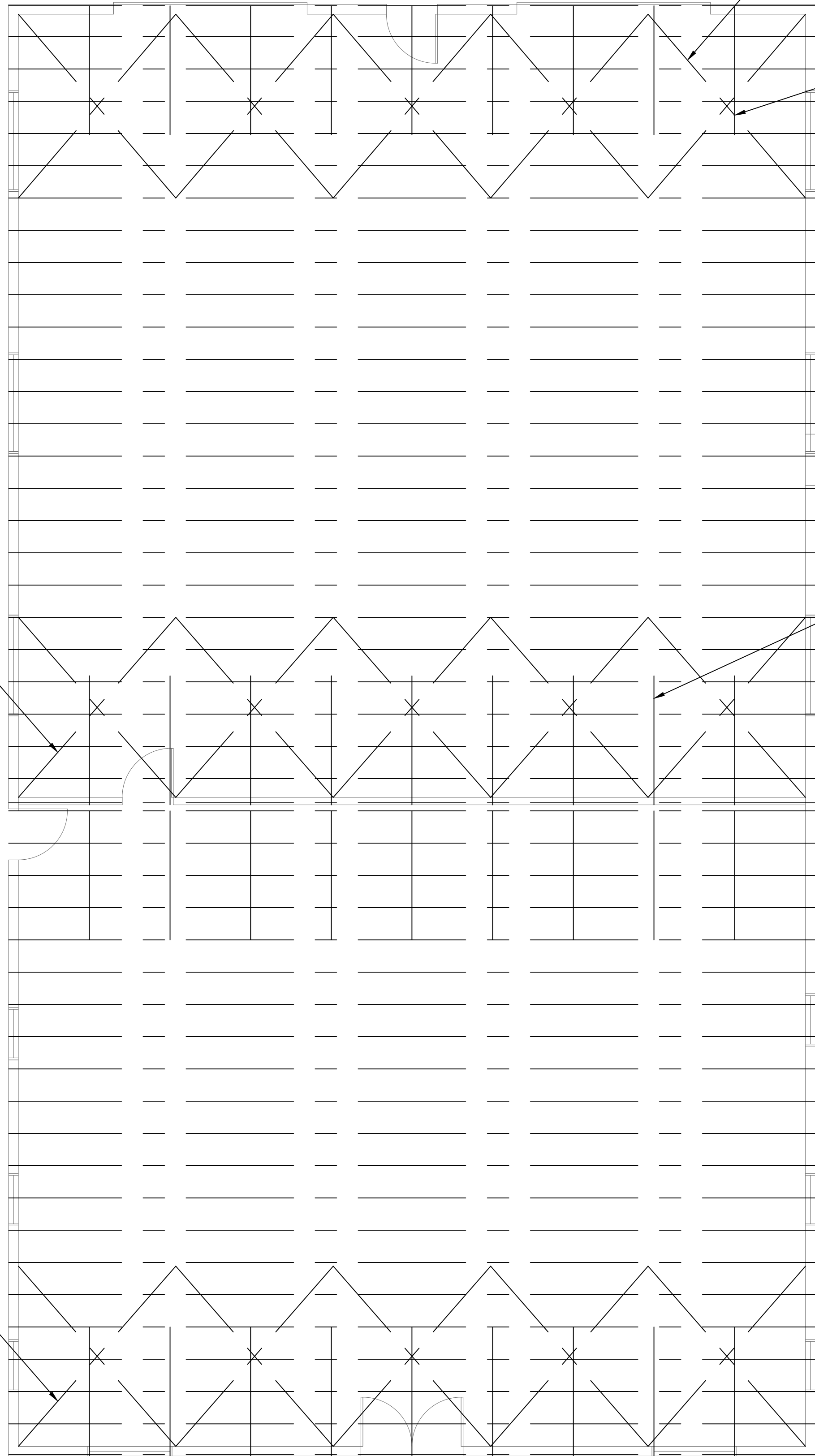
**PROPOSED OLIVER PAIPOONGE
BUILDING**

EAST AND WEST ELEVATIONS

DRAWN: SWG	CHECKED: RJF
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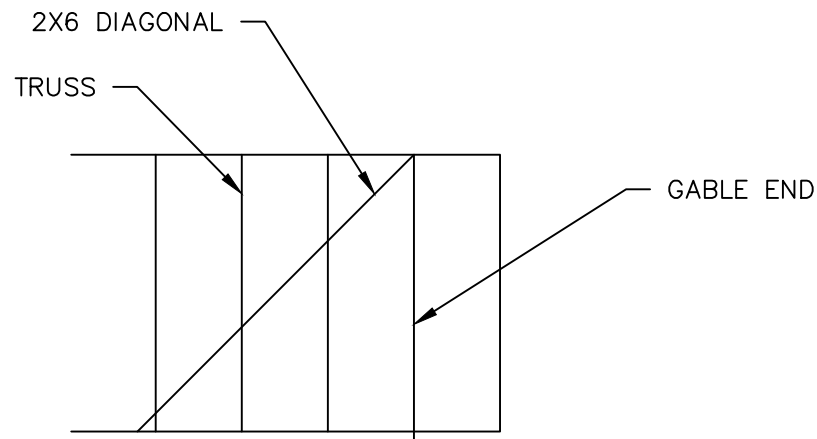
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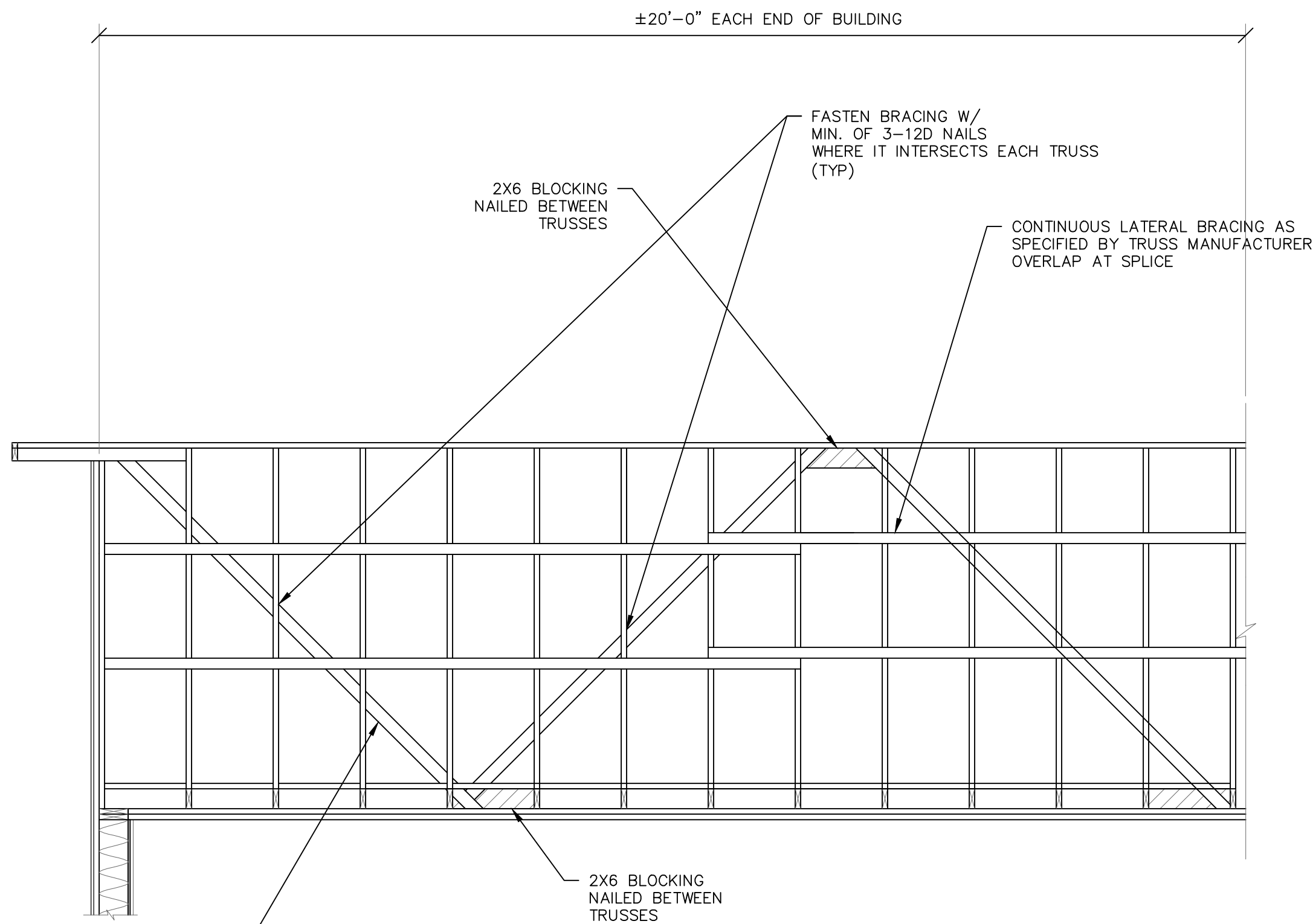


BOTTOM CHORD TRUSS BRACING

PROVIDE DIAGONAL 2X6 BRACING FROM GABLE WALL DOWN TO BOTTOM CHORD AT ALL VERTICAL MEMBERS OF TRUSSES AT A 45° ANGLE. NAIL TO EACH VERTICAL MEMBER OF TRUSS OR EVERY 5'-0".



PROVIDE DIAGONAL 2X6 BRACING FROM GABLE WALL DOWN TO BOTTOM CHORD AT ALL VERTICAL MEMBERS OF TRUSSES AT A 45° ANGLE. NAIL TO EACH VERTICAL MEMBER OF TRUSS OR EVERY 5'-0".




INSTALL DIAGONAL 2X6 BRACING @ 45° @ LATERALLY BRACED WEB MEMBER INDICATED ON CROSS SECTION, FASTENED TO THE UNDERSIDE OF THE DIAGONAL TRUSS MEMBERS THAT HAVE CONTINUOUS LATERAL BRACING. REPEAT AT GABLE ENDS

TRUSS ANCHOR BRACING
LOCATED AT EACH END OF UPPER AND LOWER ROOF
NOT SHOWN IN PLAN VIEW FOR CLARETY

NOTES:

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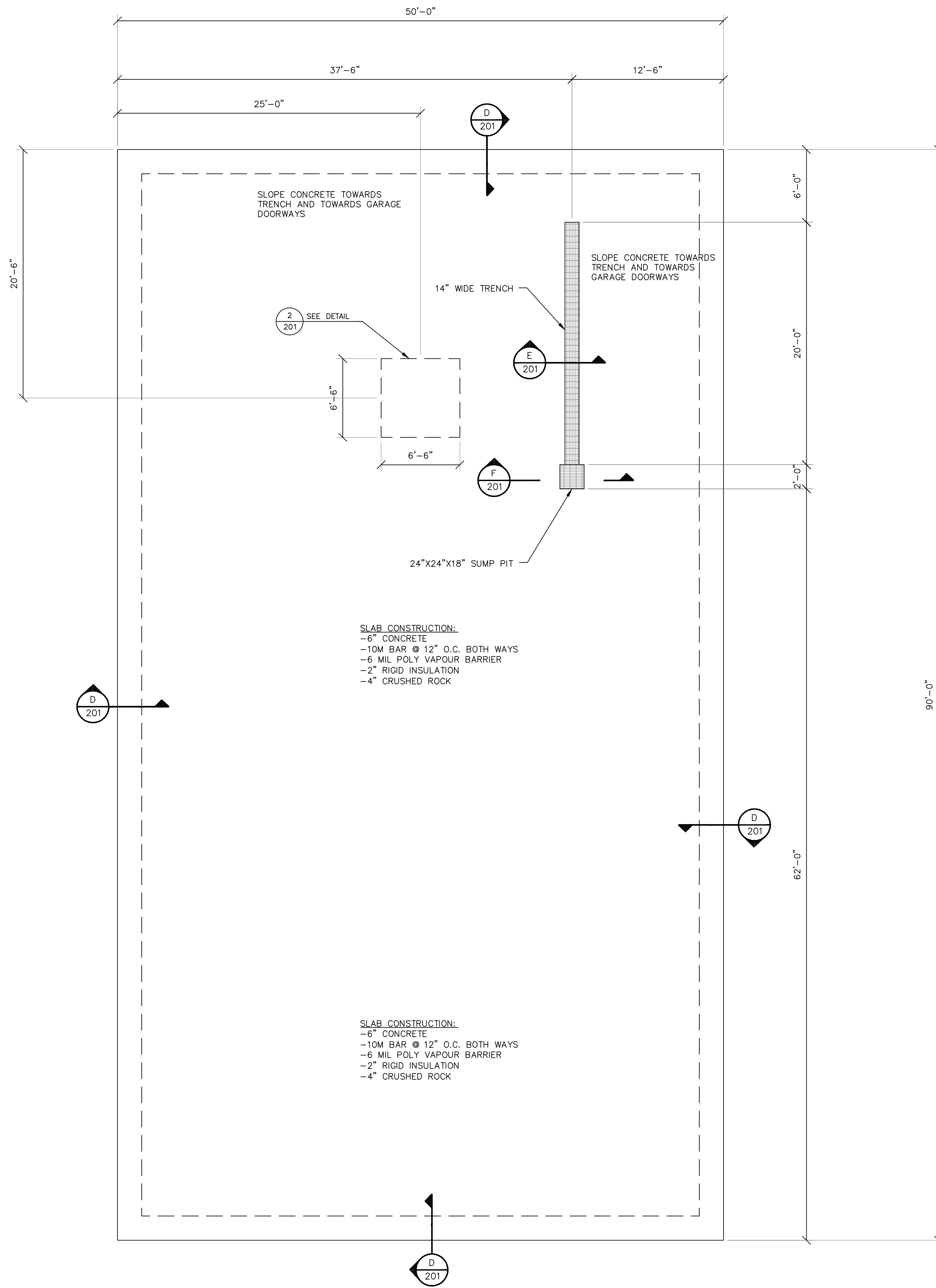
PROPOSED OLIVER PAIPOONGE BUILDING

BOTTOM CHORD TRUSS BRACING

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 3/16"=1'-0"

DWG No: AE-20079-106





FOUNDATION PLAN VIEW

NOTES:

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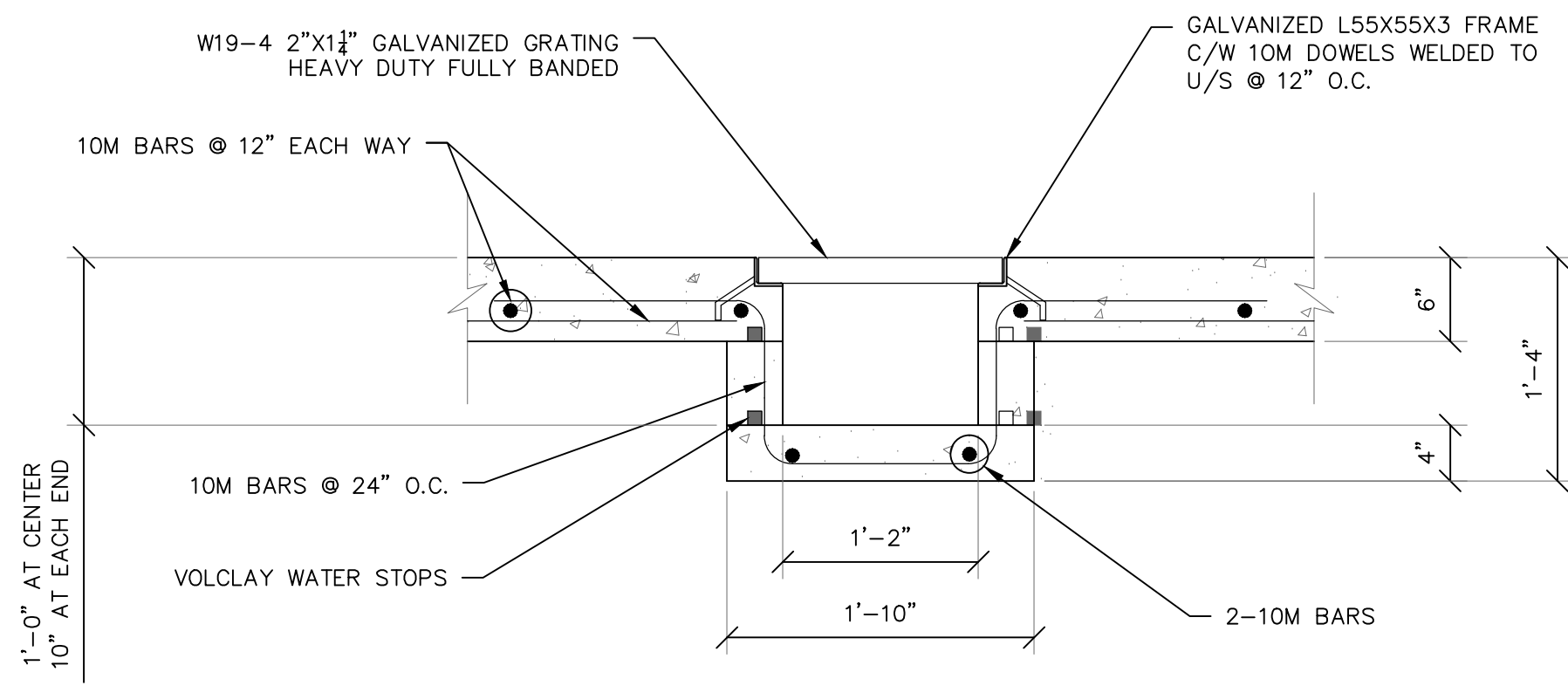


**PROPOSED OLIVER PAIPOONGE
BUILDING**

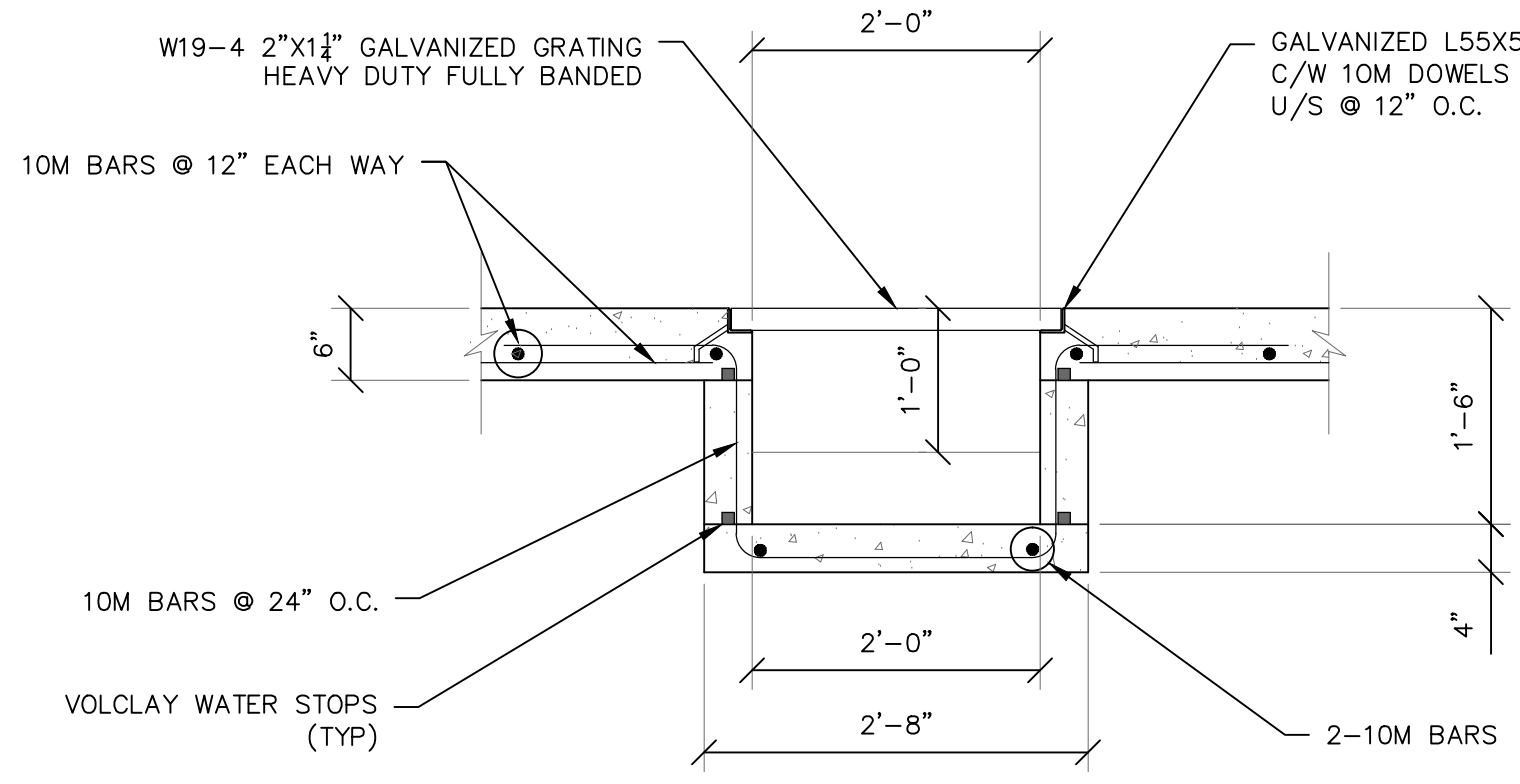
FOUNDATION PLAN VIEW

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DATE: 26/5/2020	SCALE: 3/16"=1'-0"

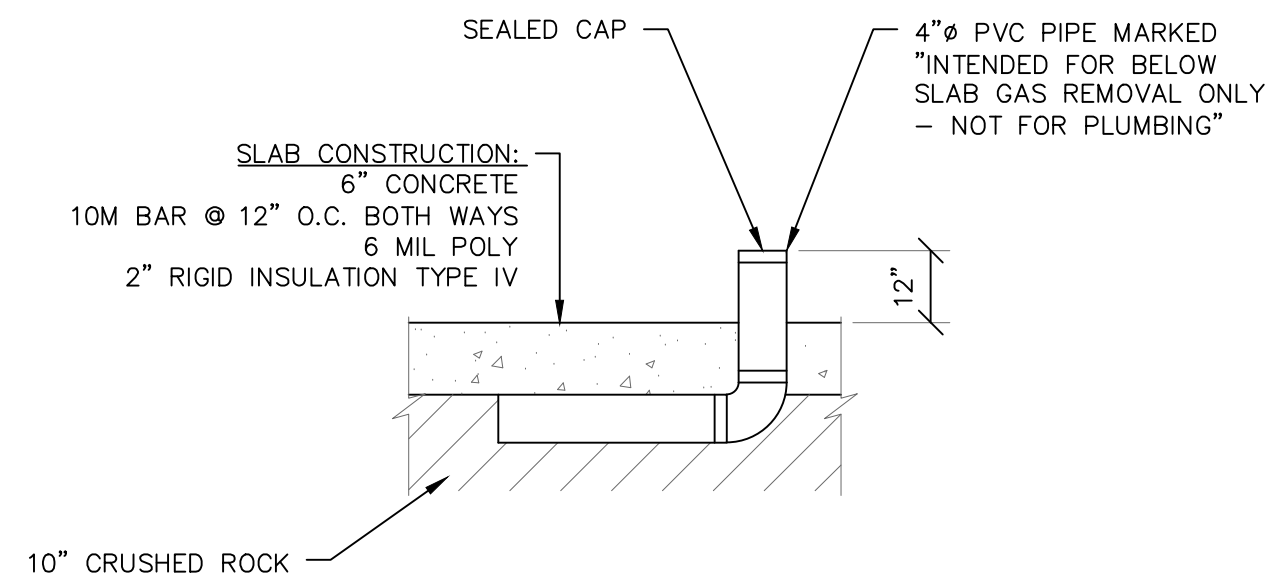
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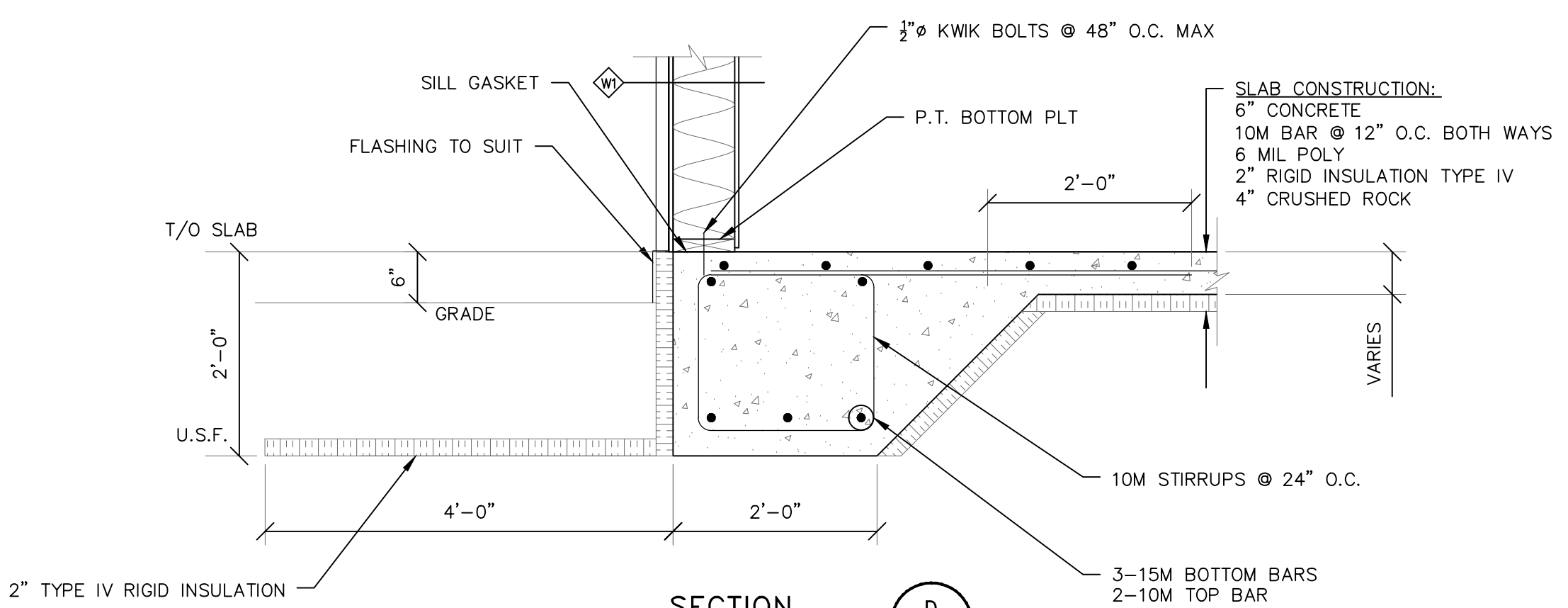
SECTION E
1"=1'-0"



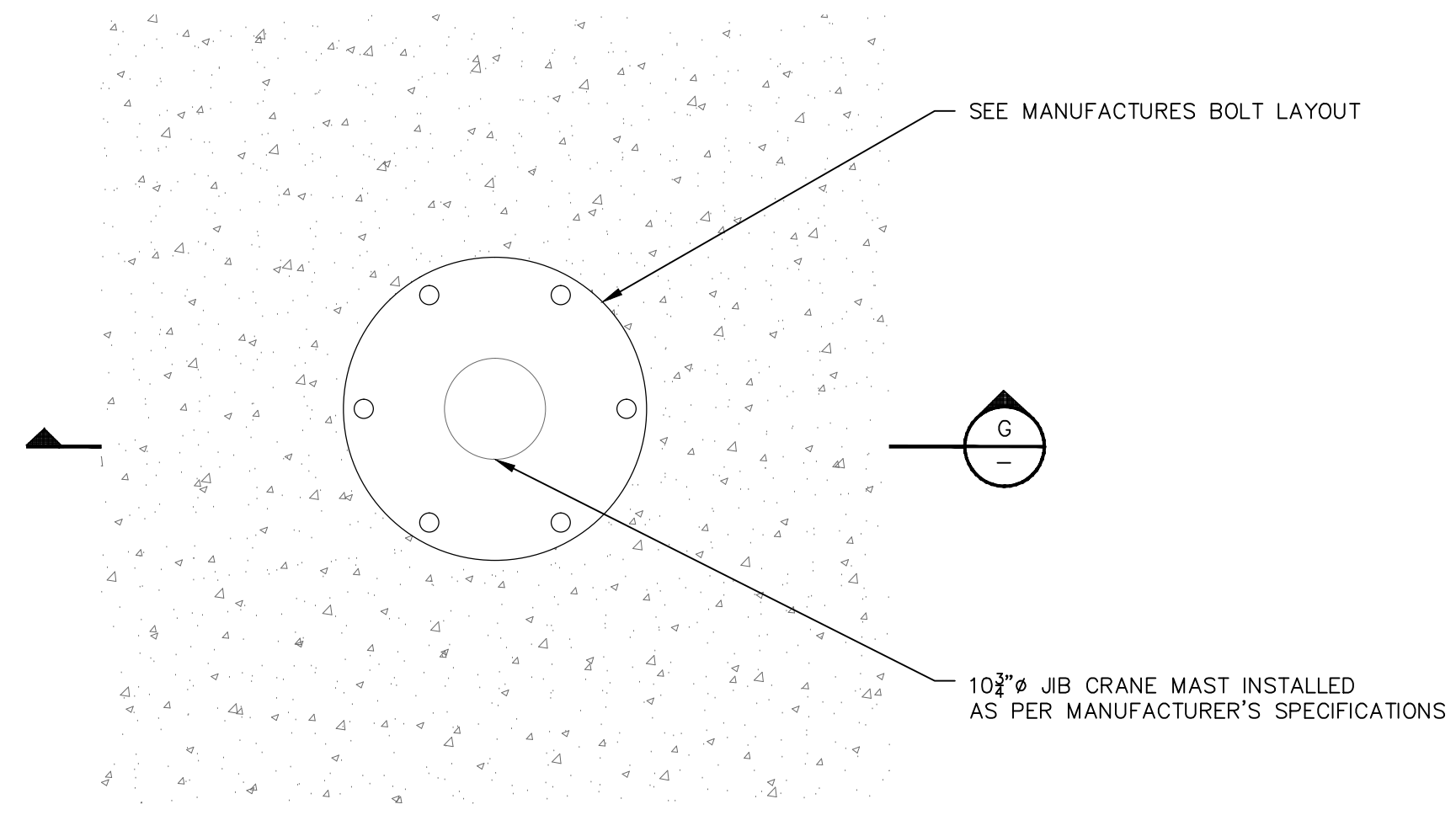
SECTION F
3/4"=1'-0"



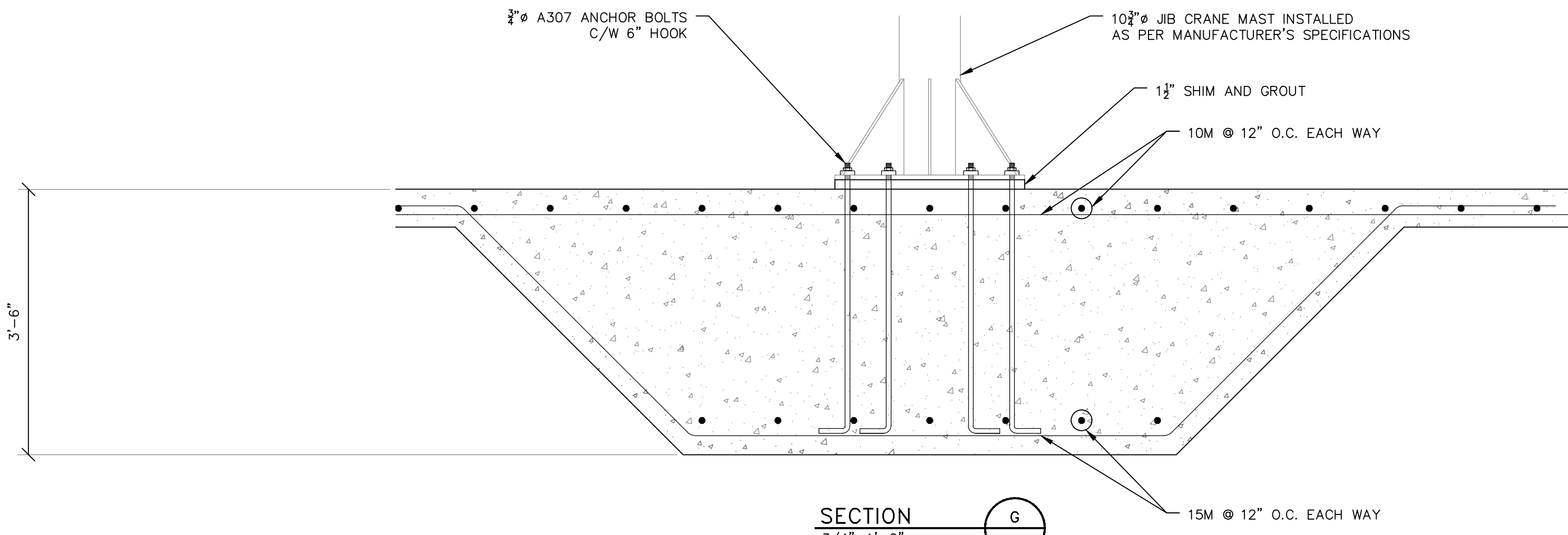
TYPICAL RADON GAS VENT



SECTION D
3/4"=1'-0"



DETAIL 2
3/4"=1'-0"



SECTION G
3/4"=1'-0"

NOTES:

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No.	DATE	REVISION

ALPHA ENGINEERING
CIVIL, STRUCTURAL, PROJECT MANAGEMENT
121 McKellar St S
Thunder Bay, ON, P7E 1H4
Ph. (807) 345-6221
Email: b.fogolin@alphaeng.ca



PROPOSED OLIVER PAIPOONGE BUILDING

FOUNDATION SECTIONS, & DETAILS

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 1"=1'-0"

DWG No: AE-20079-201