

AG BUILDING ADDITION

RALLS COUNTY R-II SCHOOL DISTRICT

21622 HIGHWAY 19  
CENTER, MO 63436

ISSUED FOR BIDDING  
03/05/2021

ARCHITECT OF RECORD:

ARCHITECHNICS  
architects • engineers • interior designers

CONTACT PERSON: JACQUES REYNOLDS  
PROJECT NO. 5730  
STATE OF MISSOURI  
ENGINEERING DESIGN FIRM 2014009673  
ARCHITECTURAL DESIGN FIRM 2014009673

APPLICABLE CODES

INTERNATIONAL BUILDING CODE 2015

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS.
- ANY DISCREPANCIES BETWEEN STATED AND EXISTING CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE ARCHITECT.
- DISCREPANCIES OR CONFLICTS BETWEEN SPECIFICATIONS AND DRAWINGS SHALL BE MADE KNOWN TO THE ARCHITECT FOR CLARIFICATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THOSE AREAS TO REMAIN UNDISTURBED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS, AS PER THE WRITTEN SPECIFICATIONS, TO MAINTAIN SAFETY AT THE CONSTRUCTION SITE, AND HE IS SOLELY RESPONSIBLE FOR SAFETY MEASURES. THE CONTRACTOR IS ALSO SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND TECHNIQUES REGARDING EXECUTION OF THE WORK.
- THE CONTRACTOR SHALL CONFORM TO ALL LOCAL AND STATE CODES AND RECEIVE LOCAL AND STATE APPROVAL WHERE NECESSARY PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES AND OBTAIN ALL PERMITS AND PAY ALL LEGAL FEES. HE SHALL ALSO COMPLY WITH ALL CITY, COUNTY, AND STATE BUILDING LAWS, ORDINANCES, OR REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE PREMISES OR ADJACENT PREMISES, OR INJURIES TO THE PUBLIC DURING THE CONSTRUCTION OF THE WORK, CAUSED BY HIMSELF, HIS SUBCONTRACTORS, OR THE CARELESSNESS OF ANY OF HIS EMPLOYEES.
- THE CONTRACTOR MUST UNDERSTAND THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SAME IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY TEMPORARY MEASURES FOR THE PROTECTION OF THE WORK, INCLUDING BARRICADES, WARNING SIGNS, LIGHTS, ETC.

ALTERNATES

- ALTERNATE BID E-1: PROVIDE EXPOSED FASTENER METAL ROOFING SYSTEM IN LIEU OF STANDING SEAM METAL.
- ALTERNATE BID E-2: PROVIDE AND INSTALL AIR CONDITIONING FOR EXISTING SHOP.
- ALTERNATE BID E-3: PROVIDE AND INSTALL AIR CONDITIONING FOR NEW SHOP.

WALL / PARTITION TYPES		
	EXTERIOR	EXPOSED FASTENER EXTERIOR MTL PANEL 2x WOOD PURLIN CONT. AIR BARRIER UNFACED INSUL, MIN R-38 BUILT UP WOOD POST 2x WOOD PURLIN CONT. VAPOR BARRIER EXPOSED FASTENER EXTERIOR MTL PANEL
	INTERIOR	EXPOSED FASTENER INTERIOR MTL PANEL 1x WOOD PURLIN
GENERAL WALL / PARTITION NOTES: 1. DIMENSIONS SHOWN ARE ACTUAL. 2. OTHER EXTERIOR WALL CONDITIONS MAY OCCUR AT HIGHER ELEVATIONS. REFER TO BUILDING AND/OR INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION. 3. SEE SPECIFICATIONS AND FINISH SCHEDULE FOR APPLICATION OF FINISHES AND FINISH REQUIREMENTS.		

INDEX OF DRAWINGS

TITLE	TITLE
G000	SURVEY
G001	
CIVIL	
C100	SITE PLANS
STRUCTURAL	
S001	STRUCTURAL NOTES
S002	STRUCTURAL NOTES
S101	FOUNDATION PLAN
S102	ROOF FRAMING PLAN
S201	STRUCTURAL ELEVATIONS
S301	CONCRETE DETAILS
S302	FOUNDATION DETAILS
S401	FRAMING DETAILS
ARCHITECTURE	
A100	FLOOR PLAN, ROOF PLAN, R.C.P., DETAILS
A200	BUILDING ELEVATIONS
MECHANICAL	
MP100	MECHANICAL/ PLUMBING PLAN
ELECTRICAL	
E000	ELECTRICAL DETAILS
E100	ELECTRICAL POWER PLAN
E101	HVAC POWER PLAN
E200	ELECTRICAL LIGHTING PLAN



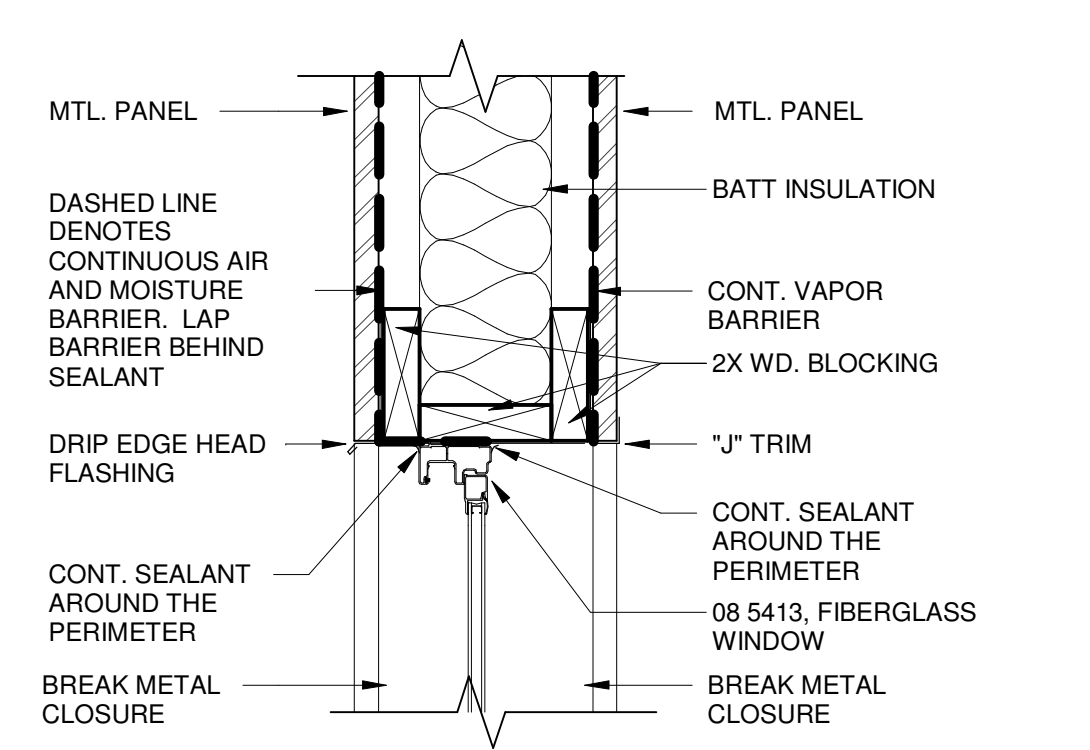
STATE OF MISSOURI

SCALE: 12" = 1'-0"



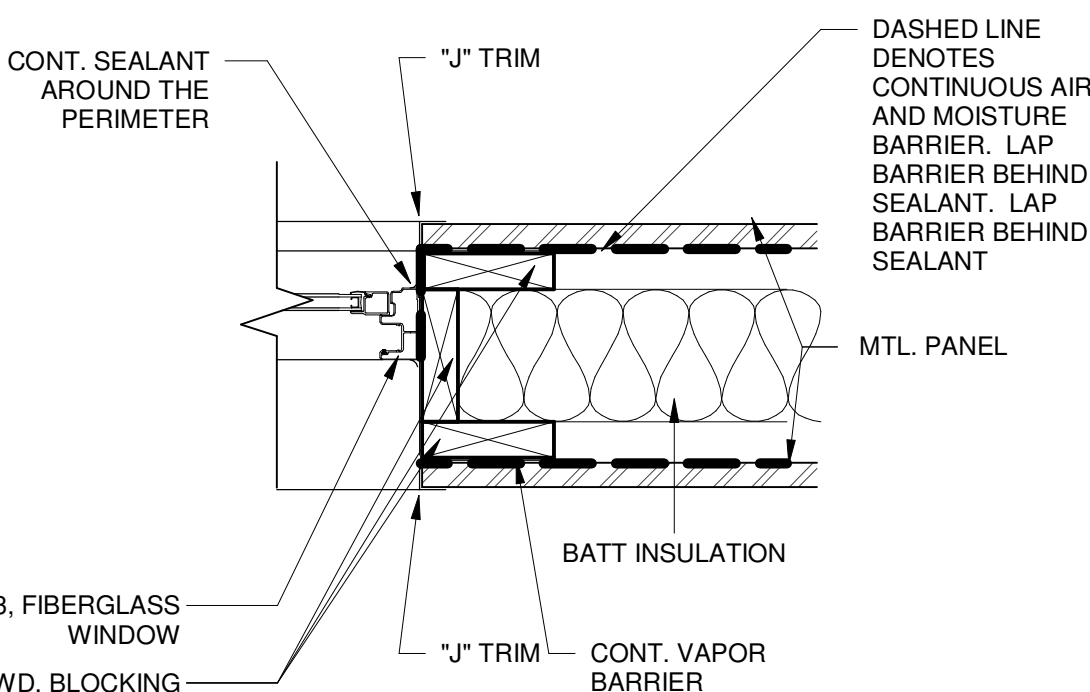
WINDOW SILL DETAIL

SCALE: 1 1/2" = 1'-0"



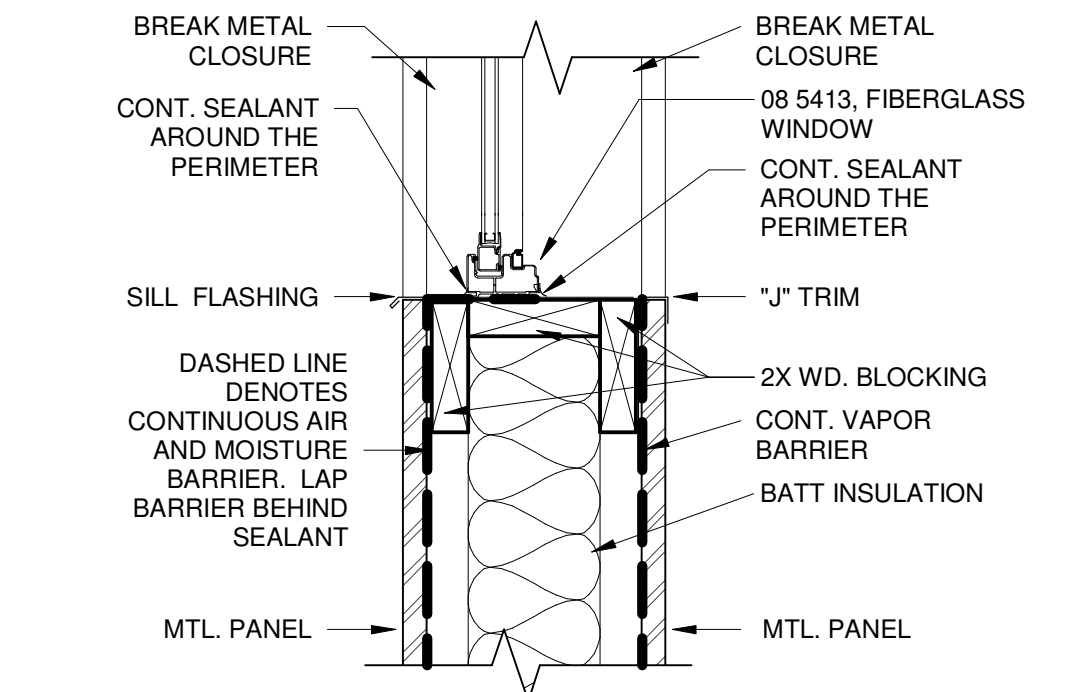
WINDOW HEAD

SCALE: 1 1/2" = 1'-0"

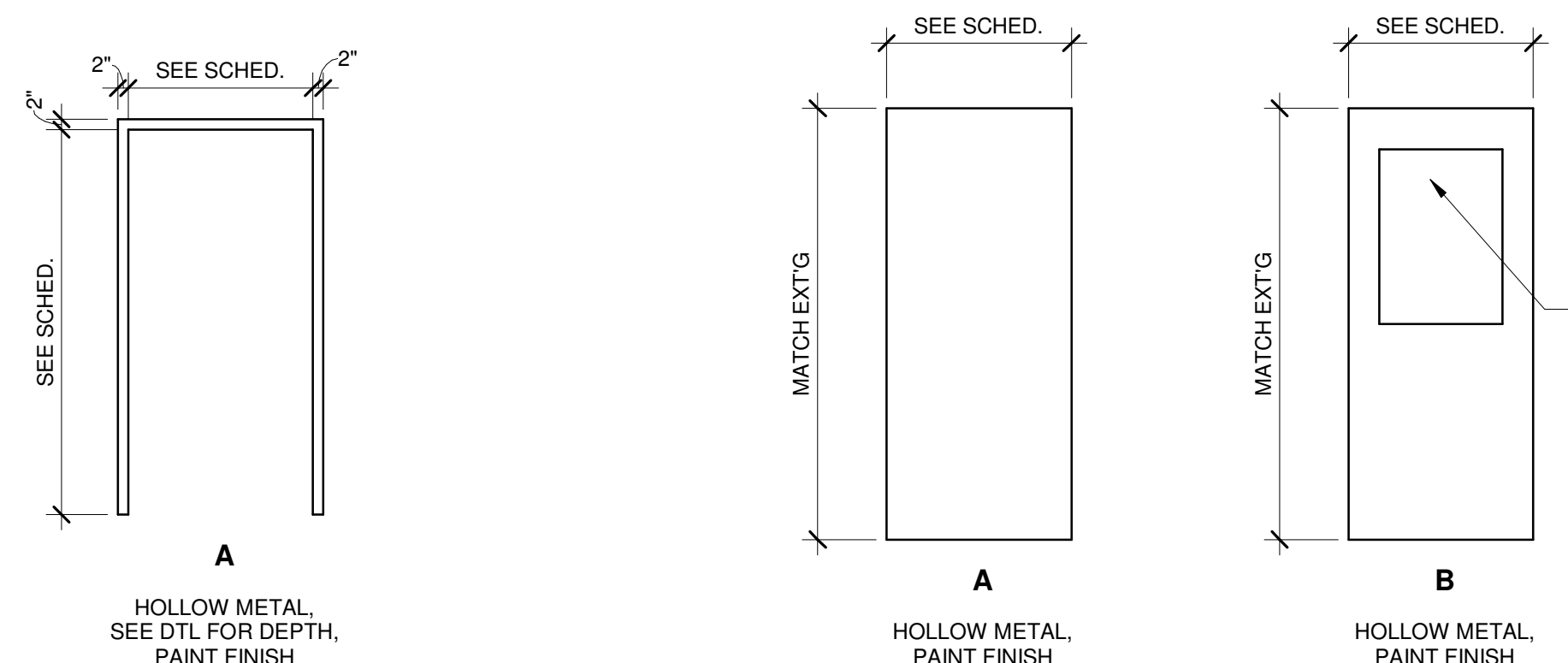


WINDOW JAMB

SCALE: 1 1/2" = 1'-0"



DOOR SCHEDULE													
WT	SIZE			DOOR			FRAME					THRESHOLD	HDWE. GROUP
	W.	H.	T.	MAT'L	FIN.	TYPE	MAT'L	FIN.	TYPE	HEAD	JAMB		
100	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	SEE SPEC	01
100A	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	SEE SPEC	01
100B	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	02
101	6'-0"	7'-0"	1 3/4"	HM	PAINT	2A/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	04
102	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	02
103	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	02
103A	6'-0"	7'-0"	1 3/4"	HM	PAINT	2A/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	02
104	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	03
105	3'-0"	7'-0"	1 3/4"	HM	PAINT	2A/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	04
106	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	SEE SPEC	02
106A	9'-0"	10'-0"	2"	SEE SPEC	PREFIN	SEE ELEV	BY MFG	BY MFG	7/G000	8/G000	N/A	SEE SPEC	01
106B	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	SEE SPEC	01
106C	3'-0"	7'-0"	1 3/4"	HM	PAINT	2B/G000	HM	PAINT	1A/G000	5/G000	6/G000	N/A	02



DOOR HARDWARE SETS

REFER TO SPEC 08.7100

- |    |                                   |     |           |
|----|-----------------------------------|-----|-----------|
| 01 | HINGES 1 1/2 PR CLOSER            | 626 | MATCH 626 |
| 02 | HINGES 1 1/2 PR CLASSROOM LOCKSET | 626 |           |
| 03 | HINGES 1 1/2 PR OFFICE LOCKSET    | 626 |           |
| 04 | HINGES 1 1/2 PR STOREROOM LOCKSET | 626 |           |

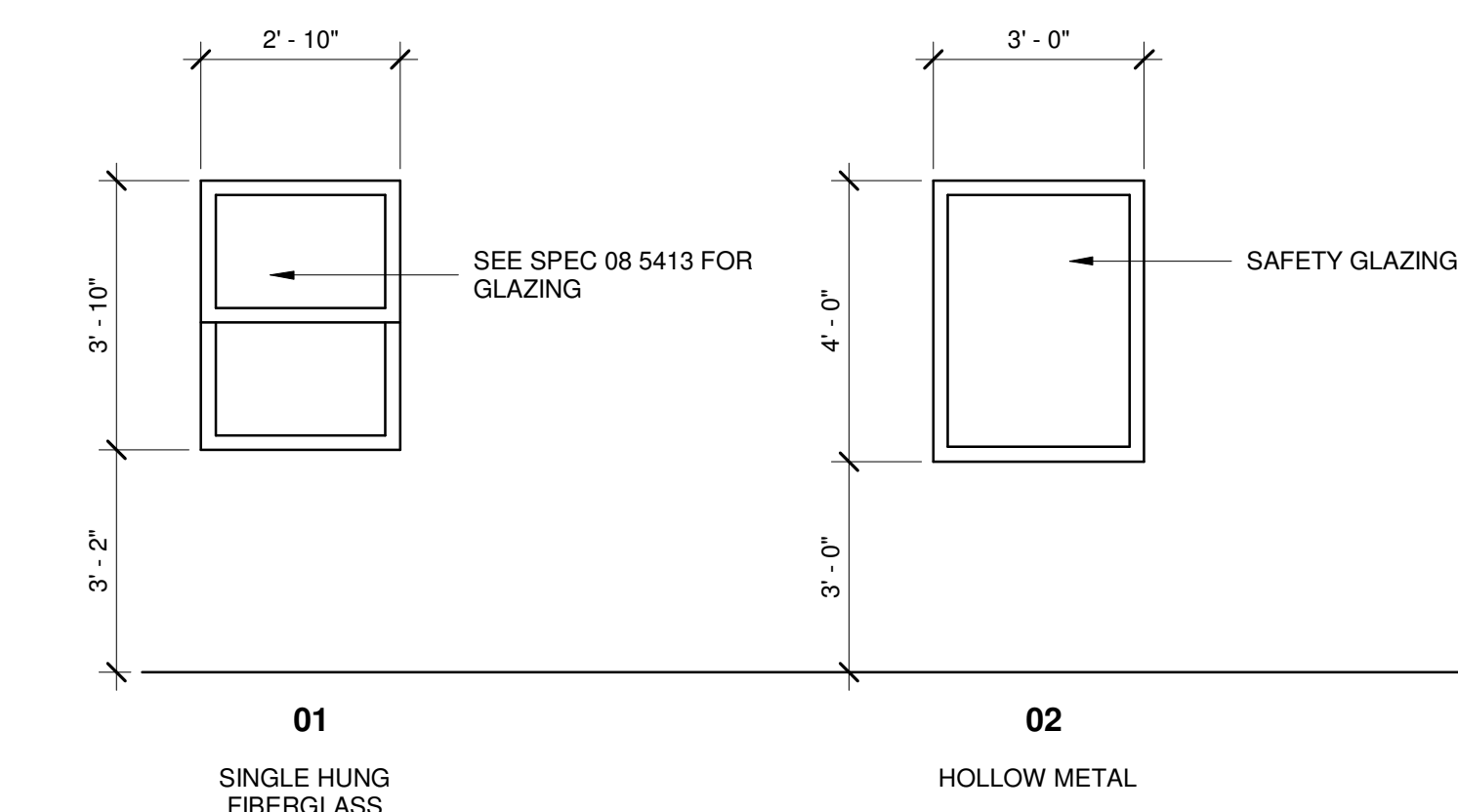
DOOR FRAME TYPES

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

DOOR TYPES

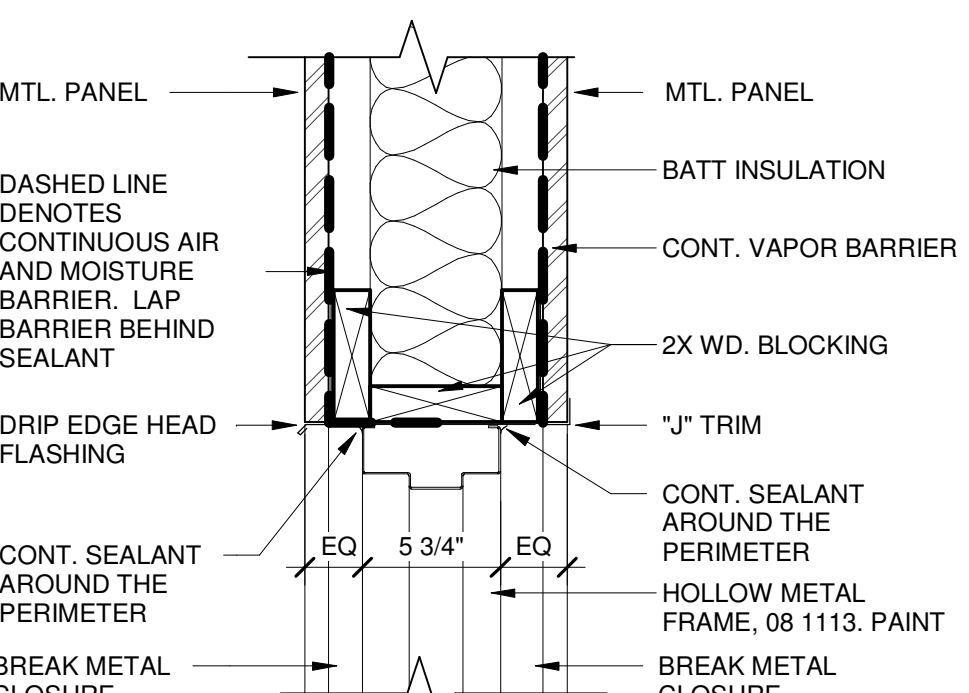
SCALE: 3/8" = 1'-0"

WINDOW SCHEDULE									
TYPE	R.O.		FINISH	HEAD	JAMB	SILL	Glazing		COMMENTS
	WIDTH	HEIGHT					THICKNESS	SILL HEIGHT	
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
01	2'-10"	3'-10"	PREFIN	9/G000	10/G000	11/G000	see spec 08 5413	3'-2"	7'-0"
02	4'-0"	4'-0"	PAINT	12/G000	12/G000 SIM	12/G000 SIM	see spec 08 8000	3'-2"	7'-2"
02	4'-0"	4'-0"	PAINT	12/G000	12/G000 SIM	12/G000 SIM	see spec 08 8000	3'-2"	7'-2"
02	4'-0"	4'-0"	PAINT	12/G000	12/G000 SIM	12/G000 SIM	see spec 08 8000	3'-2"	7'-2"
02	4'-0"	4'-0"	PAINT	12/G000	12/G000 SIM	12/G000 SIM	see spec 08 8000	3'-0"	7'-0"
02	4'-0"	4'-0"	PAINT	12/G000	12/G000 SIM	12/G000 SIM	see spec 08 8000	3'-0"	7'-0"



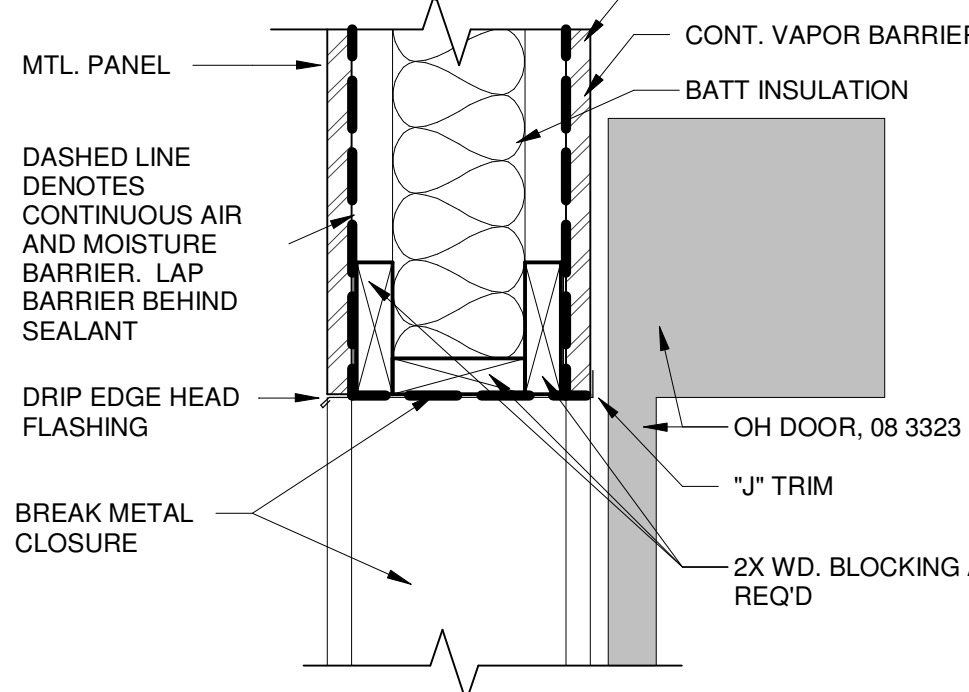
WINDOW TYPES

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



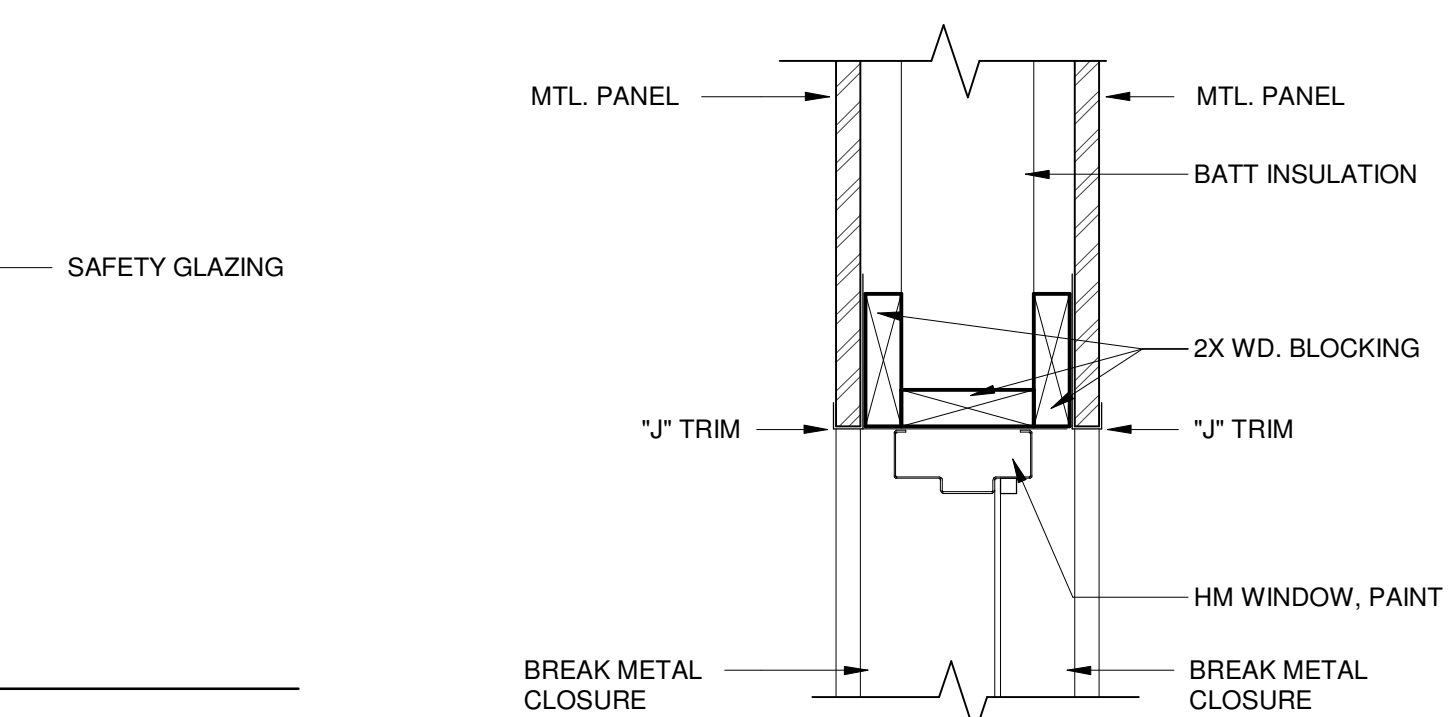
DOOR HEAD

SCALE: 1 1/2" = 1'-0"



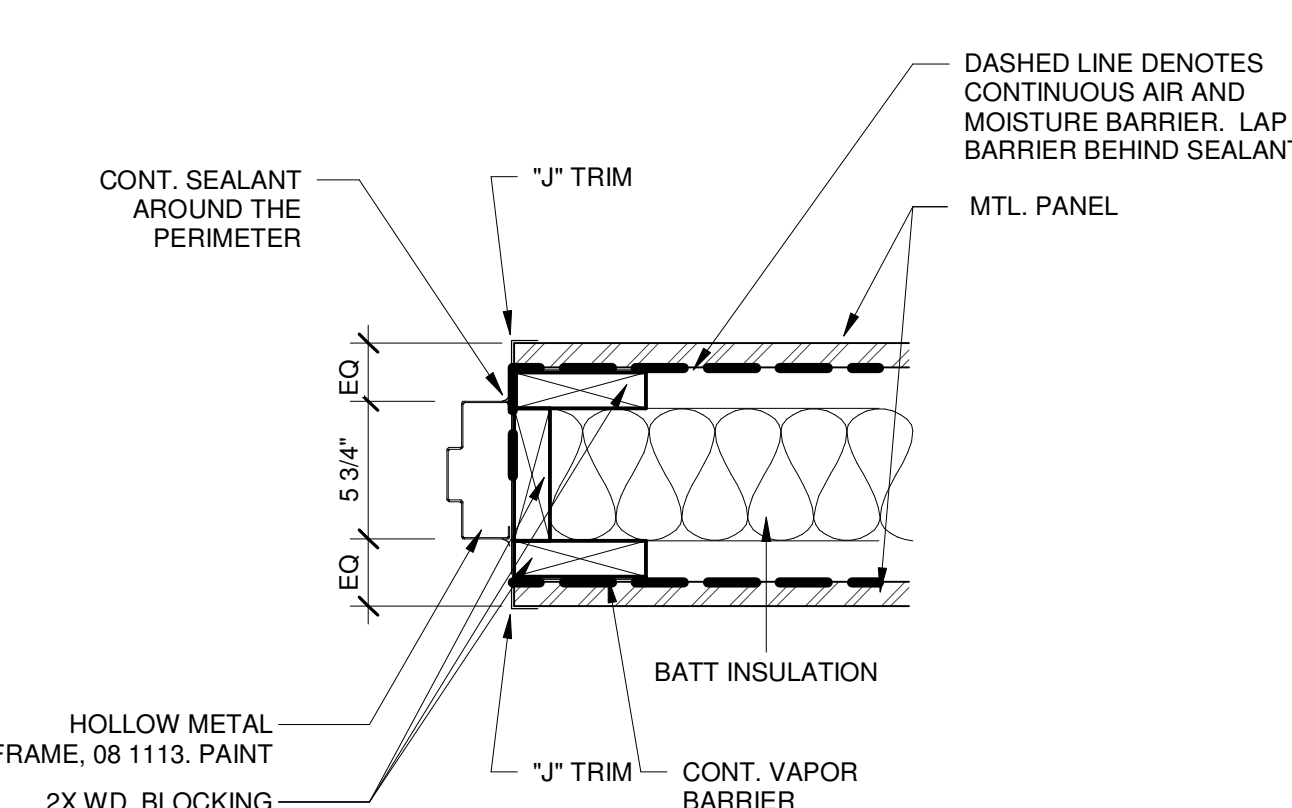
OH DOOR HEAD

SCALE: 1 1/2" = 1'-0"



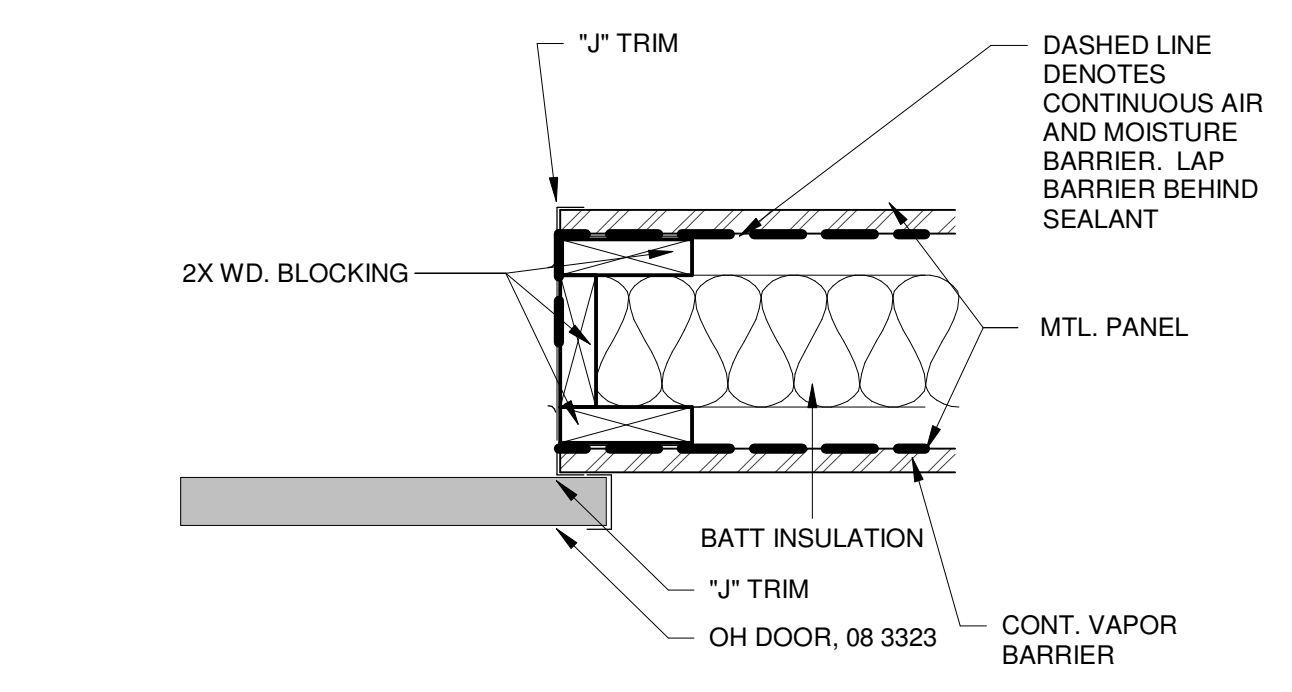
WINDOW HEAD

SCALE: 1 1/2" = 1'-0"



DOOR JAMB

SCALE: 1 1/2" = 1'-0"

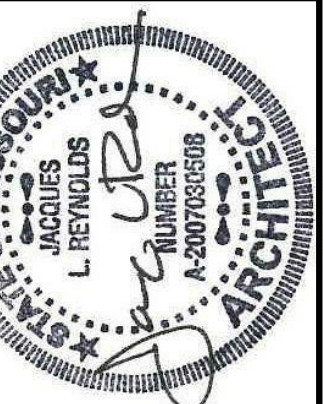


OH DOOR JAMB

SCALE: 1 1/2" = 1'-0"

ARCHITECHNICS  
architects • engineers • interior designers  
510 N. Main Street, Suite 101, St. Louis, MO 63101  
P: 314.241.1111 F: 314.241.1112  
www.architechnics.com

OWNER:  
RALLS COUNTY R-II  
SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MO 63436



RALLS COUNTY R-II SCHOOL DISTRICT  
AG BUILDING ADDITION  
21622 HIGHWAY 19  
CENTER, MO 63436

BIDDING PHASE

NOT FOR CONSTRUCTION		
ISSUE DATE: 03/05/2021		
REVISIONS		
NO.	Date	Description
PROJECT NUMBER: 6036		

TITLE

DWG. NO.  
G000



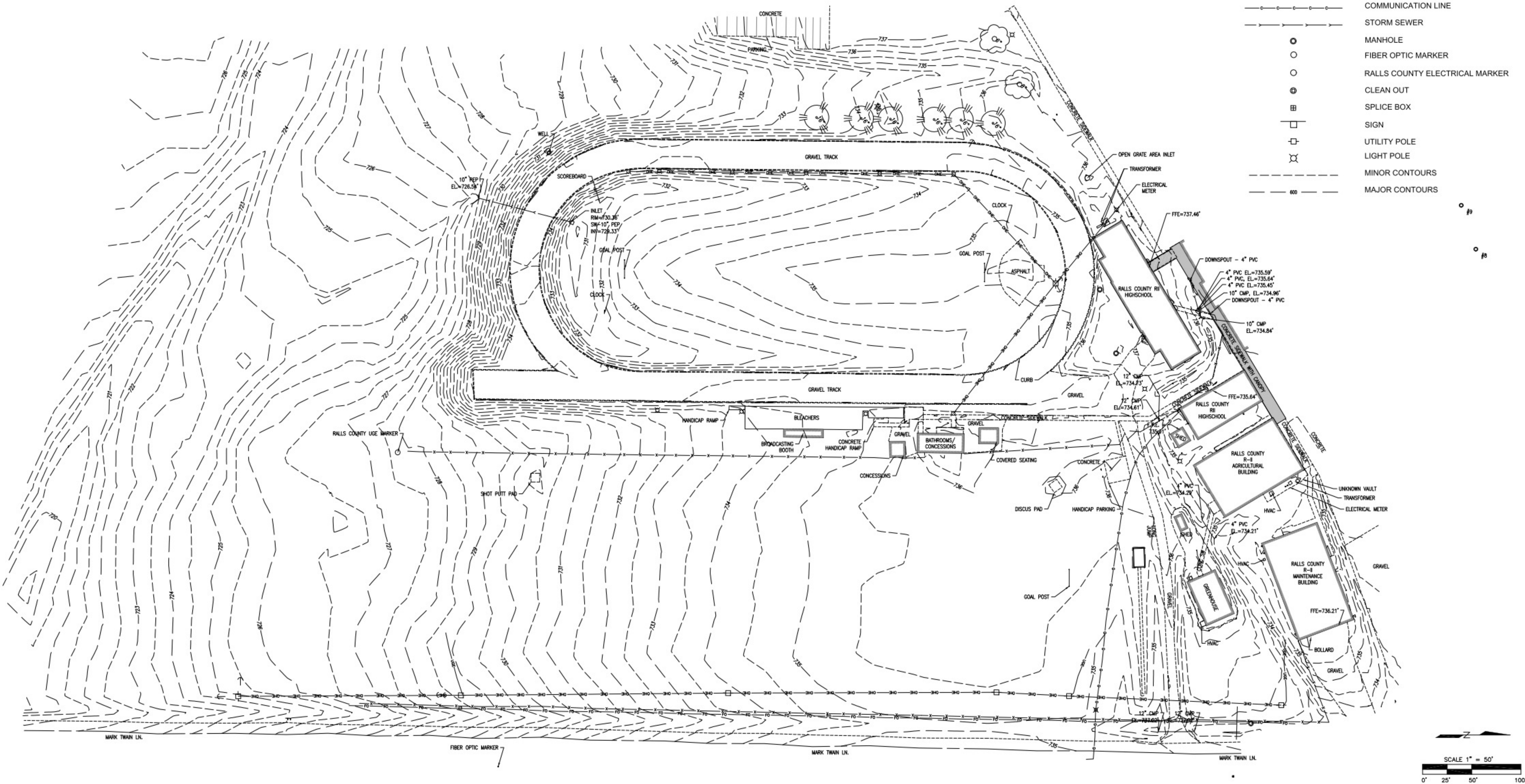
RALLS COUNTY R-II HIGH SCHOOL CONTROL				
1	1342589.42	534264.51	735.11	105-CP1 5/8 REBAR
2	1342375.22	533885.96	732.25	105-CP2 5/8 REBAR
3	1342365.58	533898.54	733.92	105-CP3 MAG NAIL
4	1342541.98	534177.50	735.50	105-CP4 BM
5	1341962.59	534037.35	734.64	105-CP5 MAG NAIL
6	1341903.58	533942.90	733.05	105-CP6 MAG NAIL
7	1342796.36	534890.64	734.97	105-5/8 REBAR
8	1342736.32	534704.67	736.28	105-CUT X
9	1342721.44	534660.10	736.27	105-CP9 MAG NAIL
10	1342821.99	534632.37	735.41	105-5/8 REBAR
11	1341537.83	534141.80	729.74	103-5/8 PIN
12	1341226.04	534362.55	727.68	103-5/8 PIN

#### UTILITY NOTE

UTILITIES AND EXISTING INFORMATION SHOWN ARE APPROXIMATE AND WERE LOCATED FROM A COMBINATION OF FIELD SURVEYS, INFORMATION PROVIDED BY THE USING AGENCY, AND FIELD OBSERVATION. CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH ALL CONSTRUCTION DOCUMENTS, TO CALL J.U.I.E. AND PERFORM ANY INSPECTIONS NECESSARY TO FIELD VERIFY LOCATIONS OF UTILITIES AND ALL OTHER EXISTING INFORMATION PRIOR TO ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO LOCATE AND PROTECT ALL UNDERGROUND FACILITIES/UTILITIES DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION. ANY DAMAGE TO ANY UTILITIES SHALL BE PROMPTLY REPORTED TO THE USING AGENCY. REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE USING AGENCY, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVE GROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND USING AGENCY. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAINS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES PRIOR TO ANY WORK IN AND AROUND UTILITY-OWNED INFRASTRUCTURE AND MAKE THEM AWARE OF WORK TO BE PERFORMED. EXISTING UTILITIES WHICH ARE DAMAGED BY THE CONTRACTOR DURING CONSTRUCTION, SHALL BE REPAIRED AND/OR REPLACED WITHOUT ADDITIONAL COMPENSATION. CONFLICTS WITH PROPOSED CONSTRUCTION AND UTILITIES TO REMAIN ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER FOR COORDINATION WITH THE USING AGENCY.

#### EXISTING

- FD. MONUMENT AS NOTED
- CENTERLINE
- EDGE OF PAVEMENT
- WATER LINE
- GAS LINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- FIBER OPTIC
- COMMUNICATION LINE
- STORM SEWER
- MANHOLE
- FIBER OPTIC MARKER
- RALLS COUNTY ELECTRICAL MARKER
- CLEAN OUT
- SPLICE BOX
- SIGN
- UTILITY POLE
- LIGHT POLE
- MINOR CONTOURS
- MAJOR CONTOURS



DEC 03, 2020 11:39 AM MLEIGH  
L:\JRS\2020\280.2002 RALLS COUNTY SCHOOL\DRAWINGS\280.2002\_V-TP-EG.dwg

**Prairie Engineers, P.C.**  
106 Washington St.  
Keokuk, IA 52632  
(217) 605-0403  
www.prairieengineers.com  
Engineering Corporation No.: 2016036823  
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ENGINEERS • SURVEYORS • SCIENTISTS

DRAWING DATE	12/03/2020	REVISION 1	
DESIGNED BY		BY & DATE	
DRAWN BY	EC	REVISION 2	
CHECKED BY	JT	BY & DATE	

GENERAL NOTES  
RALLS COUNTY R-II SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MISSOURI 63436

PEI PROJECT NO.	280.2001
PROJECT NAME	RALLS COUNTY R-II
FILENAME	280.2002_V-TP-EG.dwg
DRAWING SCALE	NOTED

C100

1 of 1 sheets

RALLS COUNTY R-II SCHOOL DISTRICT  
**AG BUILDING ADDITION**

21622 HIGHWAY 19  
CENTER, MO 63436

BIDDING PHASE

NOT FOR  
CONSTRUCTION  
ISSUE DATE: 03/05/2021

REVISIONS  
NO. Date Description

PROJECT NUMBER: 6036

SURVEY

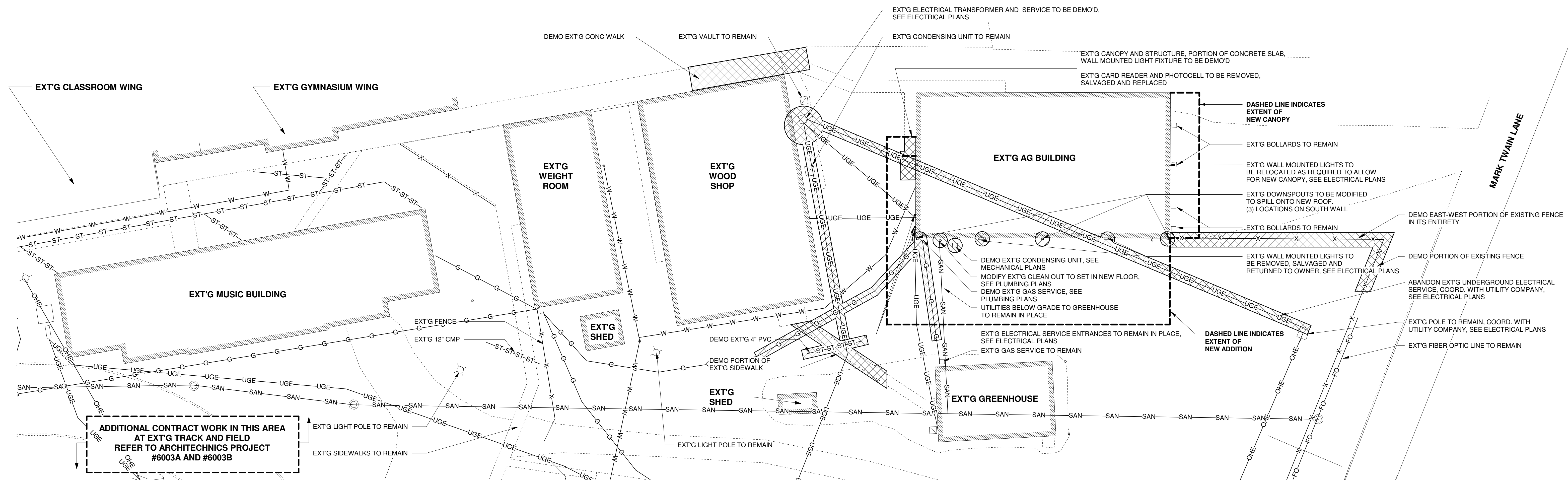
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G001

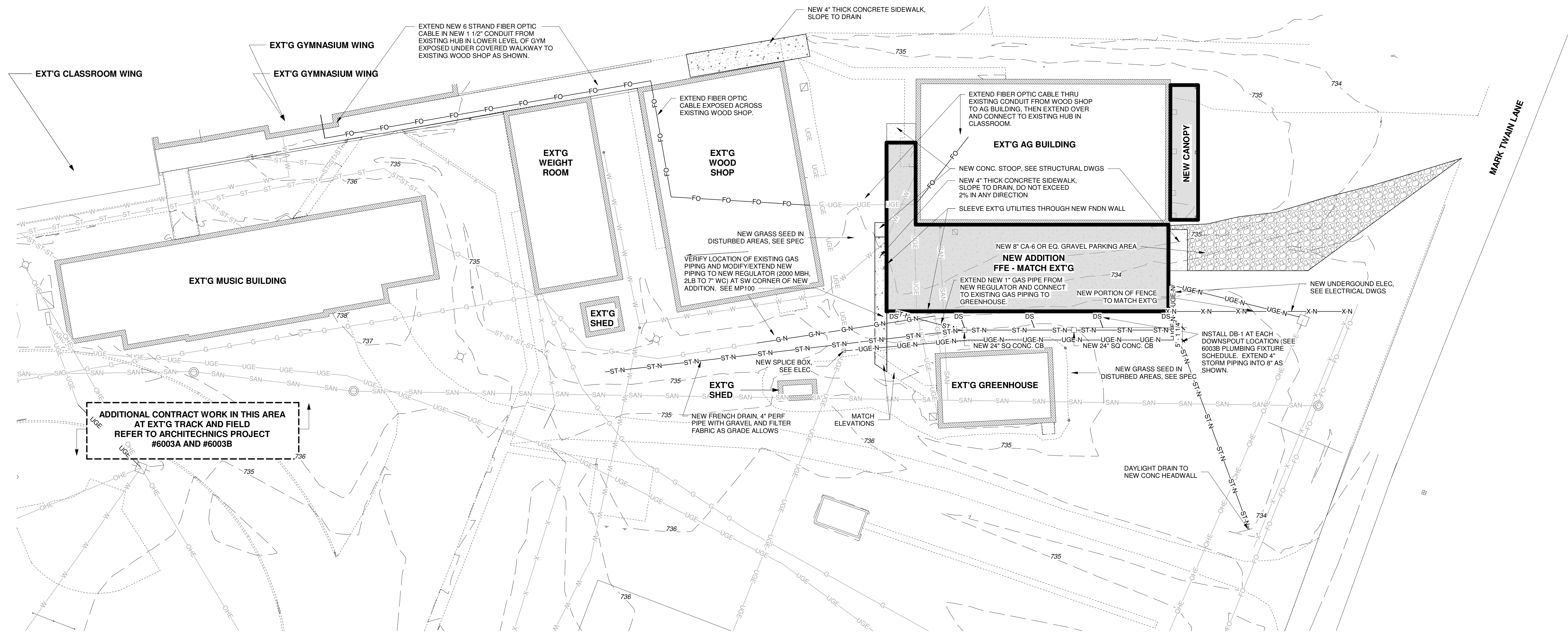
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SCHOOL DISTRICT  
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CENTER, MO 63436

**ARCHITECHNICS**  
architects • engineers • interior designers  
510 Wayne Avenue, Gaithersburg, MD 20878 • 410-283-0884 • info@architechnics.com





**1 SITE PLAN - DEMO**  
SCALE: 1" = 20'-0"  
0 10' 20' 40'



**2 SITE PLAN**  
SCALE: 1" = 20'-0"  
0 10' 20' 40'

REVISIONS		
NO.	Date	Description



3/10/2021 2:44:05 PM - ARCHITECTNICS INC.

GENERAL NOTES

1. ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE A PART OF THE PROJECT CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO THE START OF CONSTRUCTION SO A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR ARCHITECT/ENGINEER.
2. CONTRACTOR SHALL VERIFY IN FIELD ALL DIMENSIONS, ELEVATIONS AND MEMBER SIZES AS SHOWN ON THE CONTRACT DRAWINGS FOR THE EXISTING CONSTRUCTION, PRIOR TO THE DETAILS OR FABRICATION OF ANY NEW STRUCTURAL ELEMENT. CONTRACTOR SHALL DOCUMENT ANY CONSTRUCTION-RELATED DISCREPANCIES. CONTRACTOR SHALL FURNISH THE ABOVE INFORMATION IN THE FORM OF DETAILED SKETCHES TO THE ARCHITECT / STRUCTURAL ENGINEER FOR REVIEW (28) CALENDAR DAYS PRIOR TO THE SCHEDULED START OF ANY DETAILING OR FABRICATION.
3. STRUCTURAL DRAWINGS ARE TO BE COORDINATED AND USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. REFER TO OTHER TRADE DRAWINGS FOR (BUT NOT LIMITED TO) PITS, TRENCHES, EQUIPMENT PADS, BASES, DEPRESSIONS, MECHANICAL OR PLUMBING SUPPORTS, SLEEVES, STAIRS OR DUCT PENETRATIONS.
4. ARCHITECTNICS, INC. SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OR CHARGE OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES FOR THE SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THIS PROJECT, AND SHALL NOT BE RESPONSIBLE FOR CONTRACTOR'S FAILURE TO CARRY OUT HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
5. ARCHITECTNICS, INC. SHALL NOT BE RESPONSIBLE FOR, NOR HAVE CONTROL OVER, THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, ANY OF THEIR AGENTS, OR EMPLOYEES, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT. ALL SHORING AND BRACING MEMBERS AND CONNECTIONS SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE IMPOSED LOADS. TEMPORARY MEMBERS AND CONNECTIONS SHALL NOT BE REMOVED UNTIL PERMANENT MEMBERS ARE IN PLACE AND FINAL CONNECTIONS ARE MADE.
7. THE CONTRACTOR SHALL PROVIDE ALL MEASURES AND PRECAUTIONS NECESSARY TO PREVENT DAMAGE AND SETTLEMENT OF EXISTING OR NEW CONSTRUCTION INSIDE OR OUTSIDE THE PROJECT LIMITS DURING EXCAVATION AND FOUNDATION CONSTRUCTION. ANY DAMAGE TO NEW OR EXISTING CONSTRUCTION INSIDE OR OUTSIDE OF THE PROJECT LIMITS, CAUSED BY CONSTRUCTION TECHNIQUES IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ARCHITECT / STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MISLOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.
9. NO OPENING SHALL BE PLACED IN ANY STRUCTURAL MEMBER (OTHER THAN AS INDICATED ON APPROVED SHOP DRAWINGS) UNTIL THE LOCATION HAS BEEN APPROVED BY THE ARCHITECT / STRUCTURAL ENGINEER.
10. PROVIDE SLEEVE LAYOUTS FOR ALL PENETRATIONS THROUGH STRUCTURAL MEMBERS (ALL TRADES ARE INCLUDED). LAYOUTS ARE TO BE SUBMITTED TO THE ARCHITECT / STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
11. SUPPORT ALL ROOF MOUNTED EQUIPMENT OR EQUIPMENT SUSPENDED FROM FLOORS OR THE ROOF ONLY ON/FROM BEAMS DESIGNATED FOR SUCH PURPOSE. IF NO SUPPORT HAS BEEN DESIGNATED, OR IF A QUESTION ARISES, NOTIFY ARCHITECT / STRUCTURAL ENGINEER PRIOR TO ERECTION OF EQUIPMENT.
12. ALL DETAILS, SECTIONS, AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE NOTED. FOR DETAILS AND DIMENSIONS NOT INDICATED ON THE STRUCTURAL DRAWINGS, SEE THE ARCHITECTURAL DRAWINGS.
13. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE-SCALE OVER SMALL-SCALE DRAWINGS. CONTRACTOR TO DETERMINE FINAL DIMENSION WITH AOR.
14. MATERIALS AND EQUIPMENT SHALL BE STORED AND TRANSPORTED IN A MANNER SO AS NOT TO EXCEED THE ALLOWABLE FLOOR OR ROOF LOADING INDICATED IN THE "SCHEDULE OF BUILDING DESIGN LOADS" ON THE CONSTRUCTION DOCUMENTS OR THE ALLOWABLE CAPACITY OF THE CONSTRUCTED MEMBER, WHICHEVER IS SMALLER.

SHOP DRAWINGS

1. ALL SHOP DRAWING SUBMITTALS SHALL BE AS DESCRIBED IN THE PROJECT SPECIFICATIONS OR IN THESE NOTES IF THERE IS NO PROJECT SPECIFICATION.
2. SHOP DRAWINGS AND RELATED MATERIALS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT / STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL REVIEW ALL SUBMISSIONS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION, TECHNICAL CONTENT, COORDINATION OF TRADES, DIMENSIONAL ACCURACY, SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL APPROVE AND SO STAMP EACH SUBMISSION.
3. THE STRUCTURAL DRAWINGS SHALL NOT BE USED AS THE BACKGROUNDS FOR THE PRODUCTION OF ANY SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW.
4. SUBMIT (1) ONE REPRODUCIBLE AND (1) PRINT FOR REVIEW. (1) ONE REPRODUCIBLE WILL BE RETURNED UPON COMPLETION OF REVIEW. MULTIPLE COPIES OF DRAWINGS WILL NOT BE MARKED-UP WITH REVIEW COMMENTS.
5. ANY DEVIATIONS FROM THE ORIGINAL DESIGN OR DESIGN CRITERIA AS SPECIFIED ON THE CONTRACT DOCUMENTS OF THE PROJECT SHALL BE NOTED (BUBBLED, NOTE, ETC.) ON THE SHOP DRAWINGS THAT ARE SUBMITTED FOR APPROVAL.
6. ALL CHANGES TO RESUBMITTED SHOP DRAWINGS SHALL BE BUBBLED.

STRUCTURAL SYSTEM

1. THE GRAVITY LOADS RESISTING SYSTEM CONSISTS OF 2x WOOD PURLINS SUPPORTING A STANDING SEAM METAL ROOF SYSTEM. THE WOOD PURLINS ARE IN TURN SUPPORTED BY METAL PLATE CONNECTED WOOD TRUSSES AND 2x LAMINATED WOOD COLUMNS.
2. THE LATERAL LOAD RESISTING SYSTEM SHALL CONSIST OF WOOD FRAMED COLUMN AND TRUSS FRAMES. FRAMES SHALL BE DESIGNED BY THE PRE-ENGINEERED WOOD FRAME BUILDING SUPPLIER (DELEGATED DESIGN).

FOUNDATIONS

1. FOUNDATION STRUCTURE IS BASED ON THE USE OF CONTINUOUS STRIP FOOTINGS APPLYING A MAXIMUM PRESSURE OF 1,200 POUNDS PER SQUARE FOOT TO THE SOIL OR ISOLATED SPREAD FOOTINGS APPLYING A MAXIMUM PRESSURE OF 1,500 POUNDS PER SQUARE FOOT TO THE SOIL.
2. ALL ENGINEERED FILL IS TO BE COMPACTED TO ACHIEVE THIS BEARING PRESSURE AS VERIFIED BY FIELD TESTING BY A LICENSED GEOTECHNICAL ENGINEER. IF FIELD CONDITIONS DO NOT PROVIDE THIS MINIMUM VALUE, THE ARCHITECT AND ARCHITECT / STRUCTURAL ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
3. SLABS-ON-GRADE ARE DESIGNED USING A MODULUS OF SUBGRADE REACTION VALUE (K) OF 50 PCF.
4. SHOULD UNSUITABLE BEARING CONDITIONS BE ENCOUNTERED DURING EXCAVATION, NOTIFY THE OWNER, ARCHITECT, AND ARCHITECT / STRUCTURAL ENGINEER BEFORE CONTINUING WITH CONSTRUCTION.
5. THE CONCRETE FOR EACH ISOLATED FOOTING SHALL BE PLACED IN ONE (1) CONTINUOUS PLACEMENT.

FOUNDATIONS (CONT'D)

6. ALL SLABS-ON-GRADE SHALL BE PLACED OVER AN EXTREME LOW PERMEANCE VAPOR BARRIER, 15 MIL MINIMUM THICKNESS OVER BASE/SUBBASE AS SPECIFIED BY THE GEOTECHNICAL ENGINEER FOR THE PROJECT. EXISTING SUBBASE WILL BE COMPACTED IN PLACE OR WILL BE CUT OUT AND REPLACED WITH AN ENGINEERED FILL AS SPECIFIED BY A GEOTECHNICAL ENGINEER.
7. THE CONTRACTOR MUST PROVIDE SURFACE DRAINAGE AND PUMPS TO PROTECT ALL EXCAVATION FROM FLOODING. FLOODING OF ANY EXCAVATION AFTER APPROVAL OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE RE-REPREPARATION AND RE-APPROVAL OF THE SUBGRADE.
8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST OR ICE FROM PENETRATING ANY FOOTING OR SLAB SUBGRADE BEFORE AND AFTER PLACING OF CONCRETE AND UNTIL SUCH SUBGRADES ARE FULLY PROTECTED BY THE PERMANENT BUILDING STRUCTURE.
9. THE CONTRACTOR SHALL REVIEW ALL EXISTING SITE CONDITIONS AND THE SUBSURFACE SOILS EXPLORATION REPORT AND ESTABLISH SPECIFIC CONSTRUCTION PROCEDURES AND SEQUENCES FOR THE EXCAVATION, COMPACTION, FILL AND INSTALLATION OF THE NEW BUILDING FOUNDATION. SUBMIT THESE FOR REVIEW TO THE OWNER'S SOIL TESTING LABORATORY. OWNER'S REPRESENTATIVE, ARCHITECT / STRUCTURAL ENGINEER, THE CONTRACTOR'S DESIGN, MEANS AND METHODS FOR FOUNDATION CONSTRUCTION SHALL MINIMIZE SETTLEMENT OF RELATED DIMENSIONS OF ALL INTERFERENCES. CONTRACTOR TO FURNISH THE ABOVE INFORMATION IN THE FORM OF DETAILED SKETCHES TO THE ARCHITECT / STRUCTURAL ENGINEER FOR REVIEW.
10. RECORDS OF ANY EXISTING SUBGRADE INTERFERENCES OTHER THAN THOSE INTERFERENCES SHOWN OR INDICATED ON THE CONSTRUCTION DOCUMENTS, ARE NOT CURRENTLY AVAILABLE. DURING EXCAVATION WORK, INTERFERENCES MAY BE DISCOVERED. CONTRACTOR SHALL DOCUMENT CONSTRUCTION-RELATED DIMENSIONS OF ALL INTERFERENCES. CONTRACTOR TO FURNISH THE ABOVE INFORMATION IN THE FORM OF DETAILED SKETCHES TO THE ARCHITECT / STRUCTURAL ENGINEER FOR REVIEW.
11. REFER TO THE **TESTING AND INSPECTION** SECTION OF THESE NOTES FOR THE FOUNDATION TESTING AND INSPECTION REQUIREMENTS.

STRUCTURAL CONCRETE

1. 1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE PUBLICATIONS:
  - A. ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE A FOR BUILDINGS"
  - B. ACI 302 - "RECOMMENDED PRACTICE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION"
  - C. ACI 304 - "ACI MANUAL OF CONCRETE INSPECTION"
  - D. ACI 311 - "RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE"
  - E. ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT"
  - F. ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
  - G. ACI 347 - "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK"
2. PROVIDE CONCRETE TO OBTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:
  - A. SPREAD FOOTINGS..... f<sub>c</sub> = 4000 PSI
  - B. WALL FOOTINGS..... f<sub>c</sub> = 4000 PSI
  - C. PIERS..... f<sub>c</sub> = 4000 PSI
  - D. INTERIOR SLABS-ON-GRADE..... f<sub>c</sub> = 4000 PSI
  - E. EXTERIOR SLABS-ON-GRADE..... f<sub>c</sub> = 4000 PSI
3. EXTERIOR FLATWORK, STAIRS, RAMPS, ETC., SHALL HAVE A WATER/CEMENT RATIO ≤ 0.40
4. LABORATORY TEST REPORTS OR MATERIAL CERTIFICATES FOR CONCRETE MATERIALS AND MIX DESIGN TEST DATA, IN CONFORMANCE WITH ACI STANDARDS, SHALL BE SUBMITTED FOR REVIEW FOR EACH TYPE OF CONCRETE TO BE USED. EACH SUBMITTED MIX DESIGN SHALL IDENTIFY THE APPLICATION FOR WHICH THE MIX WILL BE USED.
5. ALL CONCRETE SHALL BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.
6. ALL CONCRETE ELEMENTS SUBJECT TO FREEZING AND THAWING DURING CONSTRUCTION OR OVER THE SERVICE LIFE OF THE STRUCTURE SHALL CONTAIN AN AIR ENTRAINMENT ADMIXTURE AS SPECIFIED IN ACI-318, PART 3.
7. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

8. THE CONTRACTOR SHALL SUBMIT CHECKED, DETAILED REINFORCEMENT SHOP DRAWINGS SHOWING THE LOCATIONS AND DETAILING OF ALL FOOTINGS, WALLS, PIERS, BEAMS, COLUMNS, SLABS, CONSTRUCTION JOINTS, CONTROL JOINTS, ETC., PRIOR TO FABRICATION. DETAIL S SHALL INCLUDE STEEL SIZES, LAPS, THE SPACING AND PLACEMENT.
9. THE MINIMUM CONCRETE COVER FOR CAST-IN-PLACE (NON-PRESTRESSED) CONCRETE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
  - A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.....3"
  - B. CONCRETE EXPOSED TO EARTH OR WEATHER
    - a. NO. 6 THROUGH NO. 18 BARS.....2"
    - b. NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER.....1 1/2"
  - C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
    - a. SLABS, WALLS, JOISTS:
      - i. NO. 14 AND NO. 18 BARS.....1 1/2"
      - NO. 11 BAR AND SMALLER.....3/4"
    - b. BEAMS, COLUMNS:
      - i. PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS.....1 1/2"
    - c. SHELLS, FOLDED PLATE MEMBERS:
      - i. NO. 6 THROUGH NO. 18 BARS.....2"
      - NO. 5 BAR, W31 OR D31 WIRE, AND SMALLER.....1 1/2"

10. PROVIDE ADEQUATE BOLSTERS, HI-CHAIRS, SUPPORT BARS, ETC., TO MAINTAIN SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING BARS. PROVIDE CONTINUOUS #4 SPACER BARS IN WALLS AND SLABS TO SUPPORT DOWELS.
11. PROVIDE PLASTIC TIPPED ACCESSORIES FOR REINFORCEMENT AT ALL FACES OF EXPOSED CONCRETE, INTERIOR OR EXTERIOR.

12. ALL FIELD BENDING OF REINFORCEMENT SHALL BE DONE COLD. HEATING OF BARS WILL NOT BE PERMITTED.
13. ALL CONSTRUCTION JOINTS, EXCLUDING SLAB-ON-GRADE CONSTRUCTION JOINTS, SHALL BE WIRE BRUSHED, CLEANED, MOISTENED AND A CONCRETE SLURRY APPLIED IMMEDIATELY PRIOR TO PLACING NEW CONCRETE.

14. CONTROL AND CONSTRUCTION JOINTS IN NON-STRUCTURAL SLABS-ON-GRADE SHALL BE PROVIDED AS SHOWN ON DRAWINGS AND DETAILS. CONTROL JOINTS SHALL BE SPACED AT A MAXIMUM OF 15'-0" ON CENTER IN ANY DIRECTION. SAWED CONTROL JOINTS SHALL BE OF THE SORT-CUT TYPE, 1.25 TIMES THE SLAB THICKNESS DEEP, AND CUT AS SOON AS PRACTICAL WITHOUT DISLOGGING THE COARSE AGGREGATE AS PART OF THE FINISHING OPERATION. CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS INDICATING ALL CONTROL JOINTS FOR ALL SLAB-ON-GRADE CONSTRUCTION FOR REVIEW PRIOR TO CONSTRUCTING ALL SLABS-ON-GRADE.

15. CONCRETE SLABS-ON-GRADE SHALL BE A MINIMUM OF 5 INCH THICKNESS UNLESS NOTED OTHERWISE. CONCRETE FOR SLAB-ON-GRADE CONSTRUCTION SHALL USE A DESIGN MIX THAT INCORPORATES 1 1/2" MAXIMUM SIZE AGGREGATE, WELL GRADED AND TYPE I OR TYPE II CEMENT. THE MIX SHALL CONTAIN NO ADMIXTURES THAT EXAGGERATE SHRINKAGE. PLACEMENT SLUMP FOR THE CONCRETE AT THE POINT OF PLACEMENT SHALL BE INDICATED IN THE PROJECT SPECIFICATION.
16. CONSTRUCTION JOINTS SHALL CONTAIN 1/4"x4-1/2" DIAMOND DOWEL PLATES SPACED AT 18" ON CENTER AND PLACED AT 1/2 OF THE SLAB DEPTH PERPENDICULAR TO THE PLANE OF THE JOINT.
17. AT EXPOSED CONCRETE ELEMENTS, SEE PROJECT SPECIFICATIONS FOR TYPE OF CONCRETE FINISHING REQUIRED.
18. AT ALL EXPOSED TO VIEW CONCRETE ELEMENTS (i.e. BEAMS, GIRDERS, COLUMNS, TOP OF RETAINING WALLS, ETC.), PROVIDE 3/4" CHAMFER AT EDGES.
19. PITCH ALL SLABS TO DRAINS WHERE DRAINS ARE INDICATED ON CONTRACT DRAWINGS.
20. ADDITIONAL BARS SHALL BE PROVIDED AT ALL OPENINGS IN SLABS-ON-GRADE AND CONCRETE WALLS. AT ALL OPENINGS, PROVIDE MINIMUM OF (2) - #4 BARS AT EACH SIDE EXTENDING 2'-0" BEYOND EACH SIDE OF OPENING.

STRUCTURAL CONCRETE (CONT'D)

21. ADDITIONAL BARS PROVIDED: CORNER BARS MATCHING TO PERMANENCE VAPOR BARRIER, 15 MIL MINIMUM THICKNESS OVER ADJACENT BARS SHALL BE PROVIDED AT ALL WALL CORNERS AND INTERSECTIONS.
22. AT SLABS-ON-GRADE PROVIDE ADDITIONAL REINFORCING AT RE-ENTRANT CORNERS, PROVIDE MINIMUM OF (2) - #4 BARS, 4'-0" LONG CENTERED ABOUT CORNER.
23. NO ALUMINUM OF ANY TYPE SHALL BE ALLOWED IN THE CONCRETE WORK, UNLESS COATED TO PREVENT ALUMINUM CONCRETE REACTION.
24. IN NO CASE SHALL EMBEDDED CONDUIT BE PLACED ABOVE REINFORCING IN SLAB-ON-GRADE CONSTRUCTION. MINIMUM SPACING OF ADJACENT CONDUITS SHALL BE 3 TIMES THE DIAMETER OR WIDTH OF THE LARGEST CONDUIT. MAXIMUM CONCRETE COVER FOR EMBEDDED CONDUIT SHALL BE NO LARGER THAN ONE-THIRD OF THE SLAB THICKNESS.
25. UNLESS OTHERWISE NOTED ON THE DRAWINGS, SLEEVES FOR PIPES AND CONDUITS PENETRATING GRADE BEAMS AND CONCRETE WALLS SHALL BE STEEL PIPE SLEEVES OF NOMINAL DIAMETER 2 INCHES LARGER THAN THE NOMINAL SIZE OF THE PIPE PENETRATING THE STRUCTURAL MEMBER. THE THICKNESS OF THE SLEEVE SHALL CONFORM TO SCHEDULE 40 BUT NEED NOT BE MORE THAN 3/8 INCH. ALL SUCH SLEEVE LOCATIONS SHALL BE REVIEWED BY THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
26. PROVIDE WATERSTOPS AT ALL CONSTRUCTION JOINTS LOCATED BELOW GRADE AS SHOWN ON THE DRAWINGS.
27. REFER TO THE SPECIFICATION FOR FLOOR FLATNESS AND FLOOR LEVELNESS REQUIREMENTS.
28. NO CONSTRUCTION SHALL BE MADE WITHOUT REINFORCEMENT, UNLESS OTHERWISE NOTED. THE FOLLOWING PERCENTAGE OF THE GROSS CROSS SECTIONAL AREA SHALL BE PROVIDED AS MINIMUM REINFORCEMENT:
  - A. SLABS:
    - i. TOP & BOTTOM.....0.20%
  - B. BEAMS:
    - i. TOP & BOTTOM.....0.33%
    - a. STIRRUPS.....#4@20"
    - d. (D=MEMBER DEPTH)
  - C. COLUMNS:
    - i. VERTICAL.....1.00%
    - b. TIES.....#4@10"
  - D. WALLS:
    - i. VERTICAL.....0.12% (#5)
    - b. HORIZONTAL.....0.20% (#5)
  - E. FOOTINGS:
    - i. HORIZONTAL.....0.18% (#5)
29. ALL REINFORCING STEEL SHALL BE HIGH STRENGTH NEW BILLET STEEL, CONFORMING TO ASTM A615 GRADE 60 UNLESS NOTED OTHERWISE.
30. ALL BAR DETAILING AND ACCESSORIES TO BE FURNISHED SHALL CONFORM TO TYPICAL DETAILS IN THE LATEST ACI STANDARD 315 DETAILING MANUAL, EXCEPT AS OTHERWISE SHOWN, NOTED, OR SPECIFIED.
31. WELDED WIRE FABRIC SHALL CONFORM TO ASTM SPECIFICATIONS A185. ALL WELDED WIRE FABRIC SHALL BE LAPPED TWO PANELS AT EDGES AND ENDS, AND TIED SECURELY. AT EXTERIOR SLABS PROVIDE EPOXY COATED WELDED WIRE FABRIC CONFORMING TO ASTM A884, CLASS A.
32. DETAILING AND ACCESSORIES SHALL CONFORM TO THE ACI DETAILING MANUAL AND TO THE CRSI MANUAL OF STANDARD PRACTICE. CURRENT EDITIONS, UNLESS OTHERWISE NOTED BELOW, ON THE DRAWINGS, OR IN THE SPECIFICATIONS.
33. ALL HOOKS SHALL BE "STANDARD" AS PER ACI STANDARD.
34. THE MINIMUM LENGTH OF ALL SPLICES NOT DIMENSIONED ON THE DRAWINGS SHALL BE AS FOLLOWS:

BAR SIZE	f <sub>c</sub>	SLAB/BEAM				WALL	COLUMN
		TOP	OTHER	VERT	HORIZ		
#4	4000	26"	21"	21"	28"		
	5000	24"	19"	19"	24"		
	6000	23"	17"	17"	23"		
#5	4000	33"	25"	25"	33"		19"
	5000	30"	23"	23"	30"		
	6000	28"	21"	21"	28"		
#6	4000	39"	30"	30"	39"		23"
	5000	36"	28"	28"	36"		
	6000	33"	25"	25"	33"		
#7	4000	71"	55"	55"	71"		27"
	5000	64"	50"	50"	64"		
	6000	59"	45"	45"	59"		
#8	4000	81"	63"	63"	81"		30"
	5000	73"	56"	56"	73"		
	6000	67"	51"	51"	67"		
#9	4000	91"	71"	71"	91"		34"
	5000	82"	63"	63"	82"		
	6000	75"	58"	58"	75"		
#10	4000	102"	78"	78"	102"		38"
	5000	90"	71"	71"	90"		
	6000	82"	64"	64"	82"		
#11	4000	111"	86"	86"	111"		42"
	5000	99"	77"	77"	99"		
	6000	91"	71"	71"	91"		

NOTES:

- A. TOP BARS ARE HORIZONTAL PLACES PLACED SUCH THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE SPLICE.
- B. FOR EPOXY COATED BARS MULTIPLY THE LAP LENGTHS SHOWN IN THE TABLE ABOVE BY 1.3 FOR TOP BARS AND 1.5 FOR OTHER BARS.
- C. WHERE BARS OF DIFFERENT SIZE ARE TO BE SPLICED, THE SPLICE LENGTH FOR BOTH BARS SHALL BE THAT REQUIRED FOR THE LARGER BAR.
- D. SPLICE LENGTHS SHALL BE SPECIFICALLY DIMENSIONED AT ALL LOCATIONS ON THE SHOP DRAWINGS.
- E. FOR CONCRETE STRENGTH BETWEEN LISTED VALUES, USE MINIMUM SPLICE LENGTH OF HIGHER LISTED VALUE.

35. CONTINUOUS TOP AND BOTTOM BARS, OTHER THAN IN FOOTINGS, WHEN SHOWN IN CROSS SECTION ONLY, SHALL BE LAPPED AS FOLLOWS:
  - A. TOP BARS AT MID SPANS
  - B. BOTTOM BARS CENTERED OVER SUPPORTS.

36. EPOXY ADHESIVE EMBEDDED DOWELS SHALL USE HILTI HY 150 ADHESIVE WITH THE FOLLOWING MINIMUM EMBEDMENT DEPTHS, UNLESS NOTED OTHERWISE:
  - #3 - 3"
  - #6 - 9"
  - #4 - 5"
  - #9 - 10"
  - #5 - 6"
  - #10 - 12"
  - #6 - 7"
  - #11 - 14"
  - #7 - 8"
37. REFER TO THE **TESTING AND INSPECTION** SECTION OF THESE NOTES FOR THE CONCRETE TESTING AND INSPECTION REQUIREMENTS.

POST INSTALLED ANCHORS

1. WHERE EPOXY SYSTEM IS INDICATED ON THE PLANS OR DETAILS, USE HILTI HY-200 ADHESIVE IN CONCRETE AND HILTI HY-70 IN SOLID GROUTED MASONRY UNLESS NOTED OTHERWISE. THE CONTRACTOR OR MAY SUBMIT SUBSTITUTE EPOXY SYSTEMS FOR APPROVAL PROVIDED THEY MEET OR EXCEED THE CAPACITY OF HILTI HY-200 OR THE HILTI HY-70 ADHESIVE SYSTEM.
2. DRILL HOLES TO EPOXY MANUFACTURER'S RECOMMENDED SIZE. CLEAN HOLES WITH A CIRCULAR WIRE OR NYLON BRUSH AND BLOW OUT WITH COMPRESSED AIR.
3. WHERE MECHANICAL EXPANSION ANCHORS ARE INDICATED ON THE PLANS OR DETAILS, USE HILTI KWIK BOLT IN CONCRETE UNLESS NOTED OTHERWISE. THE CONTRACTOR MAY SUBMIT SUBSTITUTE EXPANSION ANCHOR SYSTEMS FOR APPROVAL PROVIDED THEY MEET OR EXCEED THE CAPACITY OF HILTI KWIK BOLT IHS.
4. POST INSTALLED ANCHORS MUST BE INSTALLED USING THE SPACING AND EDGE DISTANCES GIVEN ON THE PLANS OR DETAILS. IF FIELD CONDITIONS DICTATE THAT THE ANCHOR SPACING OR EDGE DISTANCES BE MODIFIED, THE CONTRACTOR SHALL SUBMIT A FIELD SKETCH TO THE ARCHITECT/STRUCTURAL ENGINEER FOR REVIEW PRIOR TO MAKING ANY MODIFICATIONS.

PRE-ENGINEERED WOOD FRAMED BUILDING / PREFABRICATED METAL PLATE CONNECTED WOOD TRUSSES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE ENGINEERING DESIGN OF ALL WOOD FRAMED BUILDING COMPONENTS (COLUMNS, GIRTS, PURLINS, HEADERS ETC.) AND PREFABRICATED METAL-PLATE CONNECTED WOOD TRUSSES, INCLUDING ANY REQUIRED TEMPORARY OR PERMANENT LATERAL BRACING.
2. MATERIALS
  - A. PREFABRICATED METAL PLATE CONNECTED WOOD TRUSSES
  - I. SPECIES: VARIES
  - II. GRADE: VARIES
  - III. MODULUS OF ELASTICITY: 1,500,000 PSI (MIN.)
  - IV. MINIMUM WORKING STRESS
  - a. EXTREME FIBER IN BENDING, FB: 975 PSI
  - B. TENSION PARALLEL TO GRAIN, FT: 625 PSI
  - C. COMPRESSION PARALLEL TO GRAIN, FC: 1300 PSI
  - D. COMPRESSION PERPENDICULAR TO GRAIN, FC: 405 PSI
  - E. HORIZONTAL SHEAR, FV: 175 PSI
3. DESIGN SHALL BE BASED ON THE INFORMATION PROVIDED ON THE CONTRACT DOCUMENTS AND IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL-PLATE CONNECTED WOOD TRUSS CONSTRUCTION," TRUSS PLATE INSTITUTE AND THE "NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION," NATIONAL FOREST PRODUCTS ASSOCIATION.
4. THE CONTRACTOR SHALL SUPPLY SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS FOR THE WOOD FRAMED BUILDING. BUILDING COMPONENTS AND METAL PLATE CONNECTED WOOD TRUSSES AS OUTLINED IN THE PROJECT SPECIFICATIONS.
5. TRUSS ENDS AND BEARING LOCATIONS SHALL BE CONNECTED TO SUPPORTS WITH METAL FASTENERS PER THE WOOD FRAME BUILDING DESIGN REQUIREMENTS.
6. TRUSSES SHALL BE FABRICATED IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL-PLATE CONNECTED WOOD TRUSS CONSTRUCTION," TRUSS PLATE INSTITUTE.
7. TRUSSES SHALL BE HANDLED DURING ERECTION IN ACCORDANCE WITH RECOMMENDED PRACTICES SET FORTH IN "HANDLING, INSTALLING AND BRACING WOOD TRUSSES HIB-91," TRUSS PLATE INSTITUTE.
8. VERTICAL LOAD BEARING COMPONENTS AND TRUSSES SHALL BE BRACED AS REQUIRED DURING ERECTION TO PREVENT TOPPLING OR DOMINING.
9. THE WOOD FRAME BUILDING SUPPLIER AND TRUSS MANUFACTURER SHALL INDICATE ON THE SHOP DRAWINGS THE LOCATIONS AND SIZES OR BRACING REQUIRED TO TRANSFER TRUSS MEMBER BUCKLING FORCES TO THE STRUCTURE. UPON REVIEW OF THE SHOP DRAWINGS, STRUCTURAL ENGINEER WILL INDICATE METHOD OF ATTACHMENT AND ADDITIONAL BRACING NEEDED TO TRANSFER MEMBER BUCKLING FORCES TO THE STRUCTURE. CONTRACTOR SHALL INCLUDE IN AND NOTE IN SUBMITTED BID, ALLOWANCE FOR ADDITIONAL BRACING, SIZE TO BE DETERMINED AFTER REVIEW OF SUBMITTAL OF THE WOOD FRAME BUILDING AND METAL-PLATE CONNECTED TRUSS SHOP DRAWINGS.

TIMBER

1. THE DESIGN AND WORKMANSHIP OF ALL WOOD FRAMING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/APA NATIONAL DESIGN SPECIFICATION AND THE INTERNATIONAL BUILDING CODE.
2. ALL LUMBER SHALL BE KILN DRIED TO HAVE A MAXIMUM MOISTURE CONTENT OF 15% UNLESS NOTED OTHERWISE.
3. CONNECTIONS OF ALL 2x MATERIAL TO OTHER 2x MATERIAL OR OTHER WOOD MEMBERS SHALL BE AS INDICATED BELOW, UNLESS OTHERWISE NOTED ON THE DRAWINGS, AS NOTED IN THE SPECIFICATIONS OR NOTED WITHIN THE NAILING SCHEDULE BELOW.
  - A. 2x4, 2x6 - (3) 10d NAILS MIN.
  - B. 2x8, 2x10, 2x12 - (4) 10d NAILS MIN.
4. MATERIALS
  - A. ALL FIELD CUT LUMBER (U.N.O.)
    - i. SPECIES: SOUTHERN PINE OR BETTER (U.N.O.)
    - II. GRADE: NO. 2 OR BETTER
    - III. MODULUS OF ELASTICITY: 1,600,000 PSI
    - IV. MINIMUM WORKING STRESS
      - a. EXTREME FIBER IN BENDING, FB: 1000 PSI
      - b. TENSION PARALLEL TO GRAIN, FT: 825 PSI
      - c. COMPRESSION PARALLEL TO GRAIN, FC: 1650 PSI
      - d. COMPRESSION PERPENDICULAR TO GRAIN, FC: 565 PSI
      - e. HORIZONTAL SHEAR, FV: 175 PSI
  - B. HARDWARE
    - i. CONNECTIONS FOR WOOD CONSTRUCTION
      - a. GALVANIZED METAL, GAUGES AND DIMENSIONS AS INDICATED, MANUFACTURED BY SIMPSON OR APPROVED EQUAL.
    - II. NAILS
      - a. COATED COMMONS
  - C. PARALLEL STRAND LUMBER (PSL)
    - i. ALLOWABLE FLEXURAL STRESS (Fb): 2,900 PSI
    - II. ELASTIC MODULUS (E): 2,000,000 PSI
5. THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL TIMBER MEMBERS FOR THE WORK OF OTHER TRADES WITHOUT THE PRIOR REVIEW AND APPROVAL OF THE STRUCTURAL ENGINEER.
6. NO WOOD TREATMENTS OR OR PRESERVATIVES SHALL BE USED WITHOUT PRIOR REVIEW BY THE ARCHITECT AND STRUCTURAL ENGINEER.
7. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IN CONFORMANCE WITH THE REQUIREMENTS OF ANPA. FIELD CUTS OR DRILLING IN PRESSURE TREATED LUMBER SHALL BE THOROUGHLY BRUSHED AND COATED WITH A COMPATIBLE PRESERVATIVE LIQUID.

TESTING AND INSPECTIONS

1. ALL TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE DESIGN CODE REFERENCED IN ITEM 1. OF THE STRUCTURAL LOADING SECTION OF THESE NOTES.
2. ALL TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY HIRED BY THE OWNER.
3. THE ARCHITECT / STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY ITEM FOUND NOT TO BE IN COMPLIANCE WITH THE DESIGN INTENT OF THESE DOCUMENTS.

FOUNDATIONS

4. ALL FOUNDATION EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A REPRESENTATIVE OF A QUALIFIED GEOTECHNICAL ENGINEERING FIRM. DAILY REPORTS OF OBSERVATIONS SHALL BE PREPARED. ALL REPORTS ARE TO BE SUBMITTED TO THE ARCHITECT / STRUCTURAL ENGINEER FOR REVIEW. THE REQUIRED TEST TYPE AND FREQUENCY SHALL BE AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

CONCRETE

5. ALL CONCRETE PLACED ON THE PROJECT SHALL BE TESTED FOR SLUMP, AIR CONTENT AND STRENGTH. THE FREQUENCY OF TESTING SHALL BE AS SPECIFIED IN THE PROJECT SPECIFICATION.
6. REINFORCEMENT PLACEMENT SHALL BE INSPECTED BY THE OWNER'S TESTING LABORATORY PRIOR TO ALL CONCRETE POURS. SEE THE SPECIFICATIONS FOR REQUIREMENTS.

BIDDING PHASE

NOT FOR CONSTRUCTION

ISSUE DATE: 03/05/2021

REVISIONS

No	Date	Description

PROJECT NUMBER: 6036

STRUCTURAL NOTES

DWG. NO.

S001



NEW RALLS COUNTY AG BUILDING ADDITION

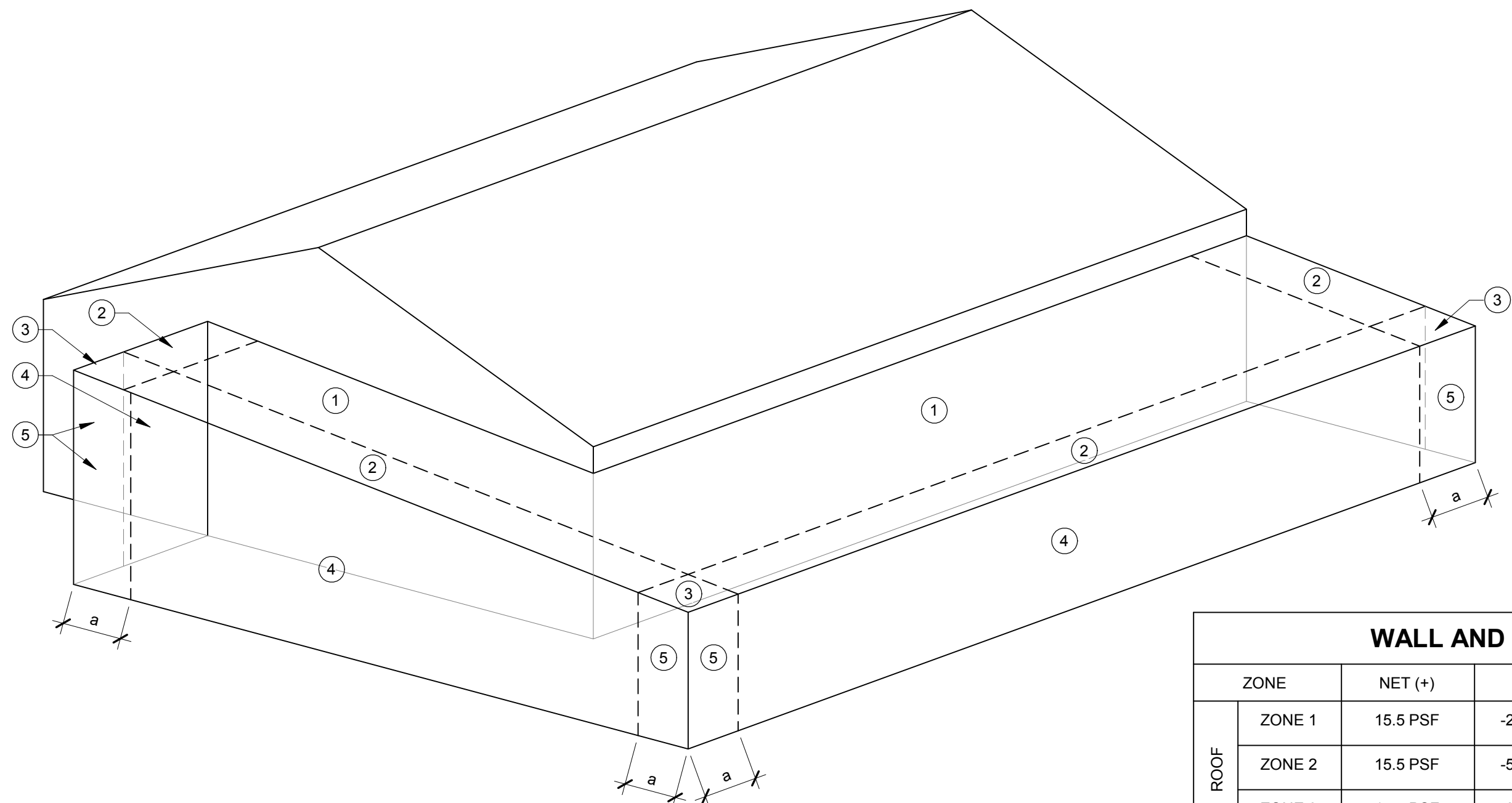
1. BUILDING CODES:  
A. INTERNATIONAL BUILDING CODE 2015  
B. ASCE 7-10
2. DESIGN LOADS:  
A. OCCUPANCY CATEGORY II  
B. DEAD LOADS:  
1. PREFABRICATED METAL PLATE CONNECTED WOOD TRUSS ROOF SYSTEM  
a. STANDING SEAM METAL ROOF PANELS = 2 PSF  
b. INSULATION (2" MINIMUM) = 1 PSF  
c. 2x WOOD PURLINS = 3 PSF  
d. MECHANICAL, ELECTRICAL & PLUMBING = 5 PSF  
e. CEILING = 1 PSF  
f. WOOD TRUSSES = 5 PSF  
C. ROOF LIVE LOAD = 20 PSF (MIN.)  
D. ROOF SNOW LOADS:  
1. GROUND SNOW LOAD  $P_g$  = 20 PSF  
2. THERMAL FACTOR  $C_t$  = 1.0  
3. EXPOSURE FACTOR  $C_e$  = 1.0  
3. IMPORTANCE FACTOR  $I_s$  = 1.0  
4. FLAT ROOF SNOW LOAD  $P_f$  = 20 PSF (MINIMUM)  
5. RAIN-ON-SNOW SURCHARGE = 5 PSF  
6. DRIFTING AND SLIDING LOADS - SEE DETAIL X / S002  
E. PONDING  
1. PONDING IS NOT APPLICABLE FOR ROOF SLOPES 1/4" OR GREATER  
F. WIND LOADING - ANALYTICAL PROCEDURE  
1. BASIC WIND SPEED (3 SECOND GUST) = 115 MPH  
2. EXPOSURE CATEGORY C  
3. IMPORTANCE FACTOR  $I_w$  = 1.00  
4. DIRECTIONAL FACTOR  $K_d$  = 0.85  
5. TOPOGRAPHIC FACTOR  $K_{zt}$  = 1.0  
6. INTERNAL PRESSURE COEFFICIENT  $GCP_i$  = +/- 0.18 (ENCLOSED)  
7. MAIN WIND FORCE RESISTING SYSTEM DESIGN PRESSURES: SEE MWFRS WIND DIAGRAMS  
8. COMPONENTS AND CLADDING DESIGN PRESSURES: PER ASCE 7-10 COMPONENTS AND CLADDING  
METHOD 2: SEE COMPENTS AND CLADDING WIND DIAGRAMS.  
G. SEISMIC LOADING - EQUIVALENT LATERAL FORCE PROCEDURE:  
1. IMPORTANCE FACTOR  $I_e$  = 1.00  
2. SITE CLASS C  
3. SPECTRAL ACCELERATION FOR SHORT PERIODS,  $S_s$  = 0.167  
4. SPECTRAL ACCELERATION FOR 1 SEC PERIOD,  $S_1$  = 0.092  
5. DESIGN SPECTRAL RESPONSE ACCELERATION SHORT PERIOD,  $S_{ds}$  = 0.178  
6. DESIGN SPECTRAL RESPONSE ACCELERATION 1 SEC PERIOD,  $S_{d1}$  = 0.149  
7. SEISMIC DESIGN CATEGORY C  
8. DESIGN COEFFICIENTS AND FACTORS FOR SEISMIC FORCE-RESISTING SYSTEMS  
a. TYPICAL PRE-ENGINEERED WOOD FRAMED CONSTRUCTION  
i. RESISTING SYSTEM - CANTILEVERED TIMBER FRAME  
ii. RESPONSE COEFFICIENT,  $R$  = 1.5  
iii. DEFLECTION AMPLIFICATION FACTOR  $C_d$  = 1.5  
iv. SYSTEM OVERSTRENGTH FACTOR  $X_o$  = 1.5  
9. COMPONENT DESIGN PER ASCE 7-10

SCHEDULE OF BUILDING DESIGN LOADS

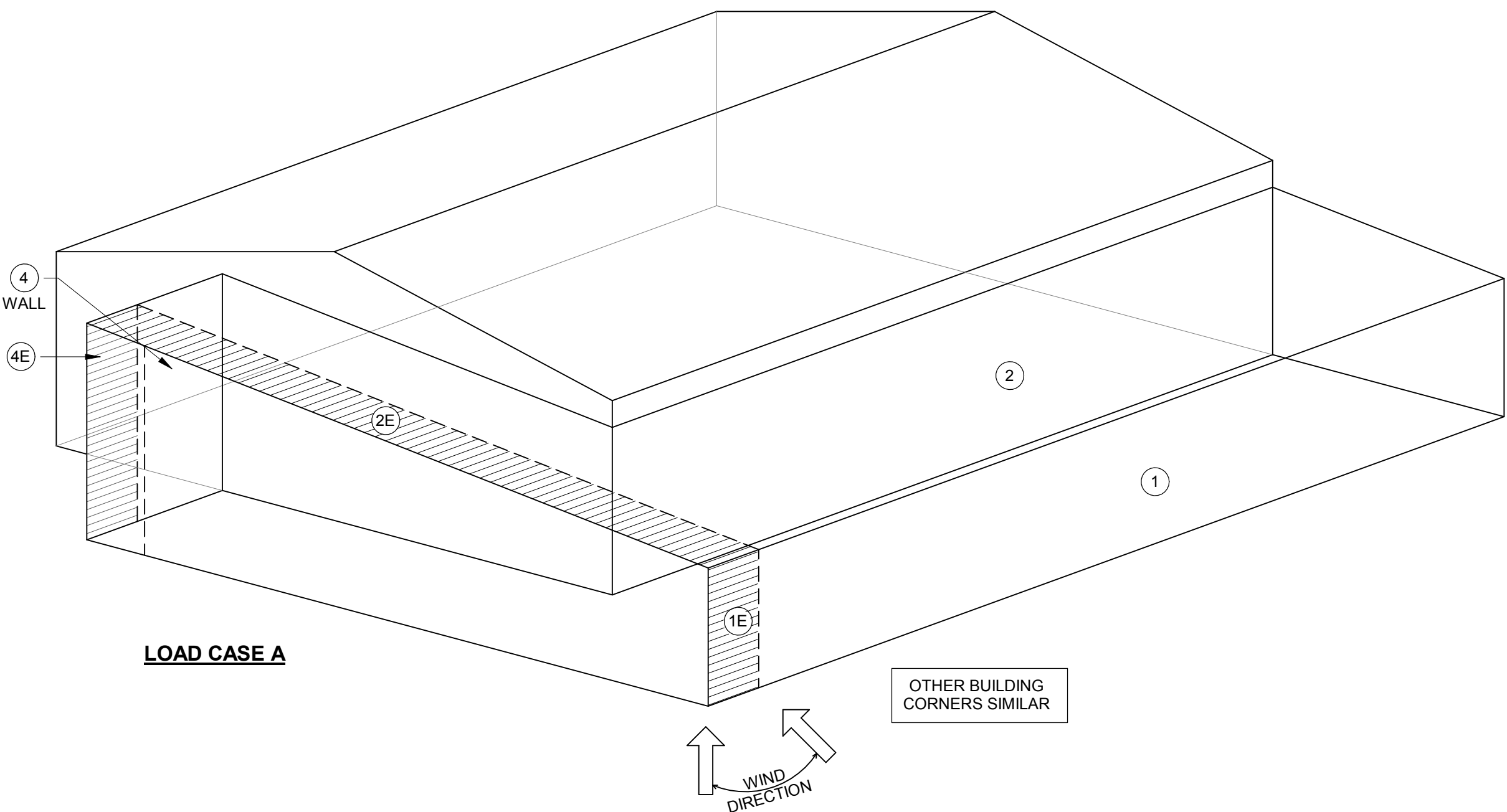
LOCATION	FLOOR	FLOOR AREA	FLOOR CONSTRUCTION	SUPERIMPOSED DEAD LOAD (psf)	PARTN' LOAD (psf)	LIVE LOAD (psf)	REMARKS
MAIN BUILDING	MAIN LEVEL	LOBBY	5" SLAB-ON-GRADE	15	-	100	
		PUBLIC AREAS & CORRIDORS	"	15	-	100	
		OFFICE	"	15	20	50	
		STORAGE	"	15	-	125	
		CLASSROOM	"	15	20	40	
		MECHANICAL	"	15	-	125	MECHANICAL UNIT WEIGHTS
	ROOF	TYPICAL	SEE TRUSS LOADING	SEE TRUSS LOADING	-	20	SNOW DRIFT

NOTES

1. DURING CONSTRUCTION ALL CONSTRUCTION LOADS ON ANY AREA OF THE FLOOR SHALL NOT EXCEED THE LOADS SHOWN IN THE TABLE.  
2. 5" SLAB-ON-GRADE = 63 PSF  
3. SUPERIMPOSED DEAD LOADS NOTED ABOVE DO NOT INCLUDE SELF WEIGHT OF WOOD TRUSS FRAMING.

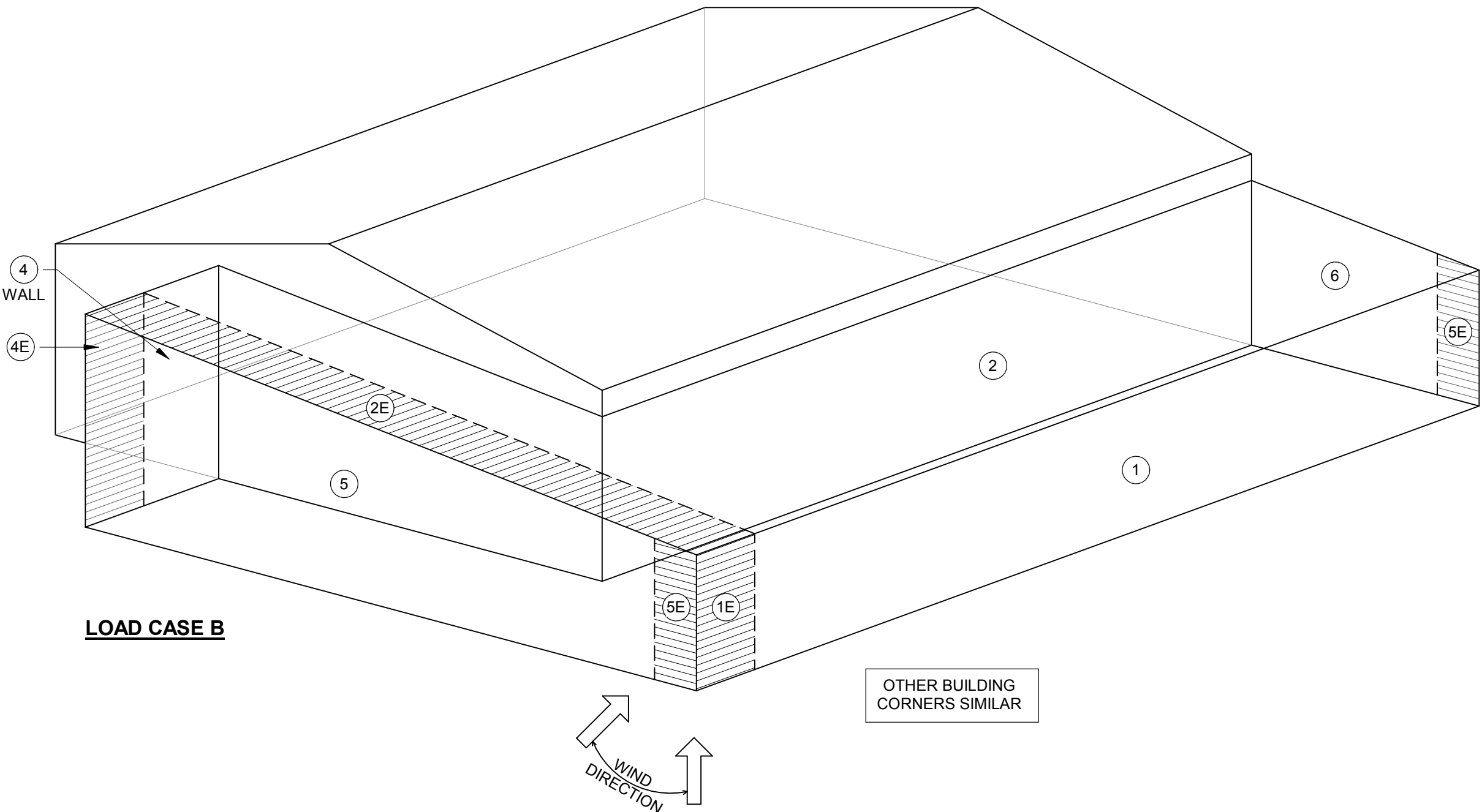


WALL AND ROOF COMPONENT WIND LOADS				
	ZONE	NET (+)	NET (-)	REMARKS
ROOF	ZONE 1	15.5 PSF	-25.75 PSF	
	ZONE 2	15.5 PSF	-58.25 PSF	
	ZONE 3	15.5 PSF	-86.00 PSF	
WALL	ZONE 4	27.25 PSF	-29.75 PSF	
	ZONE 5	27.25 PSF	-35.25 PSF	



LOAD CASE A

MWFRS WIND LOAD SCHEDULE				
ZONE	LOAD CASE A		LOAD CASE B	
	NET (+GCPi)	NET (-GCPi)	NET (+GCPi)	NET (-GCPi)
ZONE 1	8.22 PSF	17.02 PSF	-15.39 PSF	-6.60 PSF
ZONE 2	-21.25 PSF	-12.46 PSF	-21.25 PSF	-12.46 PSF
ZONE 3	-15.84 PSF	-7.05 PSF	-13.44 PSF	-4.64 PSF
ZONE 4	-14.55 PSF	-5.75 PSF	-15.39 PSF	-6.60 PSF
ZONE 5	--	--	5.37 PSF	14.17 PSF
ZONE 6	--	--	-11.48 PSF	-2.69 PSF
ZONE 1E	14.67 PSF	23.46 PSF	-16.12 PSF	-7.33 PSF
ZONE 2E	-30.54 PSF	-21.74 PSF	-30.54 PSF	-21.74 PSF
ZONE 3E	-20.85 PSF	-12.05 PSF	-17.34 PSF	-8.55 PSF
ZONE 4E	-19.50 PSF	-10.71 PSF	-16.12 PSF	-7.33 PSF
ZONE 5E	--	--	10.50 PSF	-19.30 PSF
ZONE 6E	--	--	-14.90 PSF	-6.11 PSF



LOAD CASE B

BIDDING PHASE

NOT FOR CONSTRUCTION

ISSUE DATE: 03/05/2021

REVISIONS

NO.	Date	Description

PROJECT NUMBER: 6036

STRUCTURAL NOTES

DWG. NO.

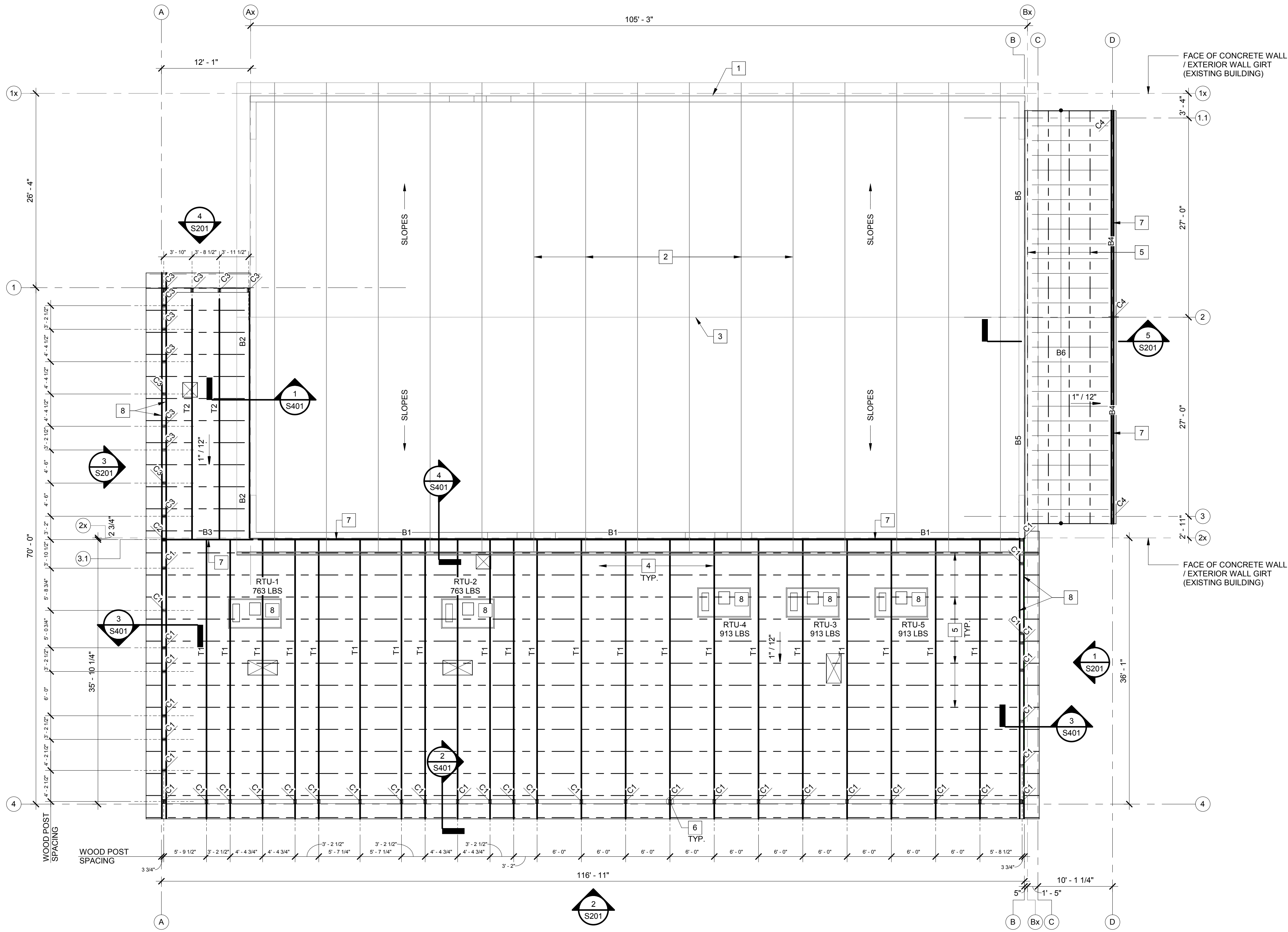
S002



☒

- ### GENERAL NOTES

1. TOP OF CONCRETE SLAB-ON-GRADE = EL. = 100'-0"
2. SOG-1 - INDICATES 6" THICK CAST-IN-PLACE CONCRETE SLAB-ON-GRADE WITH (1) LAYER OF 6x6 W2 1XW2.1 V.W.F. LOCATED AT MID-DEPTH OF THE SLAB. SEE DETAILS FOR WAPF BARRIER AND COMPACTED FILL REQUIREMENTS.
3. PX-0 - INDICATES CAST-IN-PLACE CONCRETE PIER. SEE DETAILS AND SCHEDULE FOR ADDITIONAL INFORMATION.
4. FX-0 - INDICATES CAST-IN-PLACE CONCRETE SPREAD FOOTING. SEE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION.
5. WFX-0 - INDICATES CAST-IN-PLACE CONCRETE WALL FOOTING. SEE SCHEDULE AND DETAILS FOR ADDITIONAL INFORMATION/



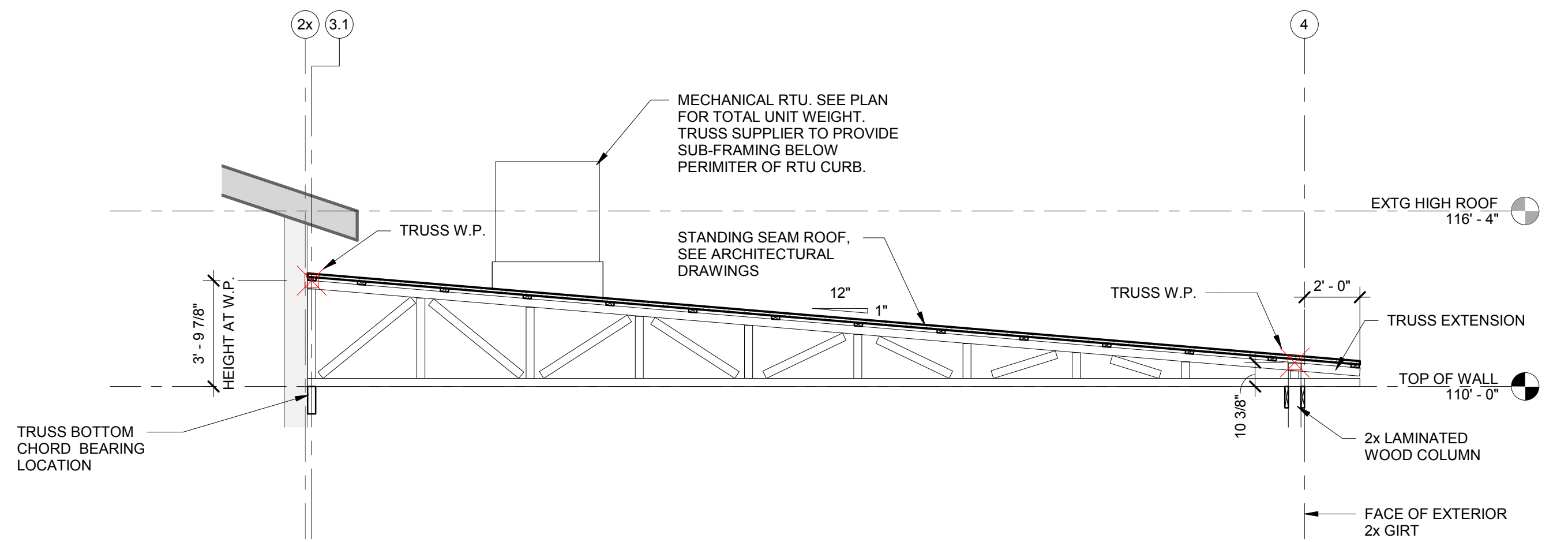
1 ROOF FRAMING PLAN  
SCALE: 1/8" = 1'-0"

KEYED NOTES STRUCTURAL - FRAMING

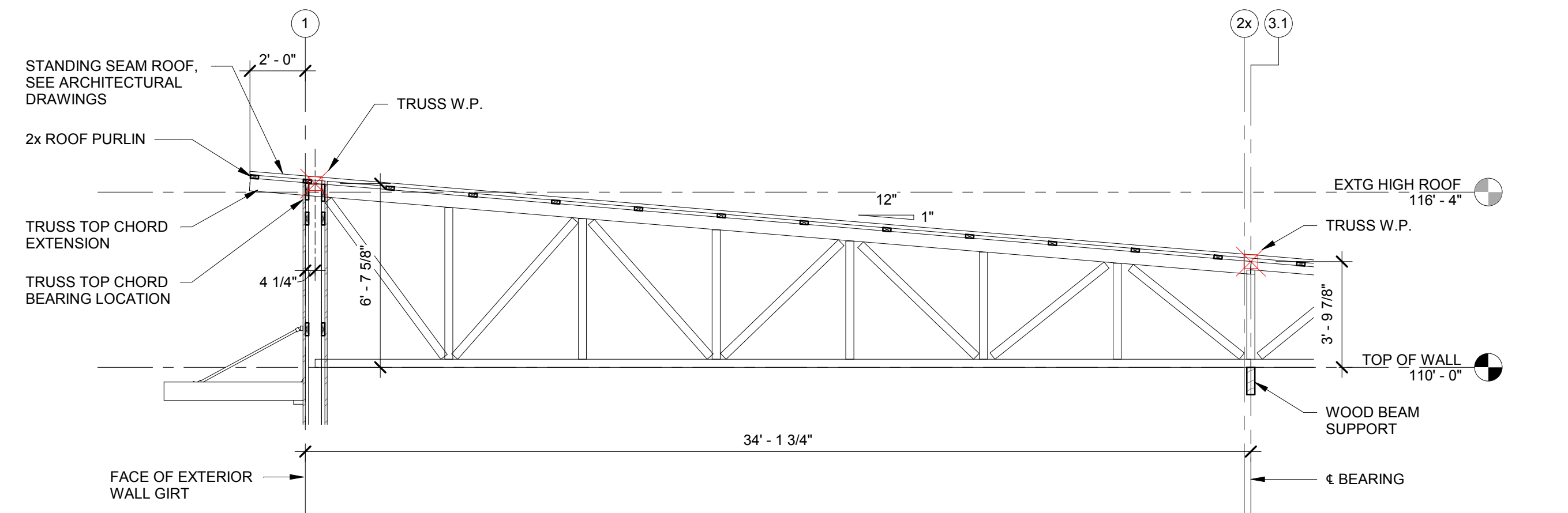
- EXISTING FRAME BUILDING STRUCTURE TO REMAIN.
- EXISTING METAL PLATE CONNECTED WOOD TRUSSES TO REMAIN.
- EXISTING ROOF RIDGE.
- NEW METAL PLATE CONNECTED WOOD TRUSSES. SEE PLAN FOR SPACING. SEE DETAILS FOR LOADING CONDITIONS.
- NEW 2x PURLIN FRAMING AT 3'-0" O.C. MAX. SPACING.
- NEW 2x LAMINATED WOOD COLUMN. FINAL DESIGN AND LOCATIONS TO BE PROVIDED BY FRAME BUILDING SUPPLIER (DELEGATED DESIGN).
- NEW WOOD BEAM FRAMING. SEE SCHEDULE FOR SIZE, ATTACHMENT AND ADDITIONAL INFORMATION.
- NEW 2x RAKE FRAMING.

GENERAL NOTES

- TX - INDICATES METAL PLATE CONNECTED WOOD TRUSS SPACED AS INDICATED ON FRAMING PLAN. TRUSS DESIGN IS A DELEGATED DESIGN BY OTHERS. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CX - INDICATES LAMINATED DIMENSIONAL COLUMN. FINAL SIZE BY FRAME BUILDING SUPPLIER.
- Bx - INDICATES WOOD BEAM. SEE SCHEDULE FOR SIZE AND ADDITIONAL INFORMATION.
- TRUSS BEARING / BOTTOM OF TRUSS ELEVATION = EL. = 110'-0"



2 TRUSS ELEVATION - TYPE T1  
SCALE: 1/4" = 1'-0"



3 TRUSS ELEVATION - TYPE T2  
SCALE: 1/4" = 1'-0"

TRUSS LOADING SCHEDULE

TRUSS DESIGNATION	BOT. CHORD DL	BOT. CHORD LL	TOP CHORD DL	TOP CHORD RLL	TOP CHORD SL	TOP CHORD WL (+/-)	REMARKS
T1	8 PSF	--	10 PSF	20 PSF	20 PSF	**	SEE PLAN FOR JOIST SPACING
T1A	8 PSF	--	10 PSF	20 PSF	20 PSF	**	SEE PLAN FOR JOIST SPACING, SEE PLAN FOR MECHANICAL LOADING
T2	8 PSF	--	10 PSF	20 PSF	20 PSF	**	SEE PLAN FOR JOIST SPACING

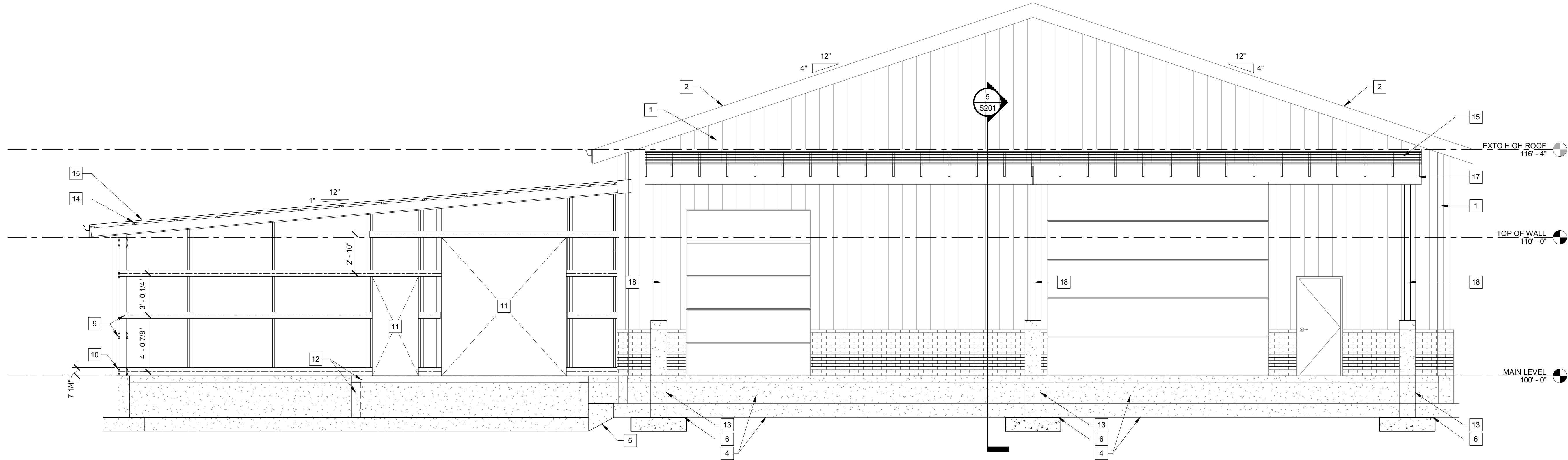
NOTES:

- \* - INDICATES TRUSS SELFWEIGHT **NOT** INCLUDED IN APPLIED DEAD LOAD. TRUSS SELFWEIGHT SHALL BE ACCOUNTED FOR BY TRUSS DESIGNER.
- \*\* - INDICATES APPLIED COMPONENT WIND LOAD. SEE WIND LOAD DIAGRAMS AND SCHEDULE FOR ADDITIONAL INFORMATION.
- SEE PLAN FOR TRUSS SPACING.

4 ROOF TRUSS LOADING SCHEDULE  
SCALE: 12" = 1'-0"

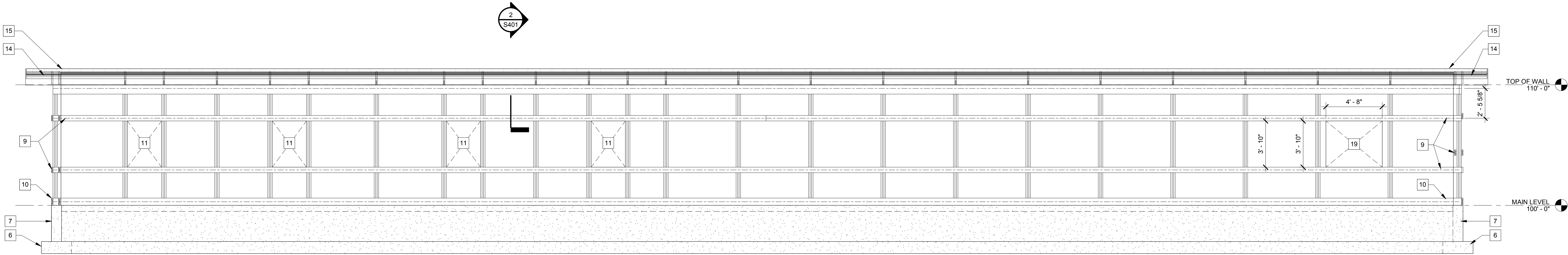
REVISIONS		
NO.	Date	Description





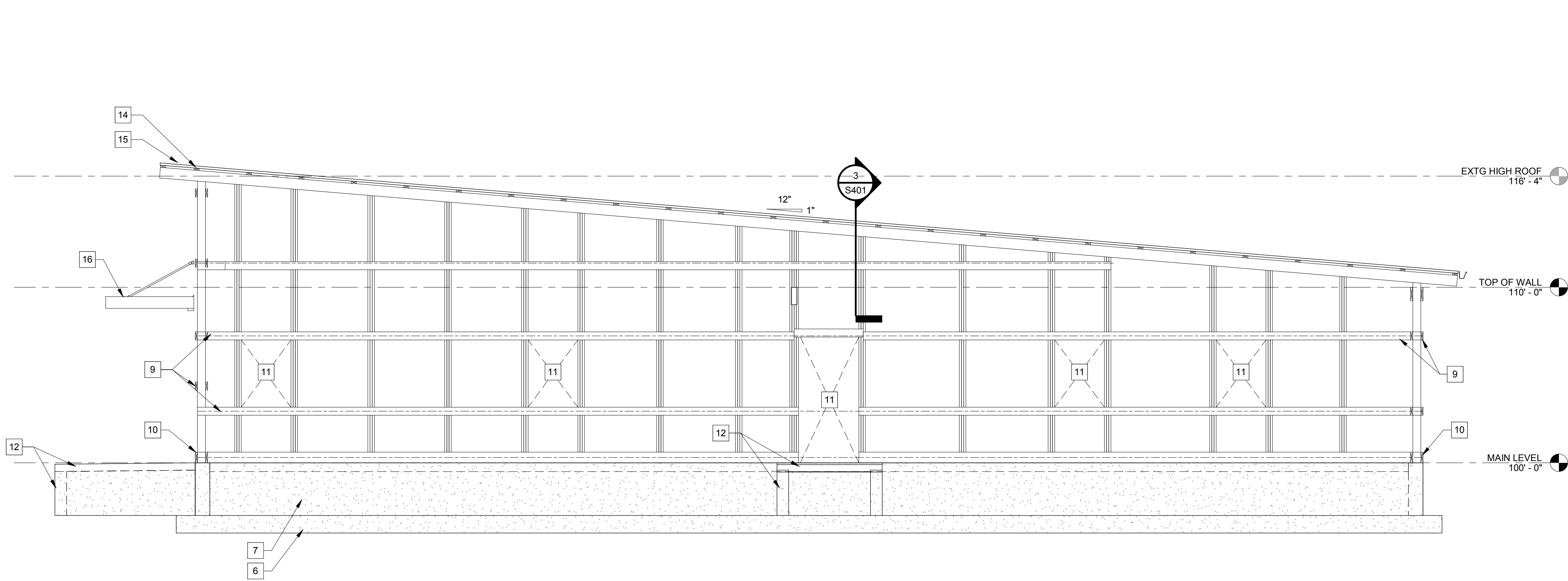
1 WALL FRAMING ELEVATION

SCALE: 1/4" = 1'-0"



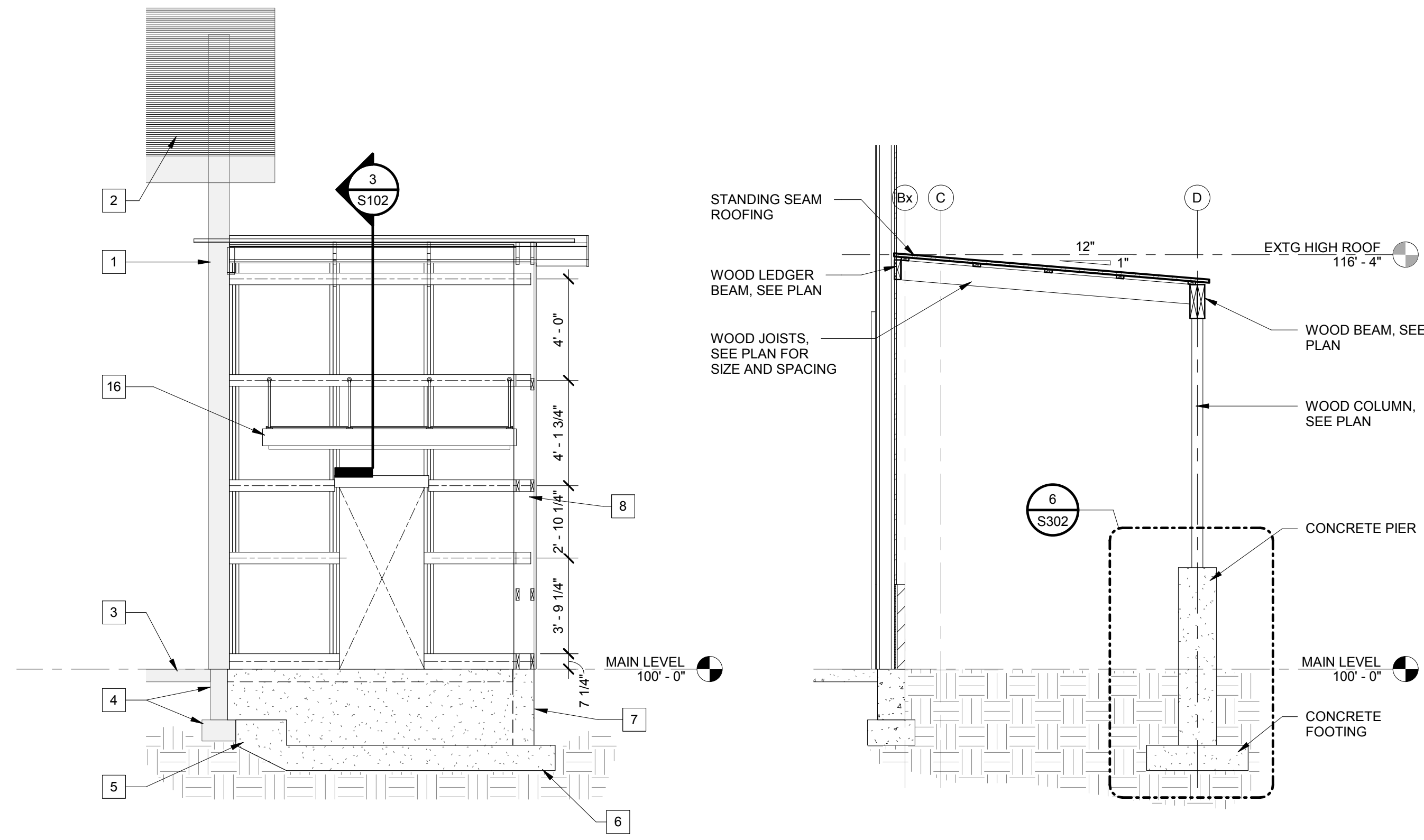
2 WALL FRAMING ELEVATION

SCALE: 1/4" = 1'-0"



3 WALL FRAMING ELEVATION

SCALE: 1/4" = 1'-0"



4 WALL FRAMING ELEVATION

SCALE: 1/4" = 1'-0"

5 CANOPY SECTION

SCALE: 1/4" = 1'-0"

KEYED NOTES STRUCTURAL - ELEVATIONS

- EXISTING FRAME BUILDING STRUCTURE TO REMAIN.
- EXISTING METAL PLATE CONNECTED WOOD TRUSSES TO REMAIN.
- EXISTING CONCRETE SLAB-ON-GRADE TO REMAIN.
- EXISTING CONCRETE FOUNDATION WALL AND FOOTING TO REMAIN. VERIFY IN FIELD CONDITIONS WHERE NEW CONSTRUCTION ABUTS EXISTING.
- NEW CONCRETE STEPPED FOOTING.
- NEW CAST-IN-PLACE CONCRETE FOOTING.
- NEW CAST-IN-PLACE CONCRETE FOUNDATION WALL.
- NEW BUILT UP WOOD COLUMN, SEE PLAN AND SCHEDULE FOR SIZE AND SPACING.
- NEW 2X WALL GIRT, FINAL SIZE AND ELEVATION BY WOOD FRAME BUILDING SUPPLIER (DELEGATED DESIGN).
- 2X8 TREATED WOOD SILL (NS & FS).
- DOOR OR WINDOW OPENING, SEE ARCHITECTURAL DRAWINGS.
- NEW CAST-IN-PLACE CONCRETE STUOP SLAB AND FOUNDATION WALLS.
- NEW CAST-IN-PLACE CONCRETE PIER.
- 2X ROOF PURLIN FRAMING, SEE PLAN FOR ADDITIONAL INFORMATION.
- NEW PRE-FINISHED STANDING SEAM METAL ROOFING, SEE ARCHITECTUTRAL DRAWINGS FOR ADDITIONAL INFORMATION.
- PREFABRICATED EXTERIOR CANOPY, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- NEW WOOD BEAM FRAMING, SEE PLAN AND SCHEDULE FOR SIZE.
- NEW WOOD COLUMN, SEE PLAN AND SCHEDULE FOR SIZE.
- NEW MECHANICAL LOUVER, COORDINATE WITH MECHANICAL CONTRACTOR FOR ROUGH OPENING SIZE AND FINAL LOCATION.

BIDDING PHASE

NOT FOR  
CONSTRUCTION  
ISSUE DATE: 03/05/2021

REVISIONS		
NO.	Date	Description

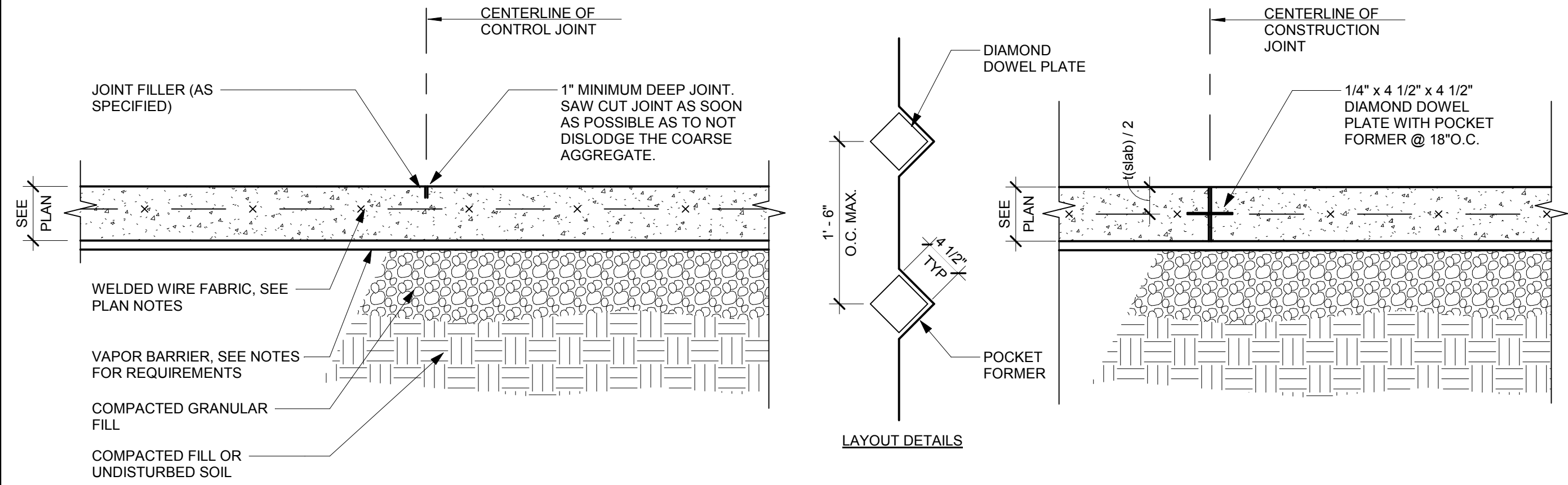
PROJECT NUMBER: 6036

STRUCTURAL  
ELEVATIONS

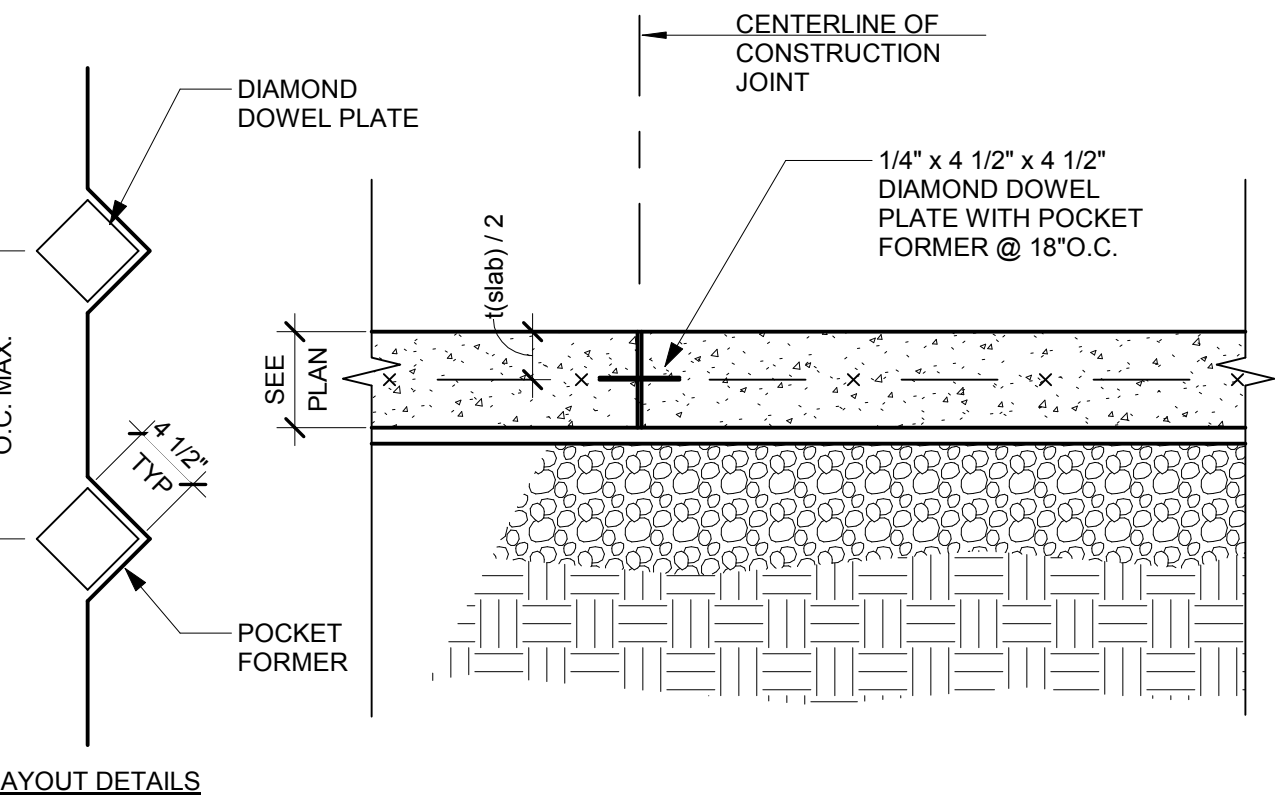
DWG. NO.

S201

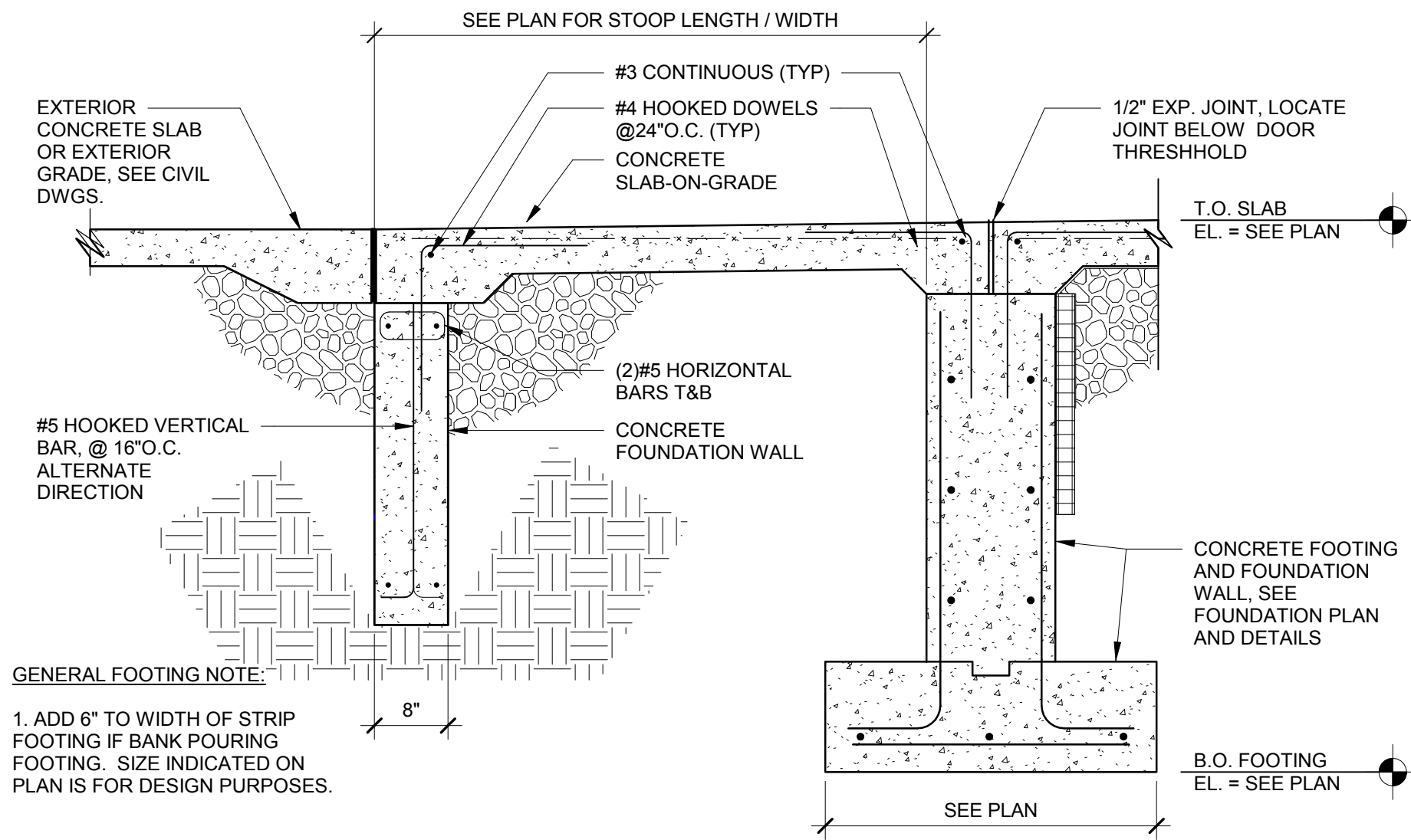




1 TYPICAL SLAB-ON-GRADE DETAIL  
SCALE: 1" = 1'-0"



2 TYPICAL SLAB-ON-GRADE DETAIL  
SCALE: 1" = 1'-0"

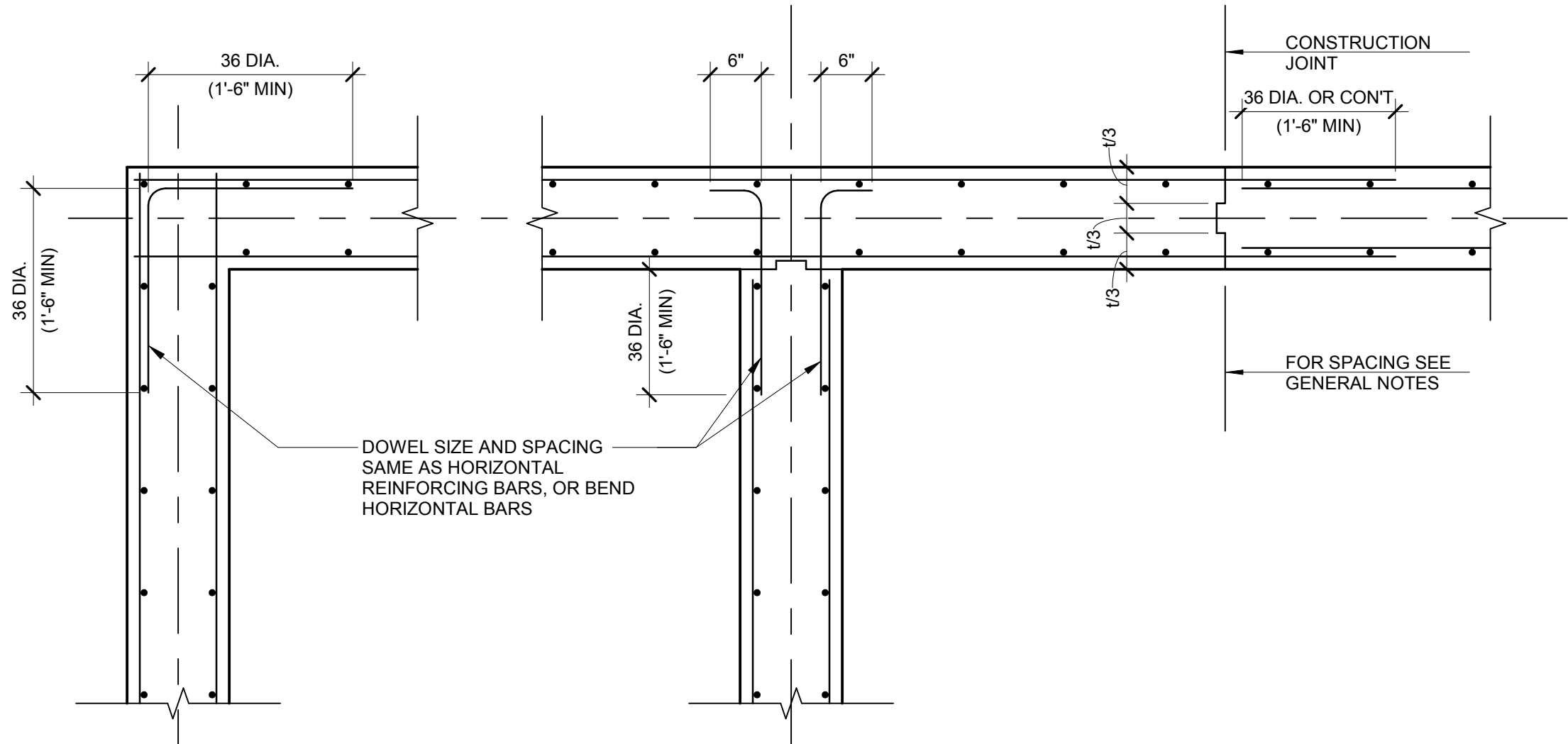


3 CONCRETE STOOP FOUNDATION  
SCALE: 3/4" = 1'-0"

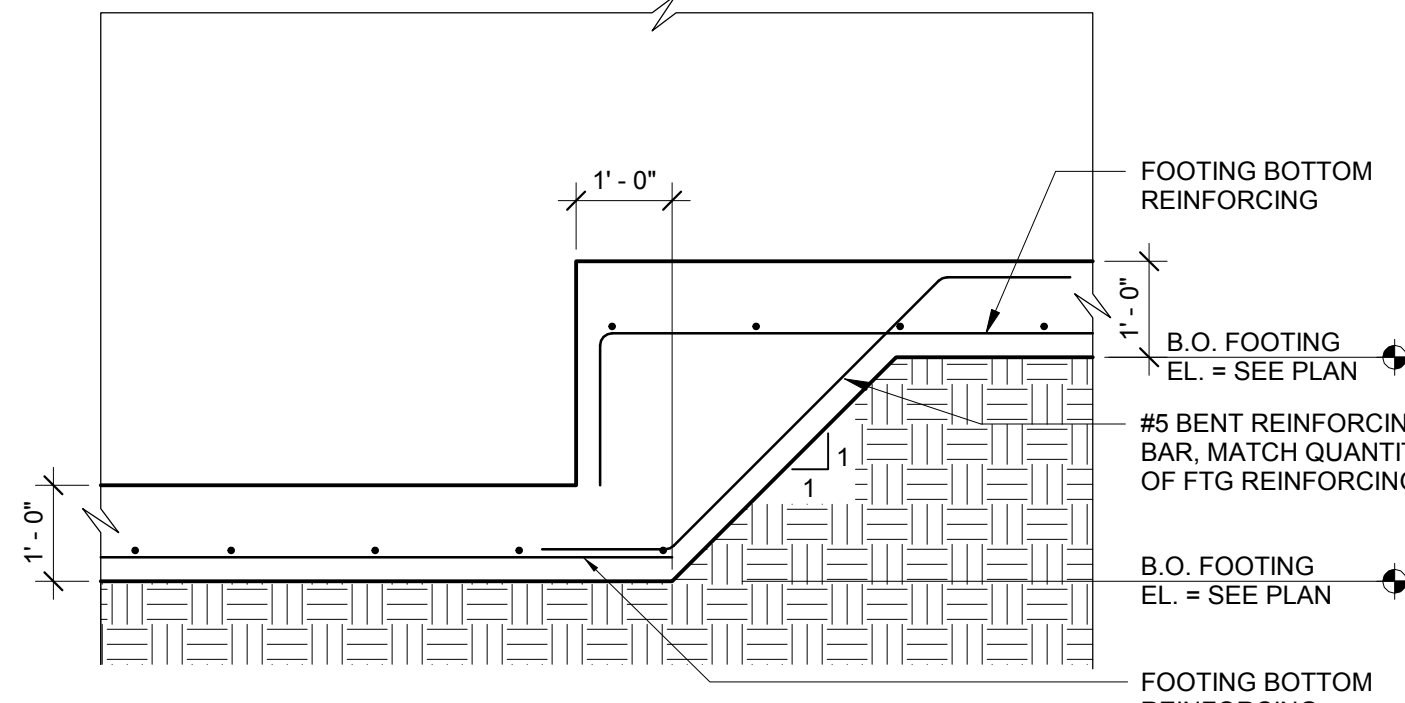
FOOTING SCHEDULE						ISOLATED FTGS. $f_{bearing} = 1,500 \text{ psf}$
FOOTING MARK	WIDTH - W (FT)	LENGTH - L (FT)	THICKNESS (FT)	BOTTOM REINFORCING	TOP REINFORCING	WALL FTGS. $f_{bearing} = 1,200 \text{ psf}$
WF-1E	1'-4"	-	0'-10"		-	EXISTING FOOTING, V.I.F.
WF-2E	1'-10 1/2"	-	1'-0"		-	EXISTING FOOTING, V.I.F.
WF-1	2'-6"	-	1'-0"	(4)#5 CONT (LONG.) #5 @ 12" O.C. (TRANS.)	-	
WF-2	3'-6"	-	1'-0"	(4)#5 CONT (LONG.) #5 @ 12" O.C. (TRANS.)	-	
F4.0	4'-0"	4'-0"	1'-0"	(5)#5x3'-6" EA. WAY	-	
F5.0	5'-0"	5'-0"	1'-0"	(6)#5x4'-6" EA. WAY	-	

GENERAL FOOTING NOTES:  
1. ADD 6" TO WIDTH AND LENGTH OF FOOTING IF BANK POURING FOOTING. SIZE INDICATED ABOVE IS FOR DESIGN PURPOSES.  
2. BOTTOM OF FOOTING ELEVATIONS NOTED ABOVE ARE UNLESS OTHERWISE NOTED ON FOUNDATION PLANS OR DETAILS.

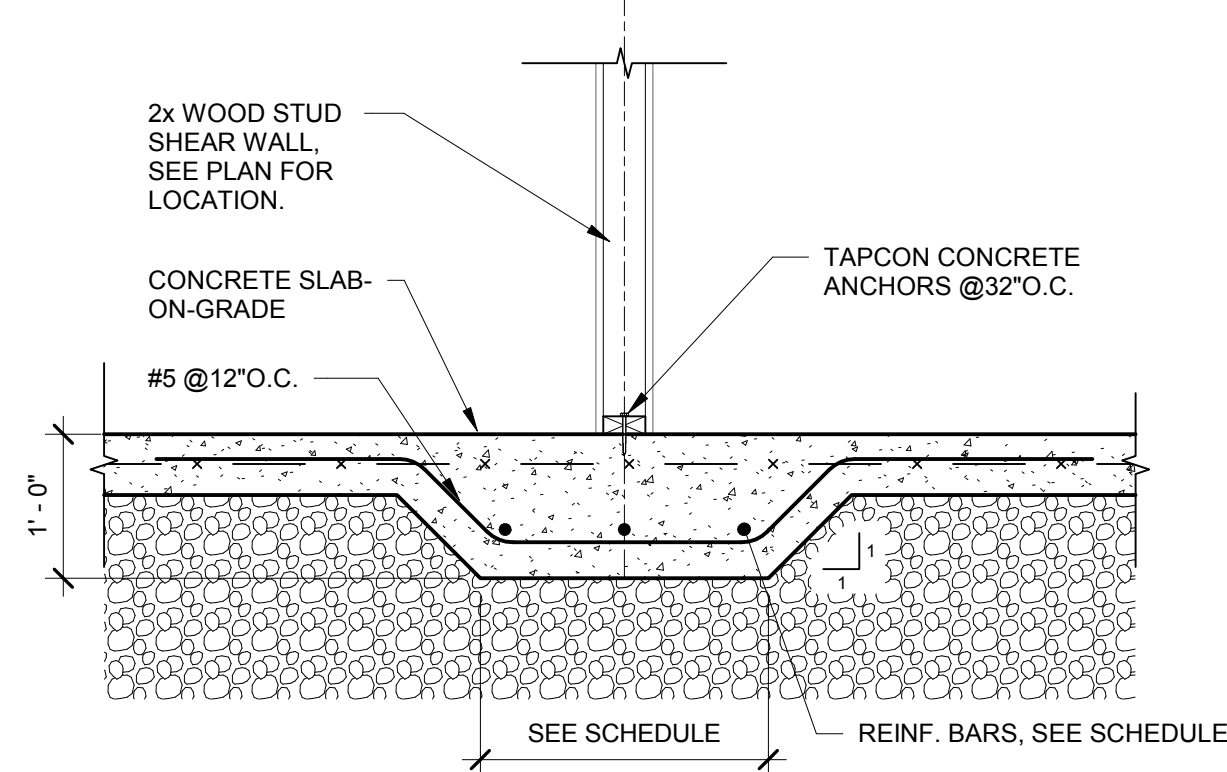
4 FOOTING SCHEDULE  
SCALE: 1" = 1'-0"



5 TYP. CONC. WALL CORNER, INTERSECTION AND CONSTRUCTION JOINT DETAILS  
SCALE: 3/4" = 1'-0"



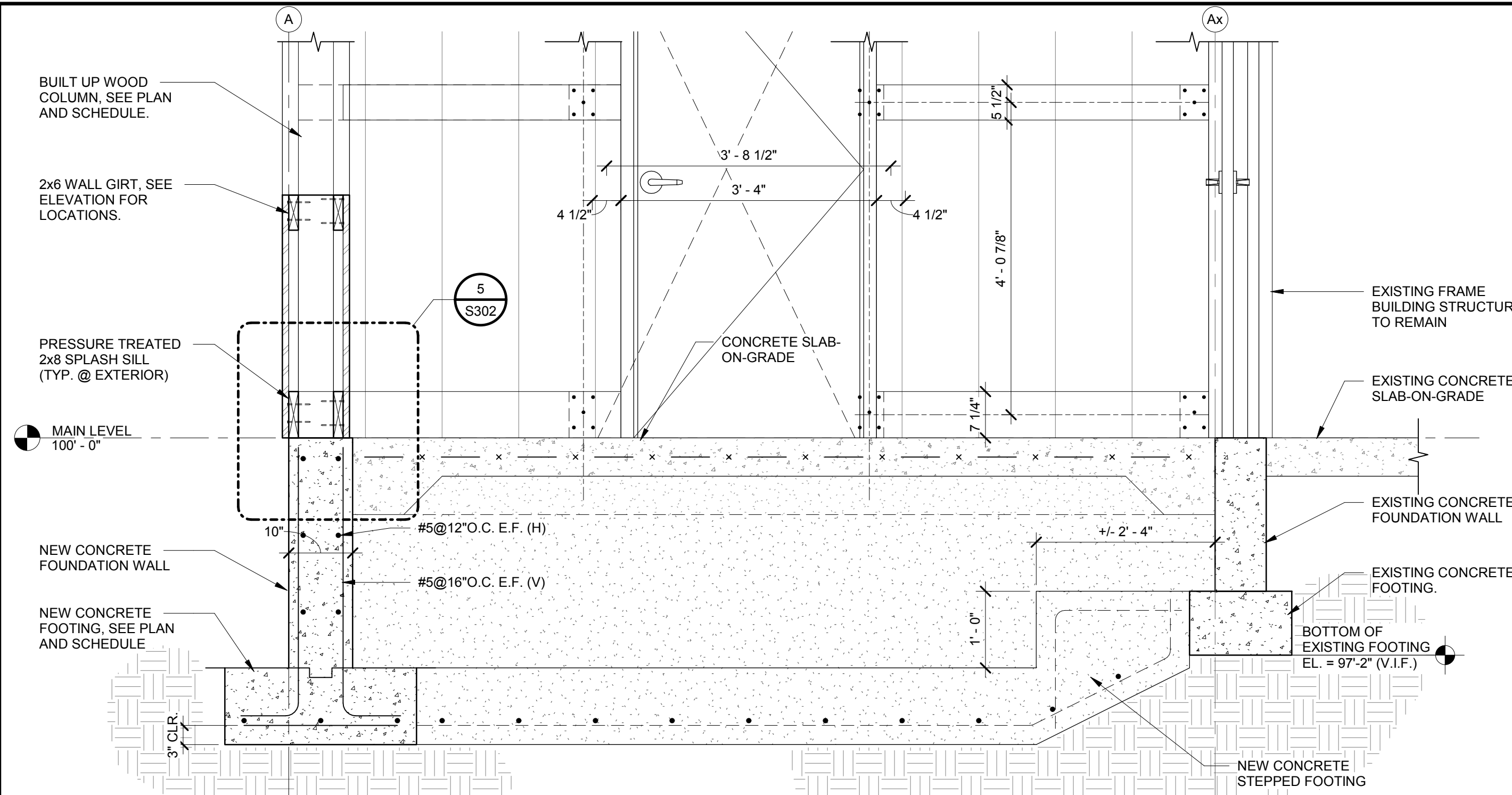
6 STEPPED FOOTING DETAIL  
SCALE: 1/2" = 1'-0"



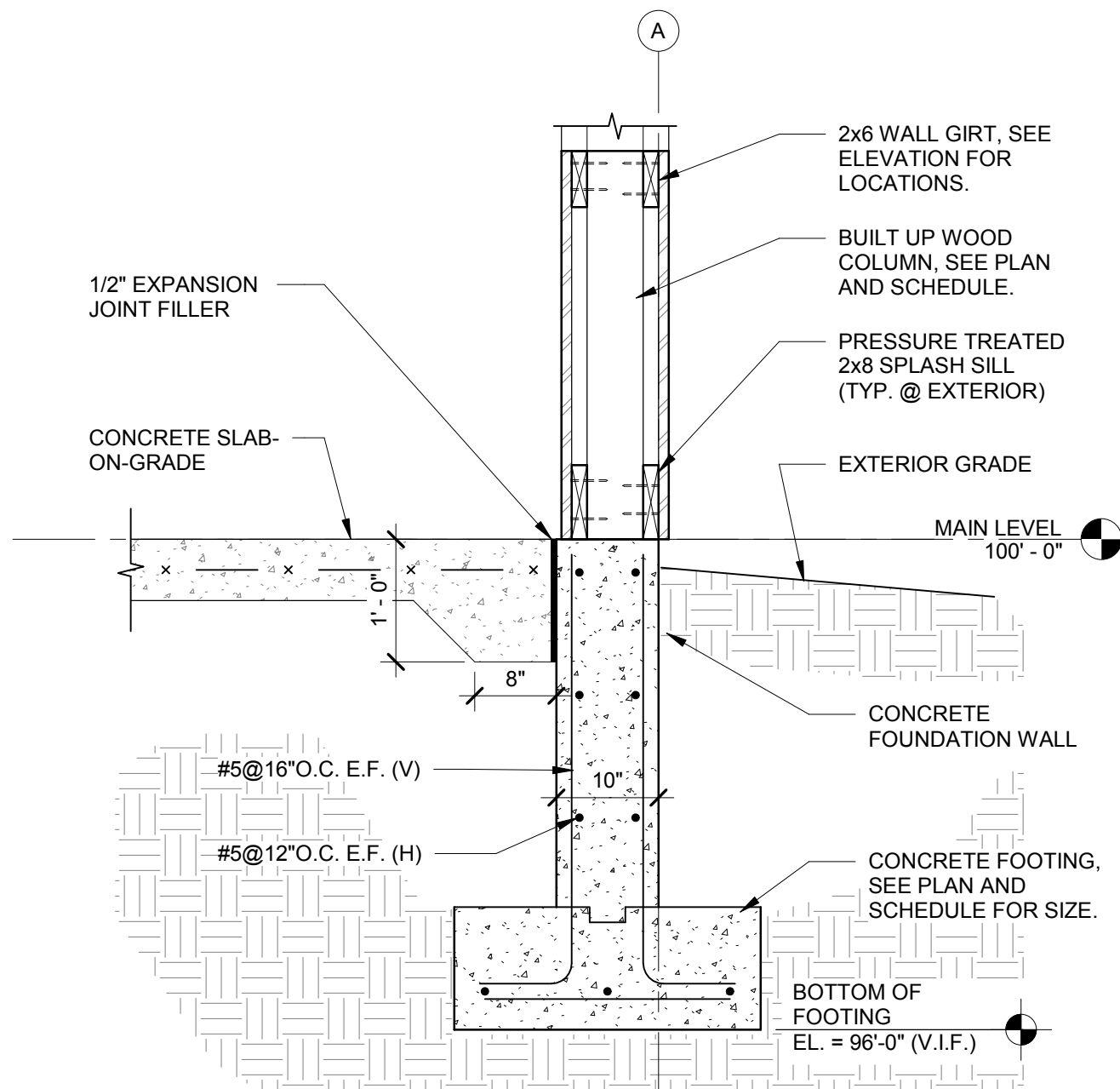
7 INTERIOR THICKENED SLAB DETAIL  
SCALE: 3/4" = 1'-0"

REVISIONS		
NO.	Date	Description

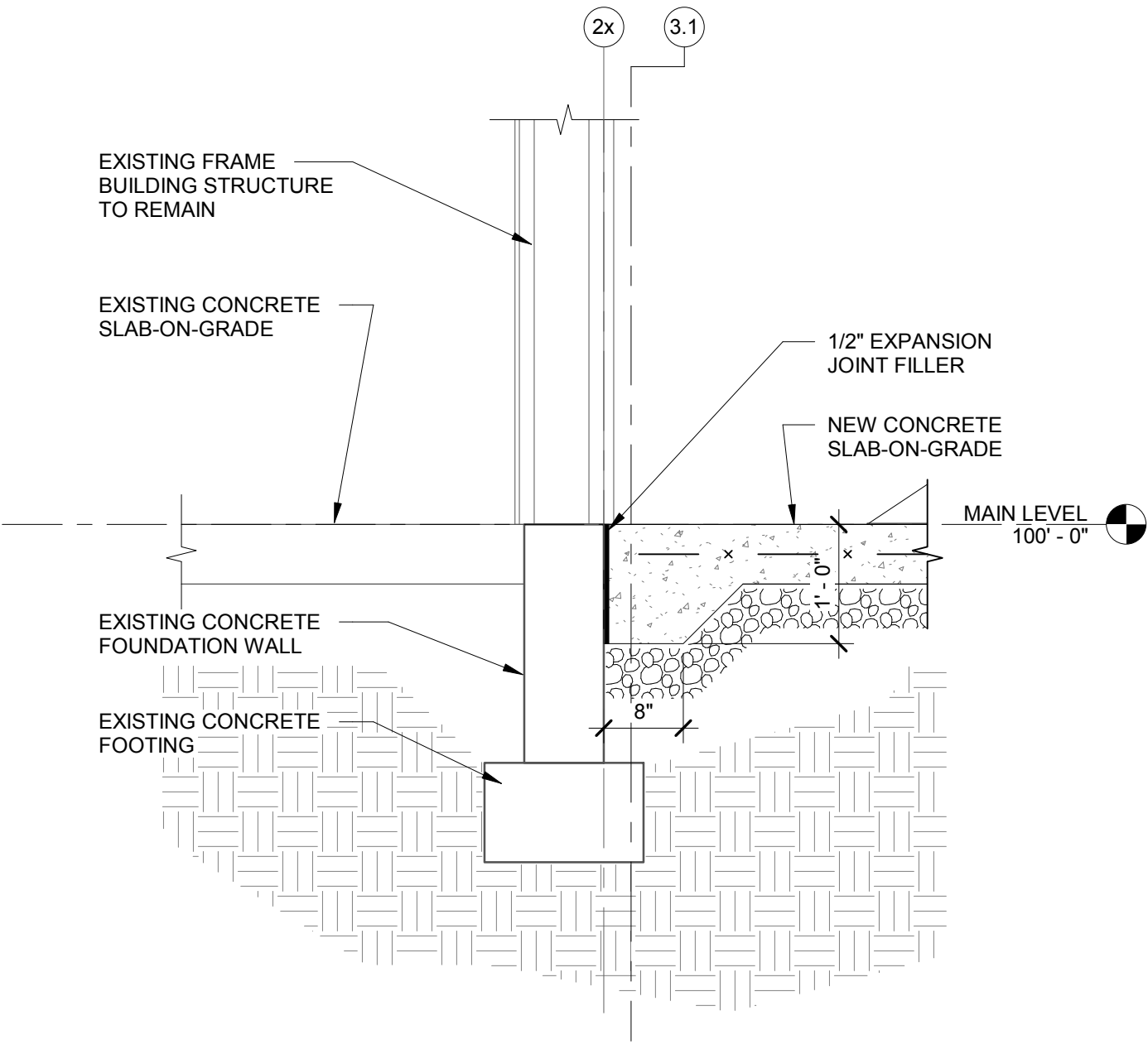




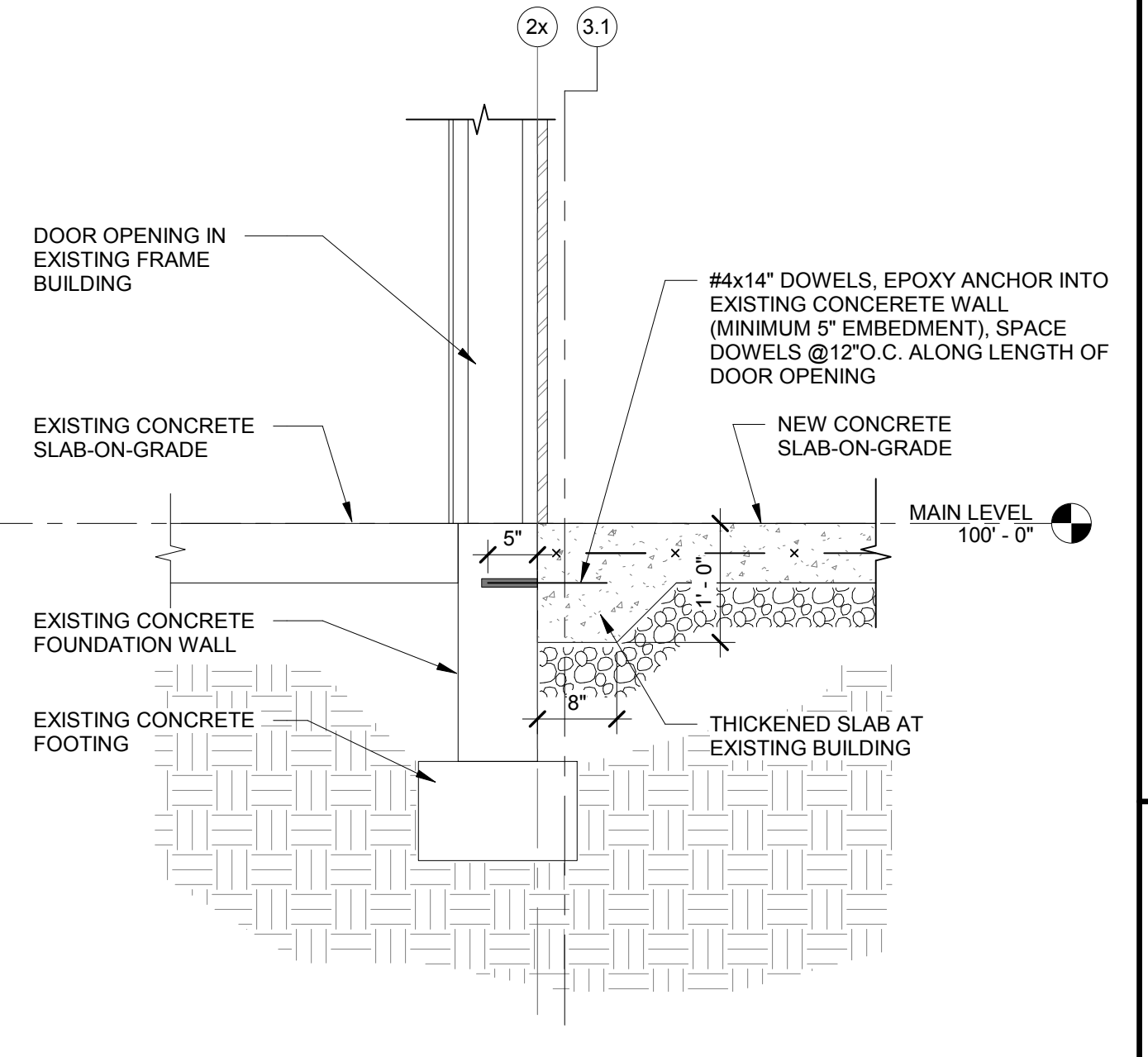
1 FOUNDATION DETAIL  
SCALE: 3/4" = 1'-0"



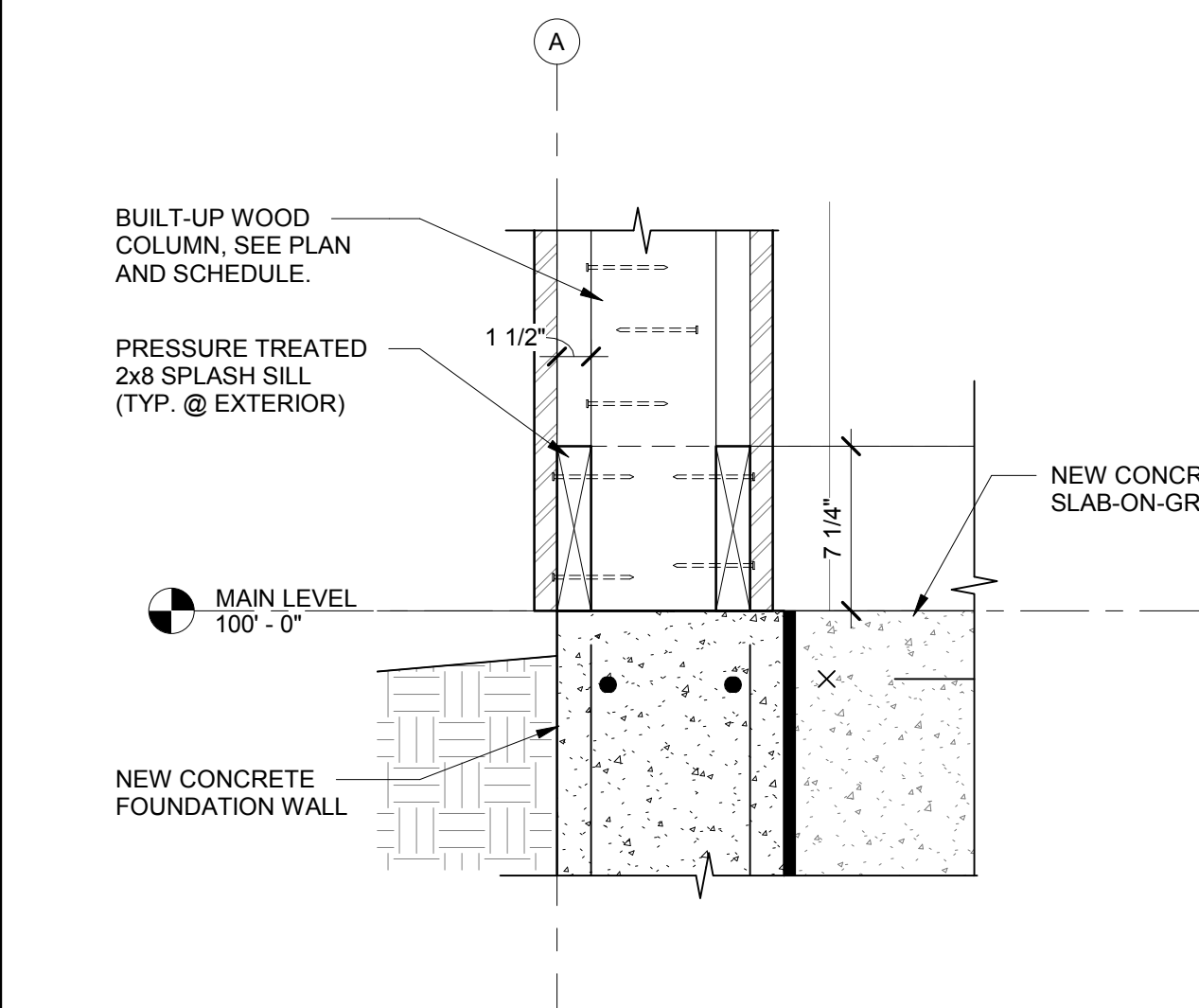
2 FOUNDATION DETAIL  
SCALE: 3/4" = 1'-0"



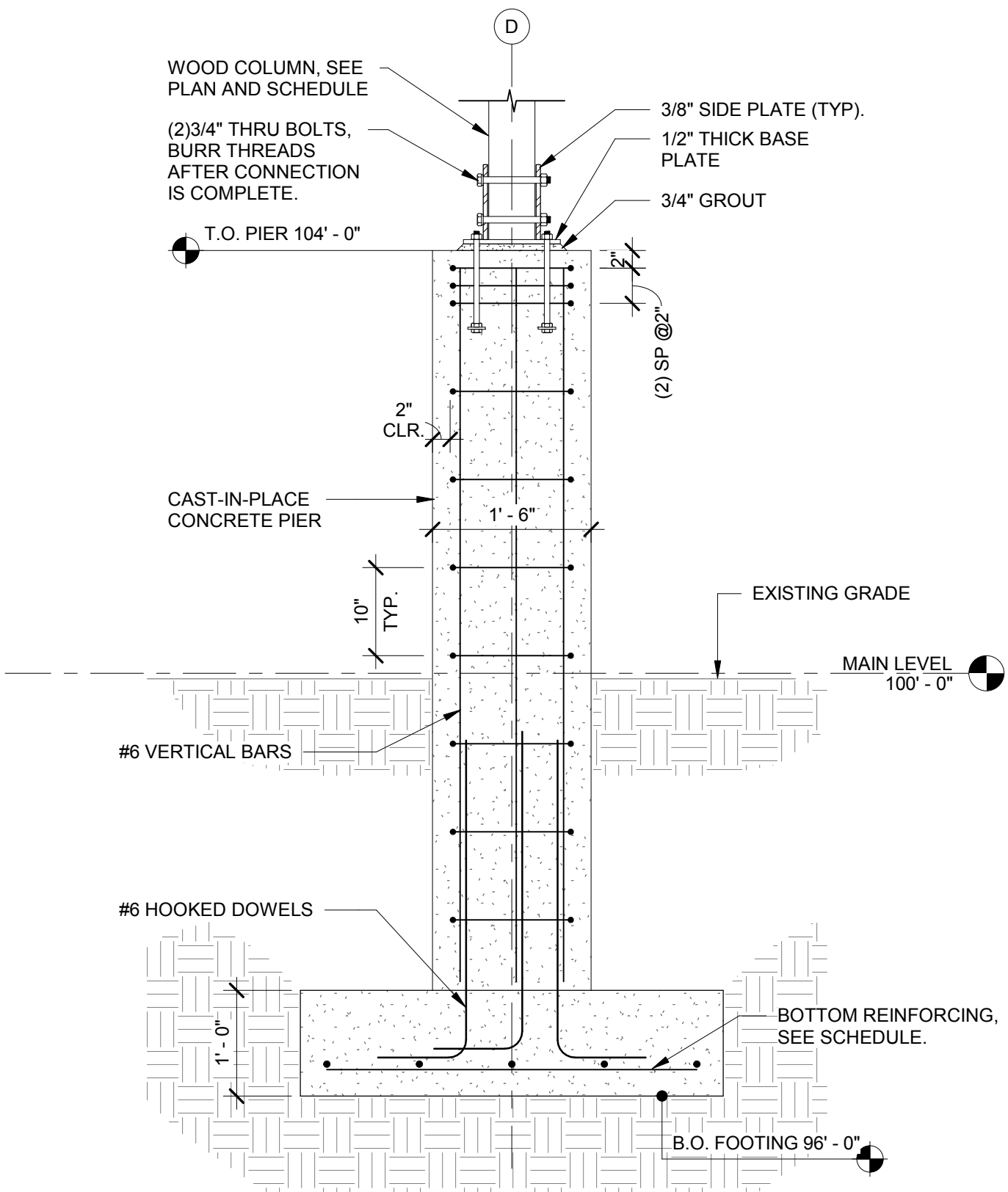
3 FOUNDATION DETAIL  
SCALE: 3/4" = 1'-0"



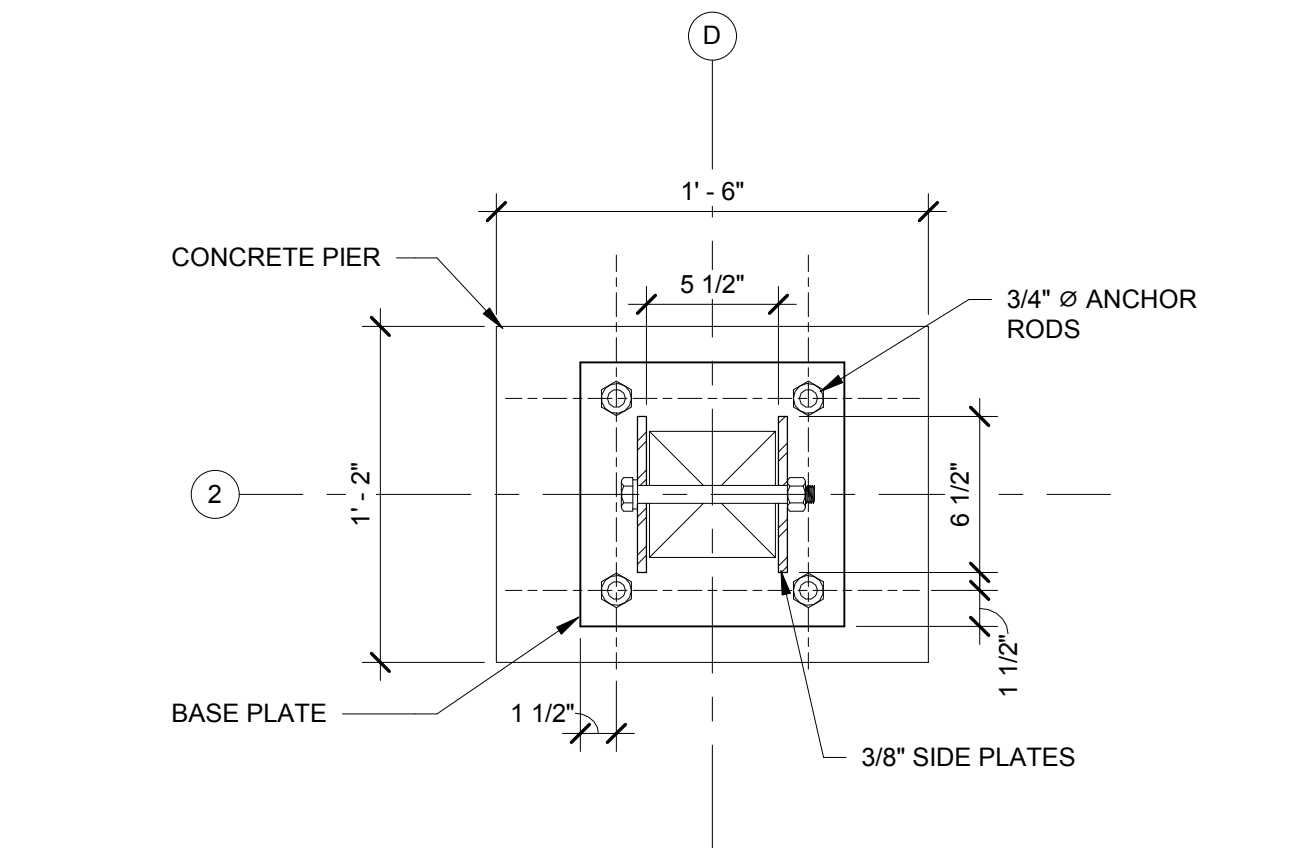
4 FOUNDATION DETAIL  
SCALE: 3/4" = 1'-0"



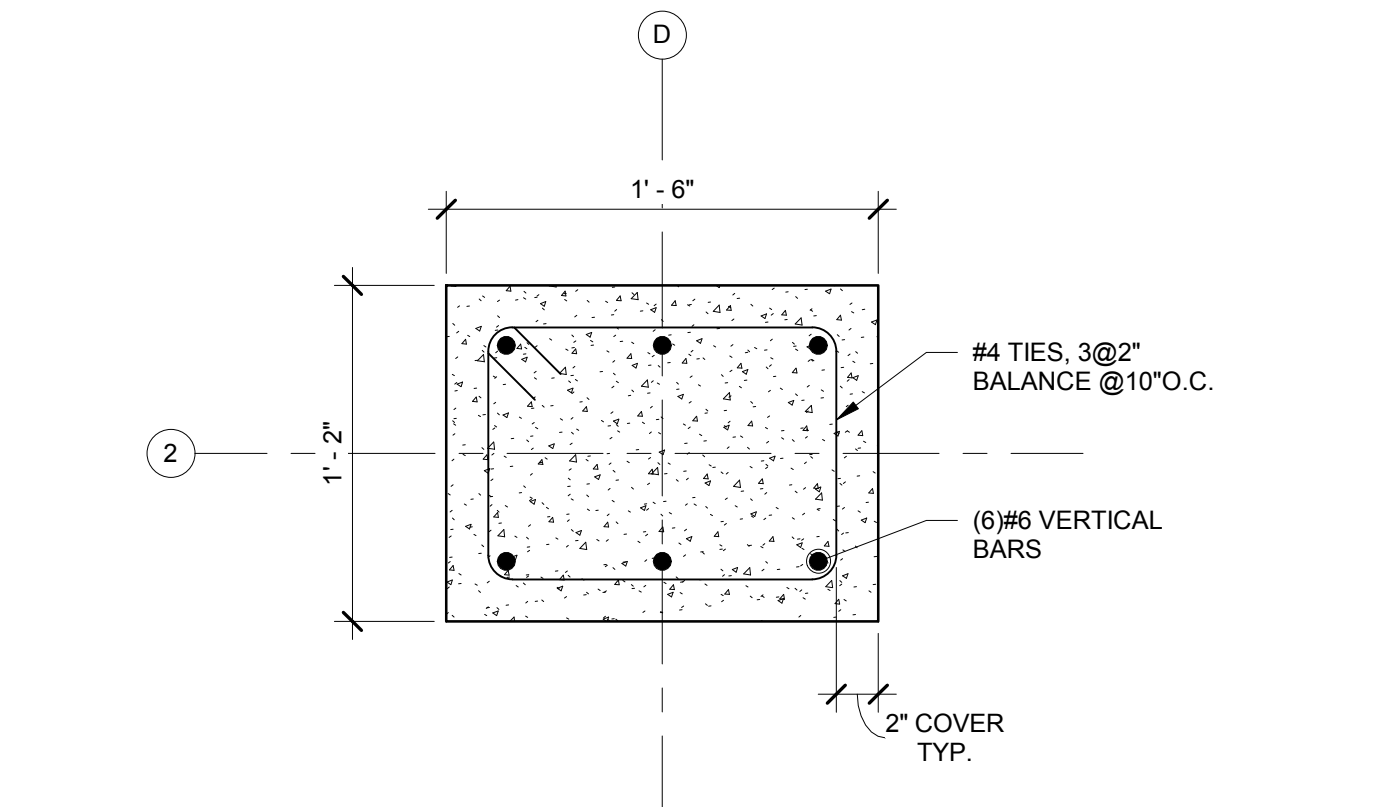
5 FOUNDATION DETAIL  
SCALE: 1 1/2" = 1'-0"



6 CANOPY FOUNDATION DETAIL  
SCALE: 3/4" = 1'-0"

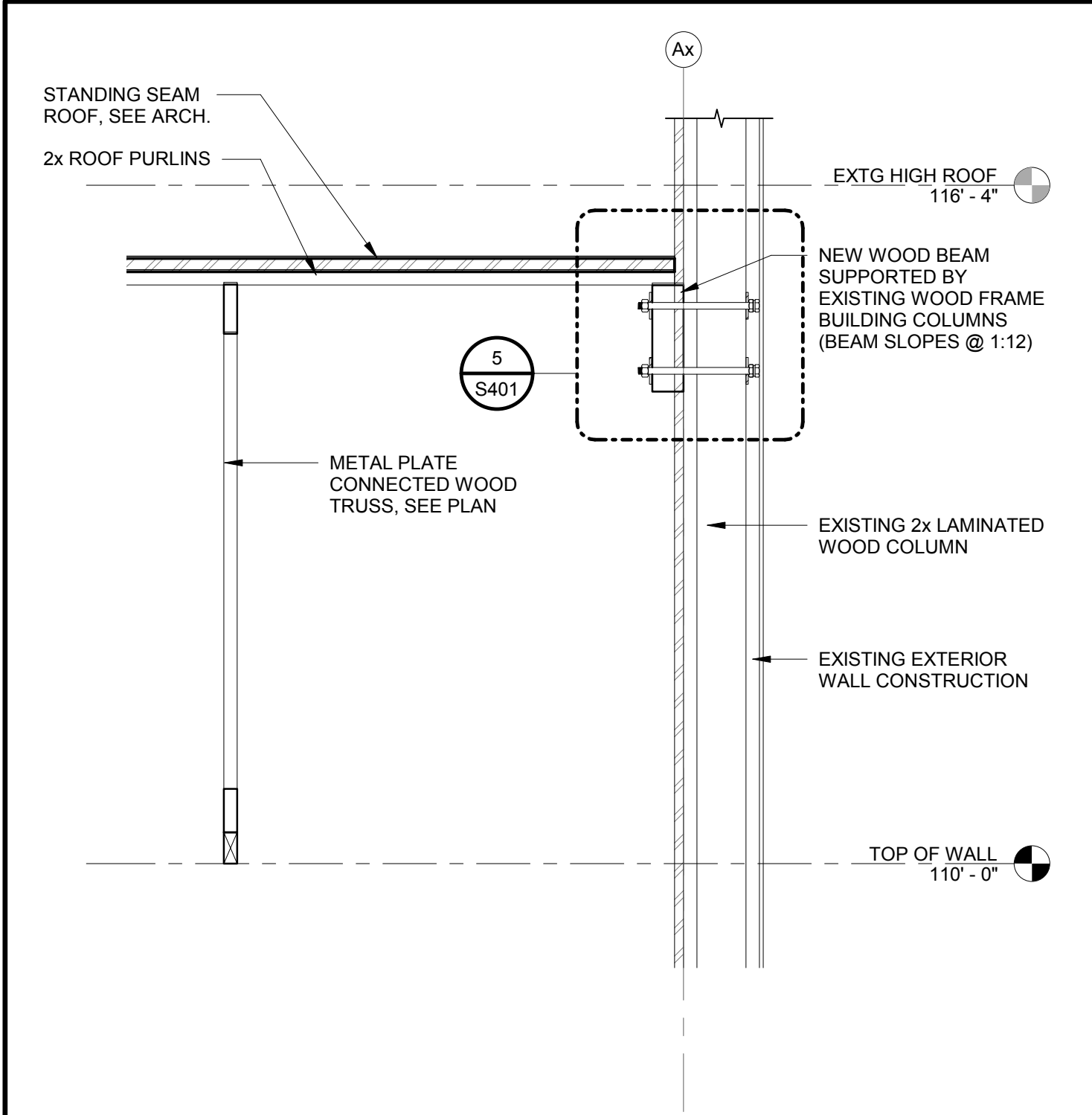


7 WOOD COLUMN BASE PLATE  
SCALE: 1 1/2" = 1'-0"

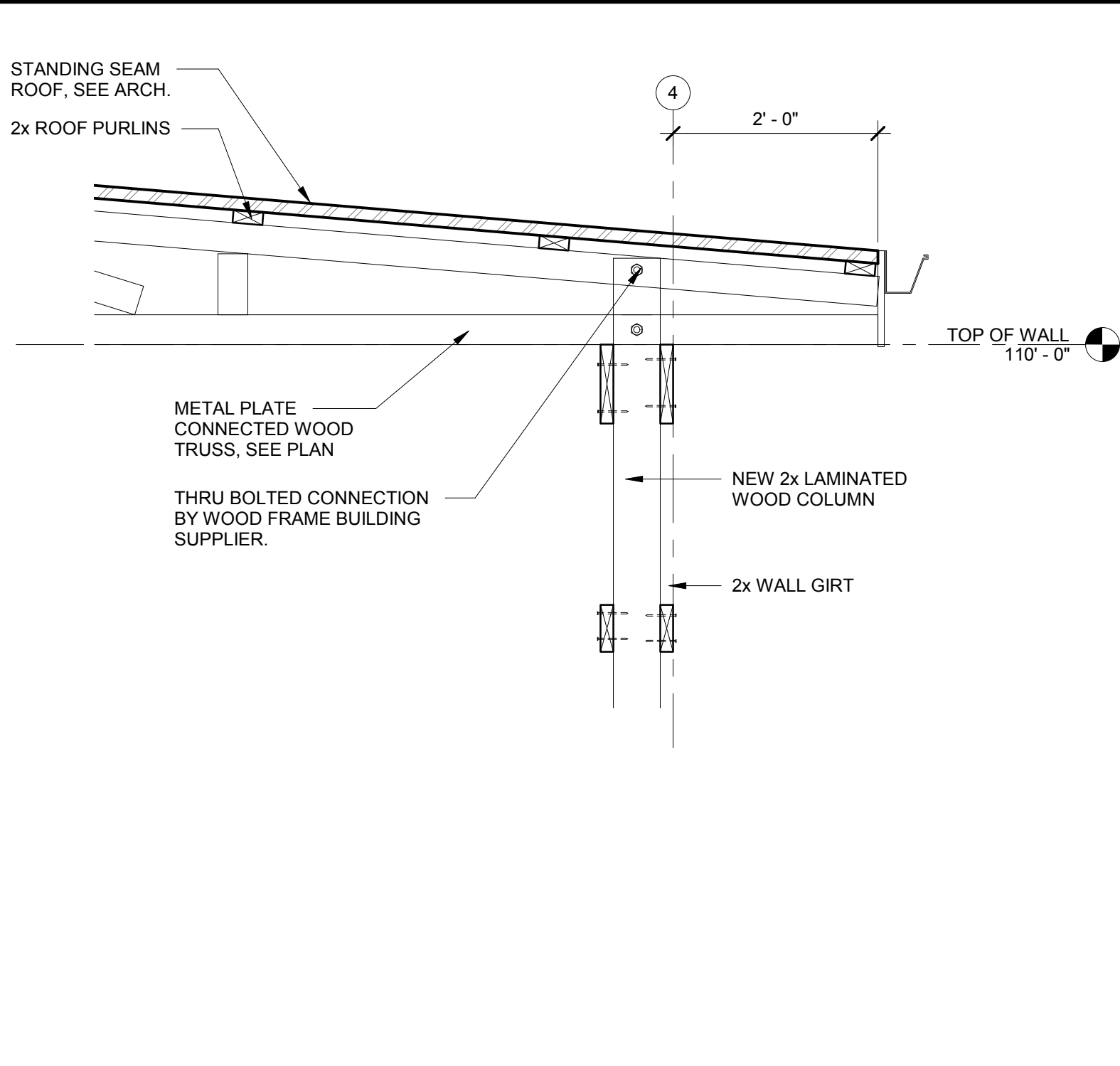


8 PIER DETAIL - P1.0  
SCALE: 1 1/2" = 1'-0"

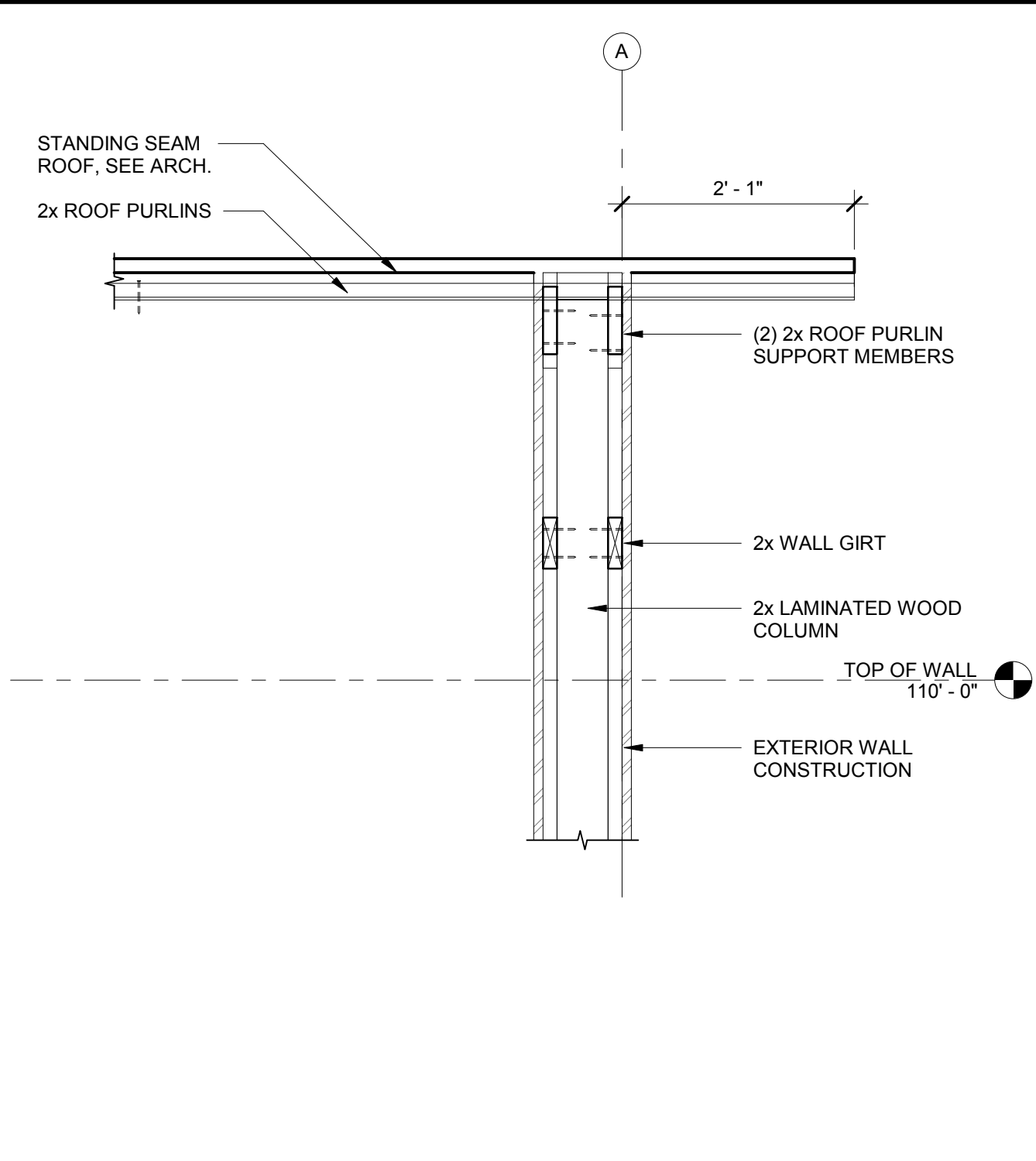




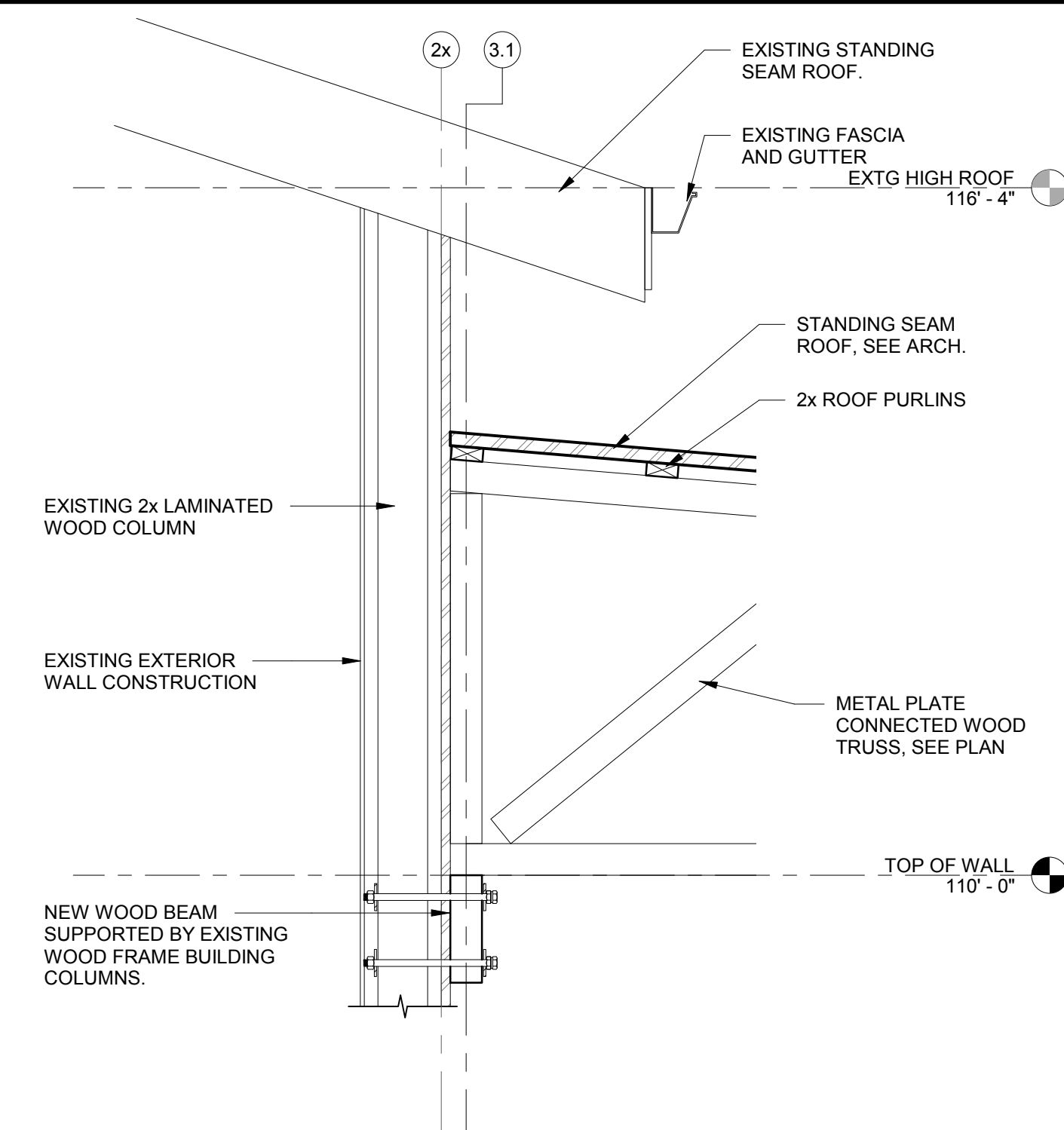
**1 FRAMING DETAIL**  
SCALE: 3/4" = 1'-0"



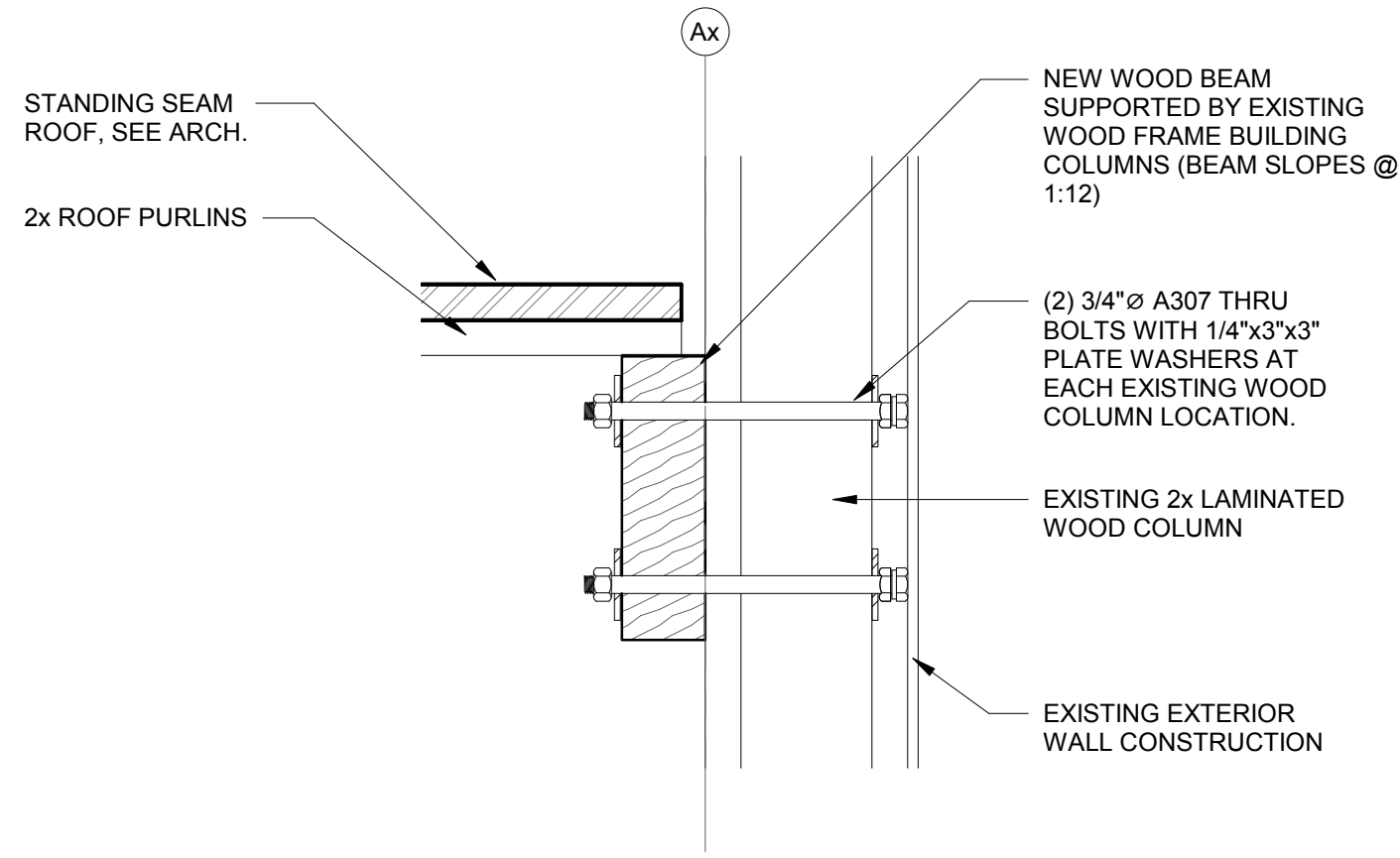
**2 FRAMING DETAIL**  
SCALE: 3/4" = 1'-0"



**3 FRAMING DETAIL**  
SCALE: 3/4" = 1'-0"



**4 FRAMING DETAIL**  
SCALE: 3/4" = 1'-0"



**5 WOOD BEAM CONNECTION DETAIL**  
SCALE: 1 1/2" = 1'-0"

OWNER:  
RALLS COUNTY R-II  
SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MO 63436

RALLS COUNTY R-II SCHOOL DISTRICT  
**AG BUILDING ADDITION**  
21622 HIGHWAY 19  
CENTER, MO 63436

**BIDDING PHASE**

**NOT FOR CONSTRUCTION**  
ISSUE DATE: 03/05/2021

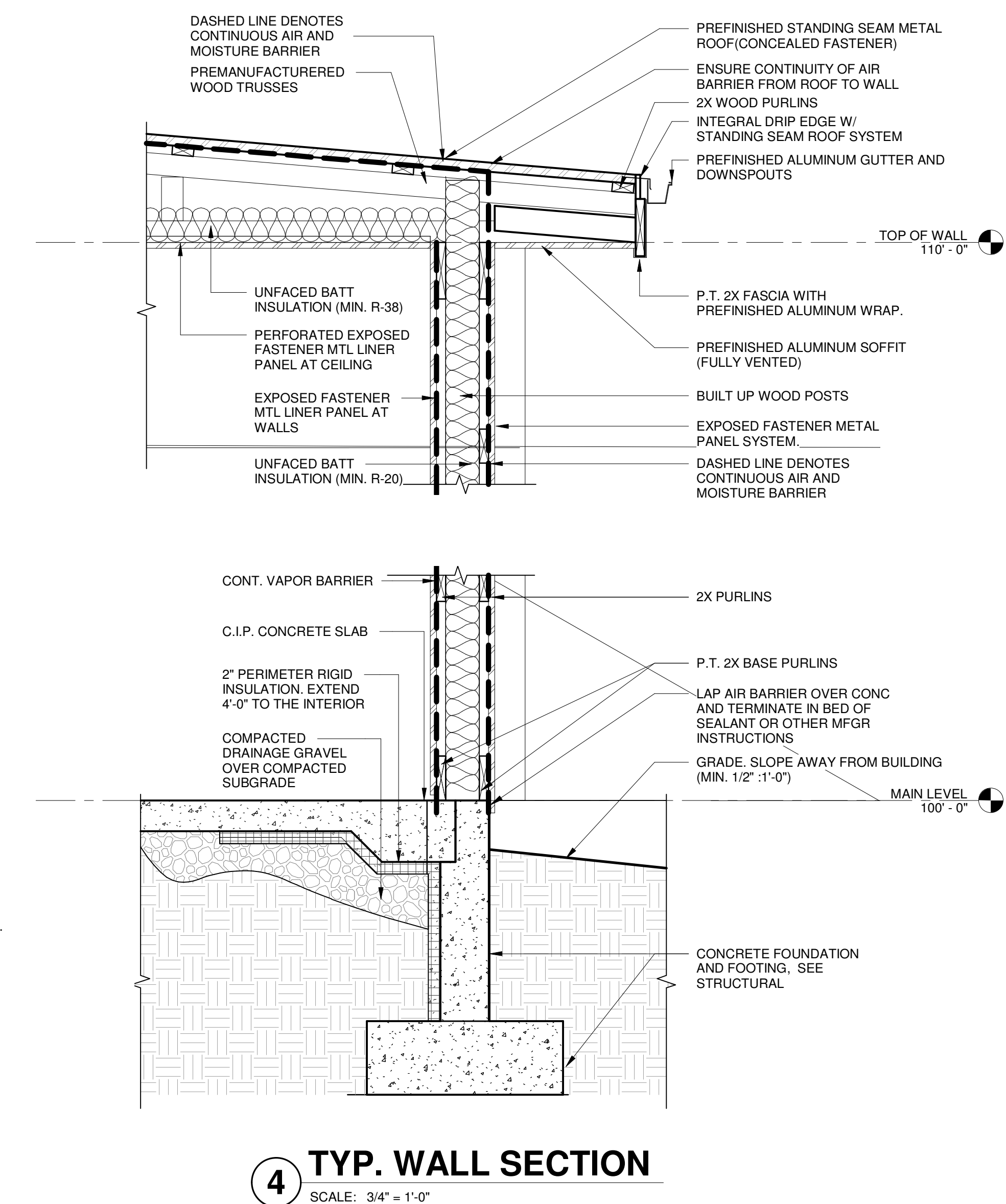
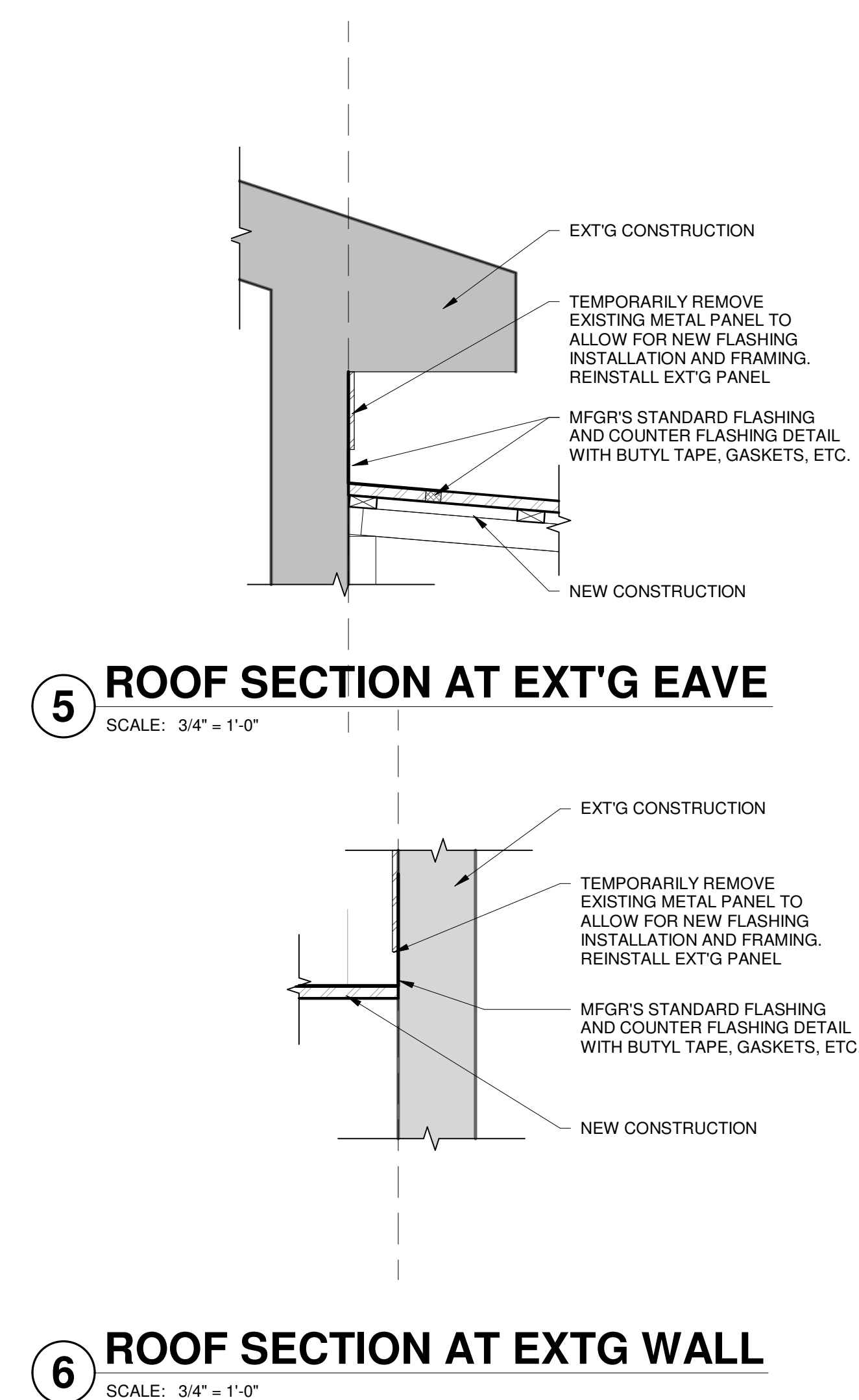
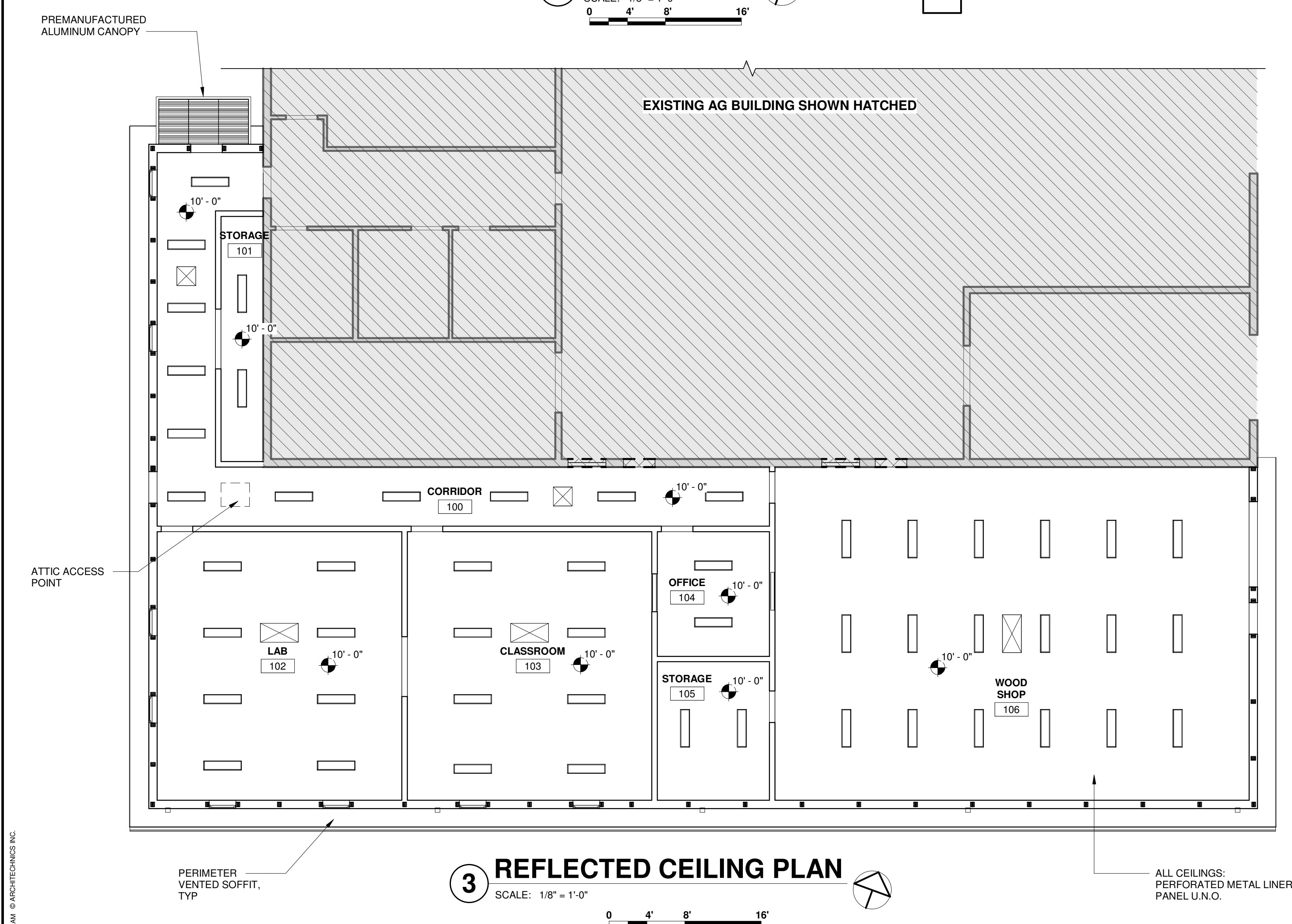
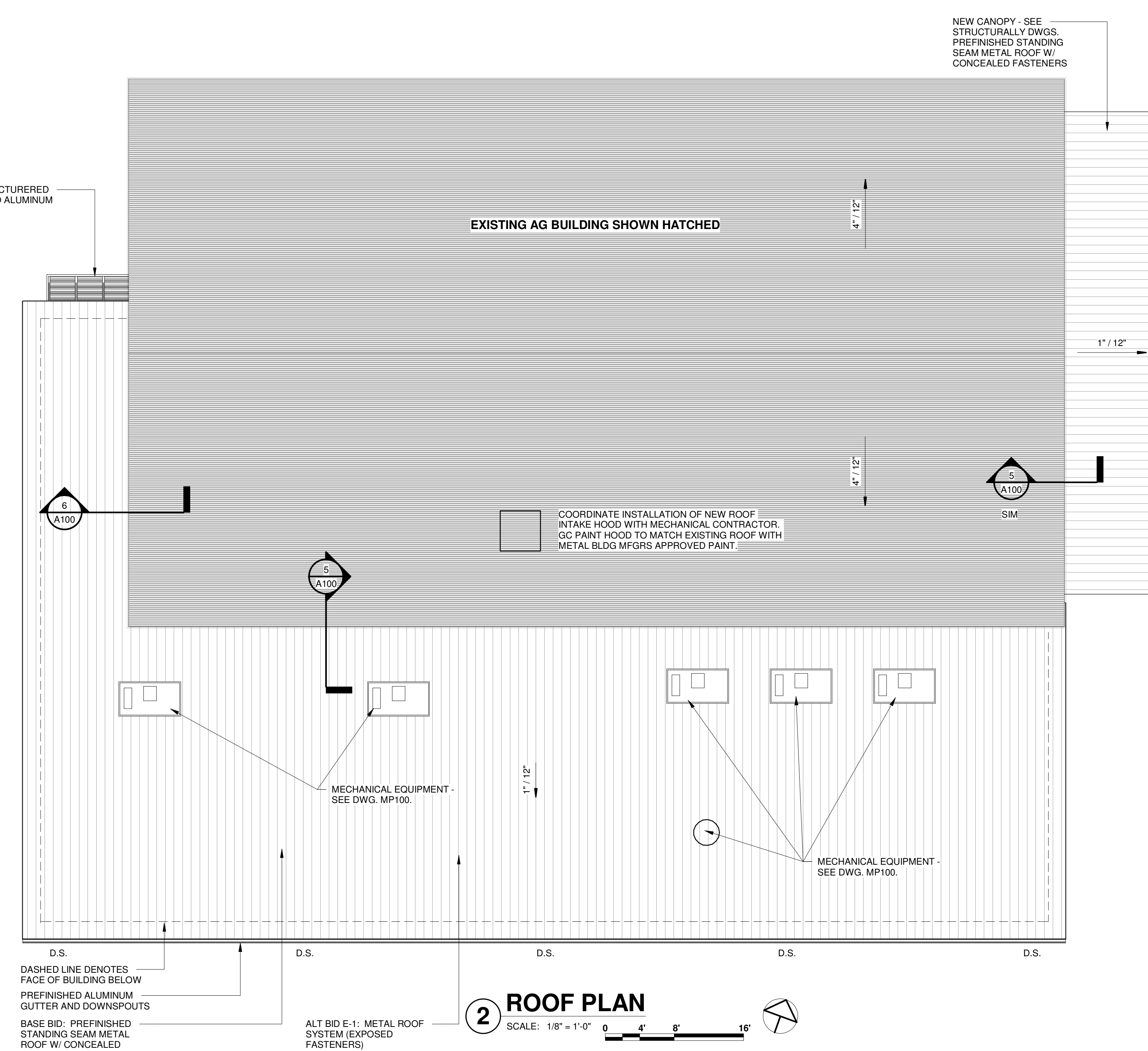
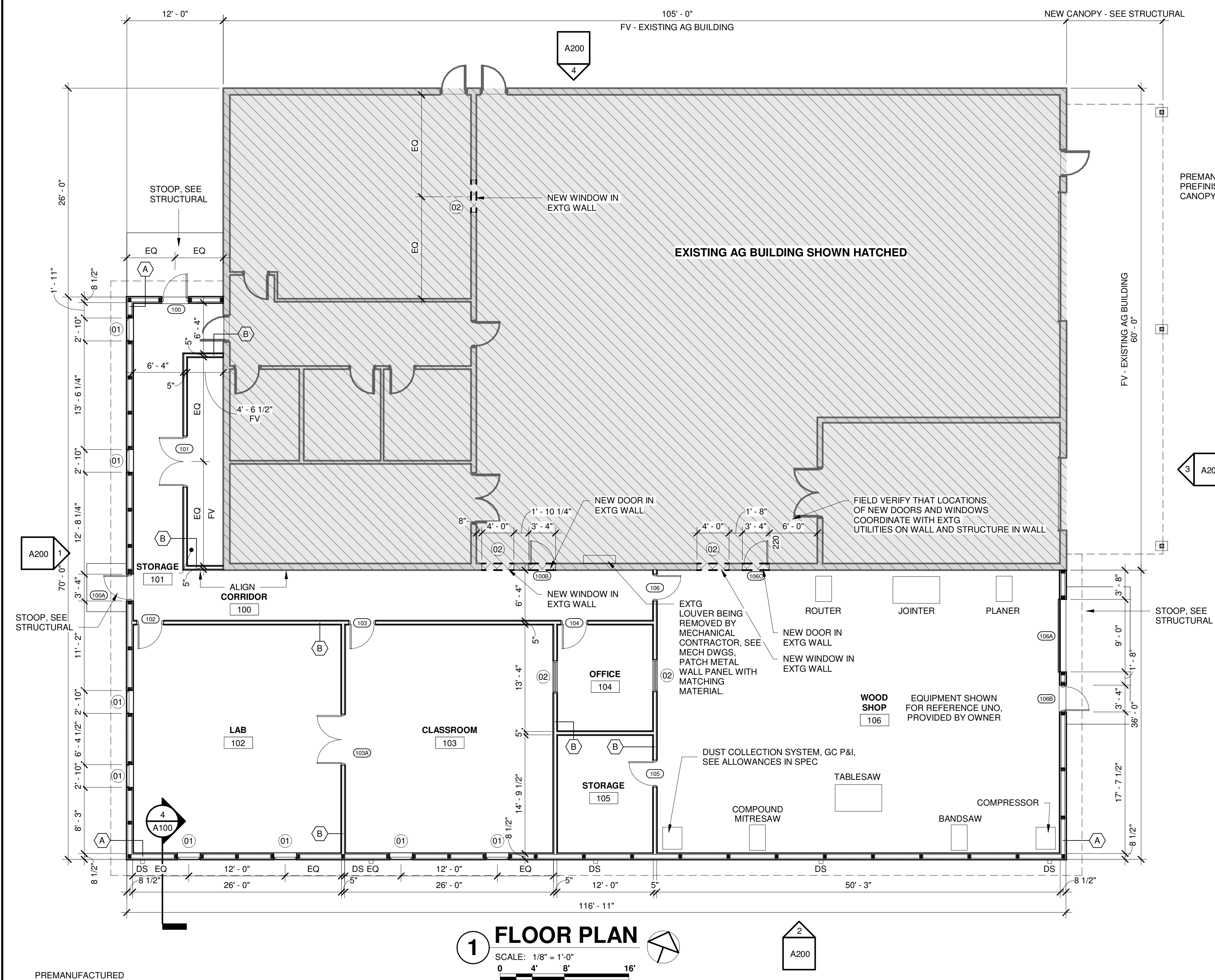
REVISIONS		
NO.	Date	Description

PROJECT NUMBER: 6036

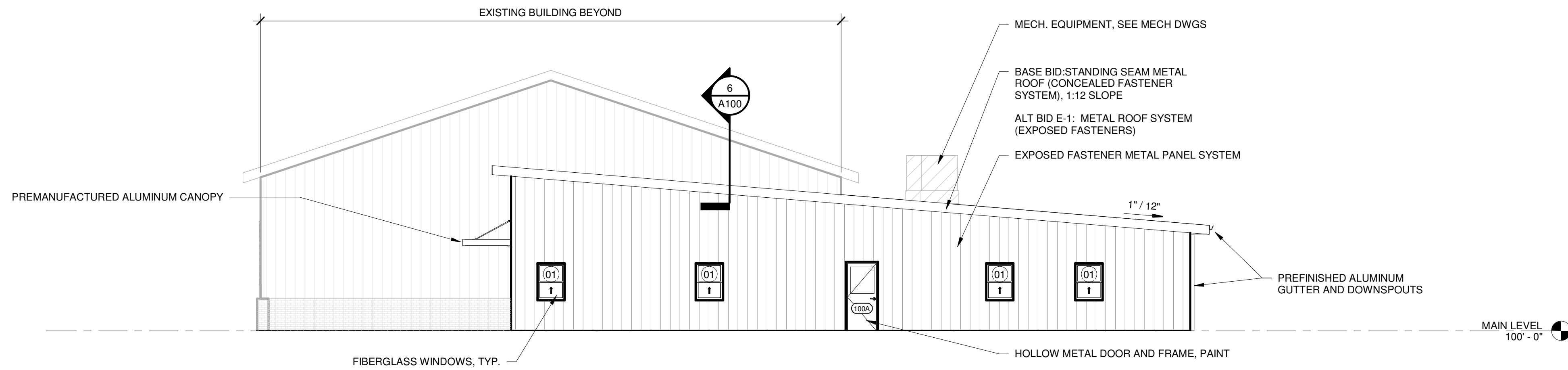
**FRAMING DETAILS**

DWG. NO.  
**S401**

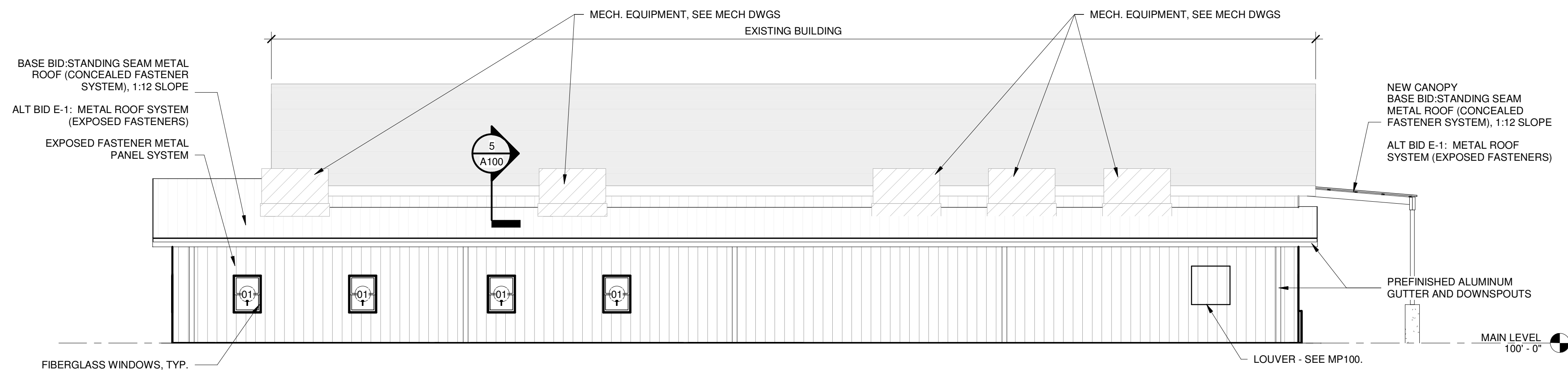




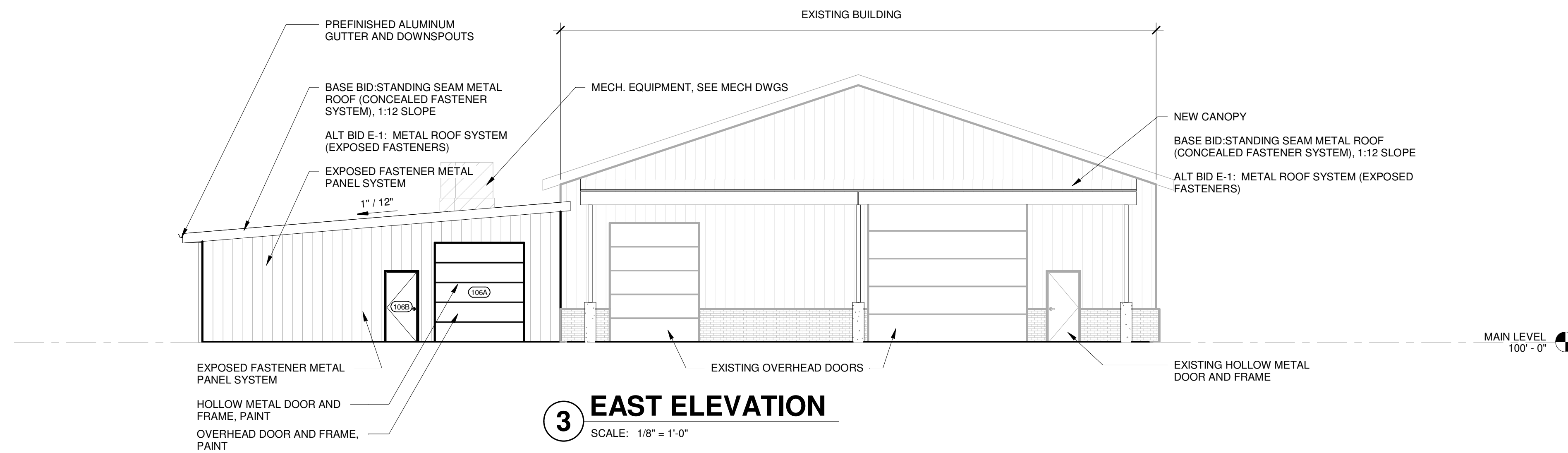




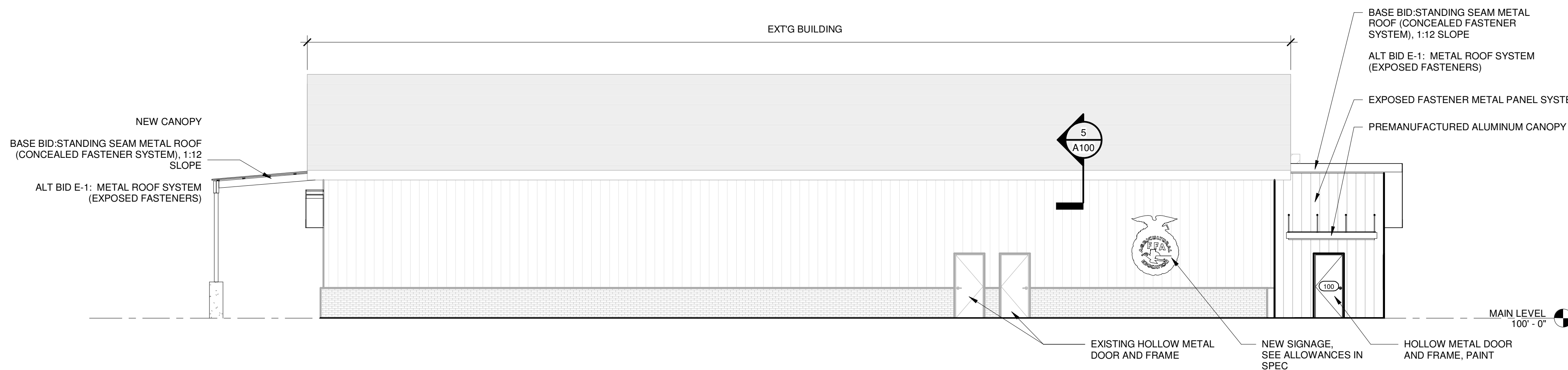
1 WEST ELEVATION  
SCALE: 1/8" = 1'-0"



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



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



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

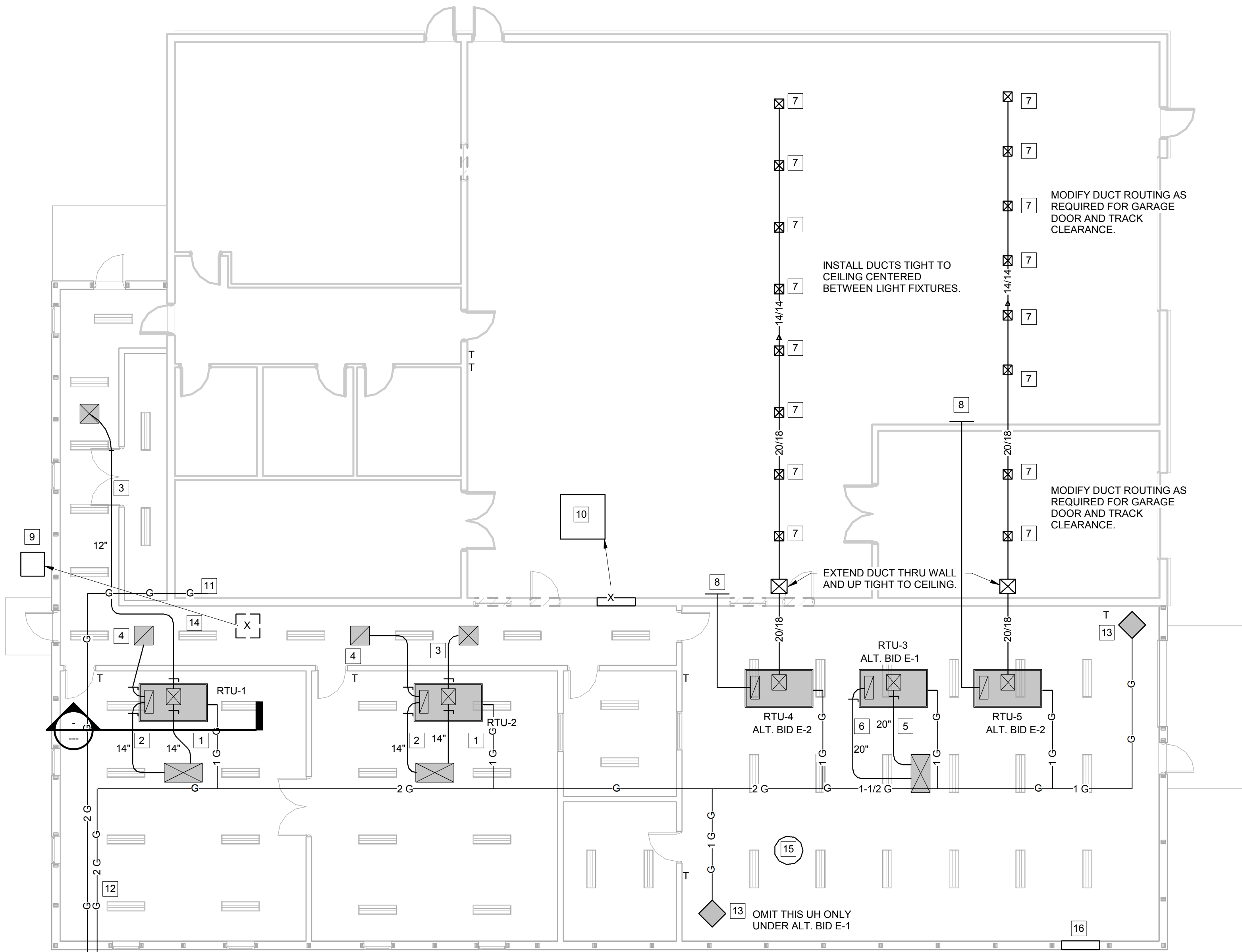
REVISIONS		
NO.	Date	Description



RTU-1, 2  
LENNOX OR EQUAL LGH036H4E  
240V, SINGLE PHASE, 24 MCA  
1200 CFM  
36 MBH DX COOLING  
70 MBH, 2 STAGE GAS HEAT  
ENTHALPY ECONOMIZER  
CO2 SENSOR FOR DEMAND CONTROL VENTILATION  
WIFI THERMOSTAT  
STEP DOWN CONCENTRIC DIFFUSER KIT  
FACTORY DISCONNECT  
CONVENIENCE OUTLET ON RTU-2 WIRED BY ELECTRICAL CONTRACTOR  
HAIL GUARDS  
14" COMPENSATING ROOF CURB FOR 1"12" PITCH  
INSTALL FULL SIZE SA/RA DUCT DOWN FROM UNIT WITH FLEX CONNECTION

RTU-3 - ALT. BID E-1  
LENNOX OR EQUAL LGH060H4E  
240V, SINGLE PHASE, 41 MCA  
2000 CFM  
FACTORY RA SMOKE DETECTOR  
60 MBH DX COOLING  
108 MBH, 2 STAGE GAS HEAT  
ENTHALPY ECONOMIZER  
CO2 SENSOR FOR DEMAND CONTROL VENTILATION  
WIFI THERMOSTAT  
STEP DOWN CONCENTRIC DIFFUSER KIT  
FACTORY DISCONNECT  
CONVENIENCE OUTLET WIRED BY ELECTRICAL CONTRACTOR  
HAIL GUARDS  
14" COMPENSATING ROOF CURB FOR 1"12" PITCH  
INSTALL FULL SIZE SA/RA DUCT DOWN FROM UNIT WITH FLEX CONNECTION

RTU-4, 5 - ALT. BID E-2  
LENNOX OR EQUAL LGH060H4E  
240V, SINGLE PHASE, 41 MCA  
2000 CFM  
FACTORY RA SMOKE DETECTOR  
60 MBH DX COOLING  
108 MBH, 2 STAGE GAS HEAT  
ENTHALPY ECONOMIZER  
CO2 SENSOR FOR DEMAND CONTROL VENTILATION  
WIFI THERMOSTAT  
FACTORY DISCONNECT  
CONVENIENCE OUTLET ON RTU-4 WIRED BY ELECTRICAL CONTRACTOR  
HAIL GUARDS  
14" COMPENSATING ROOF CURB FOR 1"12" PITCH  
INSTALL FULL SIZE SA/RA DUCT DOWN FROM UNIT WITH FLEX CONNECTION



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

KEYED NOTES MECHANICAL

- 1 EXTEND 14" RIGID SA DUCT WITH DAMPER FROM RTU OVER TO CONCENTRIC DIFFUSER KIT.
- 2 EXTEND 14" RIGID RA DUCT WITH DAMPER FROM RTU OVER TO CONCENTRIC DIFFUSER KIT.
- 3 EXTEND 12" RIGID SA DUCT WITH DAMPER FROM RTU OVER TO 24/24 ALUMINUM SA DIFFUSER WITH 12" DUCT CONNECTION, 2 WAY THROW. BALANCE TO 400 CFM. BALANCE TO 400 CFM.
- 4 EXTEND 12" RIGID RA DUCT WITH DAMPER FROM RTU OVER TO 24/24 EGG CRATE GRILLE WITH 12" DUCT CONNECTION.
- 5 EXTEND 20" RIGID SA DUCT WITH DAMPER FROM RTU OVER TO CONCENTRIC DIFFUSER KIT.
- 6 EXTEND 20" RIGID RA DUCT WITH DAMPER FROM RTU OVER TO CONCENTRIC DIFFUSER KIT.
- 7 INSTALL 10/10 ALUMINUM SA DIFFUSER WITH INTEGRAL DAMPER ON BOTTOM OF DUCT.
- 8 INSTALL 30/12 ALUMINUM RA GRILLE IN WALL. CLEAR OF CONDUITS, ETC.
- 9 MODIFY EXISTING REFRIGERANT PIPING, CONTROL WIRING, ETC AS REQUIRED AND RELOCATE EXISTING CONDENSING UNIT AND BASE TO NEW LOCATION SHOWN. COORDINATE WITH ELECTRICAL CONTRACTOR.
- 10 RELOCATE EXISTING WALL LOUVER AND DAMPER TO CEILING CENTERED BETWEEN EXISTING LIGHT FIXTURES. EXTEND 48/48 DUCT UP AND TRANSITION TO 30/30 DUCT UP TO NEW VENT PRODUCTS 6200 SERIES OR EQUAL INTAKE HOOD WITH 30/30 THROAT, PAINT GRIP FINISH, AND 24" ROOF CURB. COORDINATE WITH ROOFING AND ELECTRICAL CONTRACTORS.
- 11 EXTEND NEW 2" GAS PIPING FROM NEW REGULATOR UP ON WALL AND CONCEALED ACROSS ATTIC AND CONNECT TO EXISTING GAS PIPING IN EXISTING BUILDING.
- 12 EXTEND NEW 2" GAS PIPING FROM NEW REGULATOR UP ON WALL AND CONCEALED ACROSS ATTIC AND CONNECT TO NEW EQUIPMENT AS SHOWN.
- 13 INSTALL NEW LENNOX OR EQUAL LF25-075 GAS UNIT HEATER WITH CEILING BRACKET AND REMOTE THERMOSTAT. EXTEND VENT PIPING THRU EXTERIOR WALL AND TERMINATE WITH WALL CAP.
- 14 MODIFY EXISTING PIPING AS REQUIRED AND INSTALL NEW BRASS PLUMBING CLEANOUT IN NEW FINISH FLOOR. COORDIANTE WITH GC.
- 15 INSTALL NEW TWIN CITY OR EQUAL DCRD180B EXHAUST FAN ON 14" COMPENSATING ROOF CURB. 3000 CFM, 120V, 1 HP, WITH BACKDRAFT DAMPER, BIRD SCREEN, SPEED CONTROLLER, AND DISCONNECT. INTERCONNECT WITH WALL LOUVER AUTO DAMPER (NOTE 16) OPERATION.
- 16 INSTALL NEW AIR BALANCE OR EQUAL 46W" X 54H A435 ALUMINUM LOUVER WITH WALL SLEEVE FOR 12" WALL AND BIRD SCREEN. INCLUDE A651 MOTORIZED DAMPER WITH PROVING SWITCH AND CONNECT TO EXHAUST FAN OPERATION.

OWNER:  
BALLS COUNTY R-4  
SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MO 63436

RALLS COUNTY R-4 SCHOOL DISTRICT  
AG BUILDING ADDITION

21622 HIGHWAY 19  
CENTER, MO 63436

BIDDING PHASE

NOT FOR CONSTRUCTION

ISSUE DATE: 03/05/2021

REVISIONS

NO.	Date	Description

PROJECT NUMBER: 6036

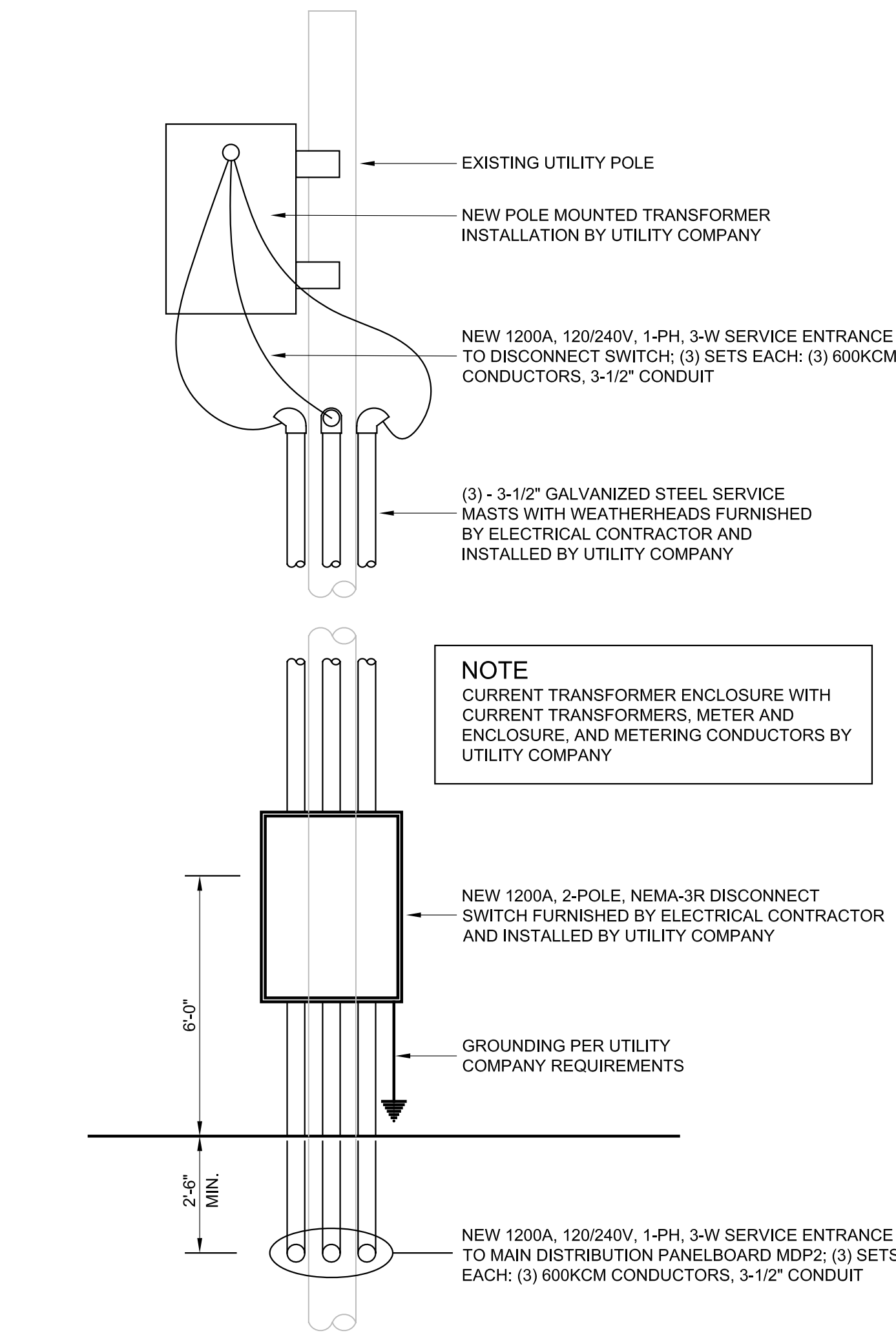
MECHANICAL/PLUMBING PLAN

DWG. NO.

MP100

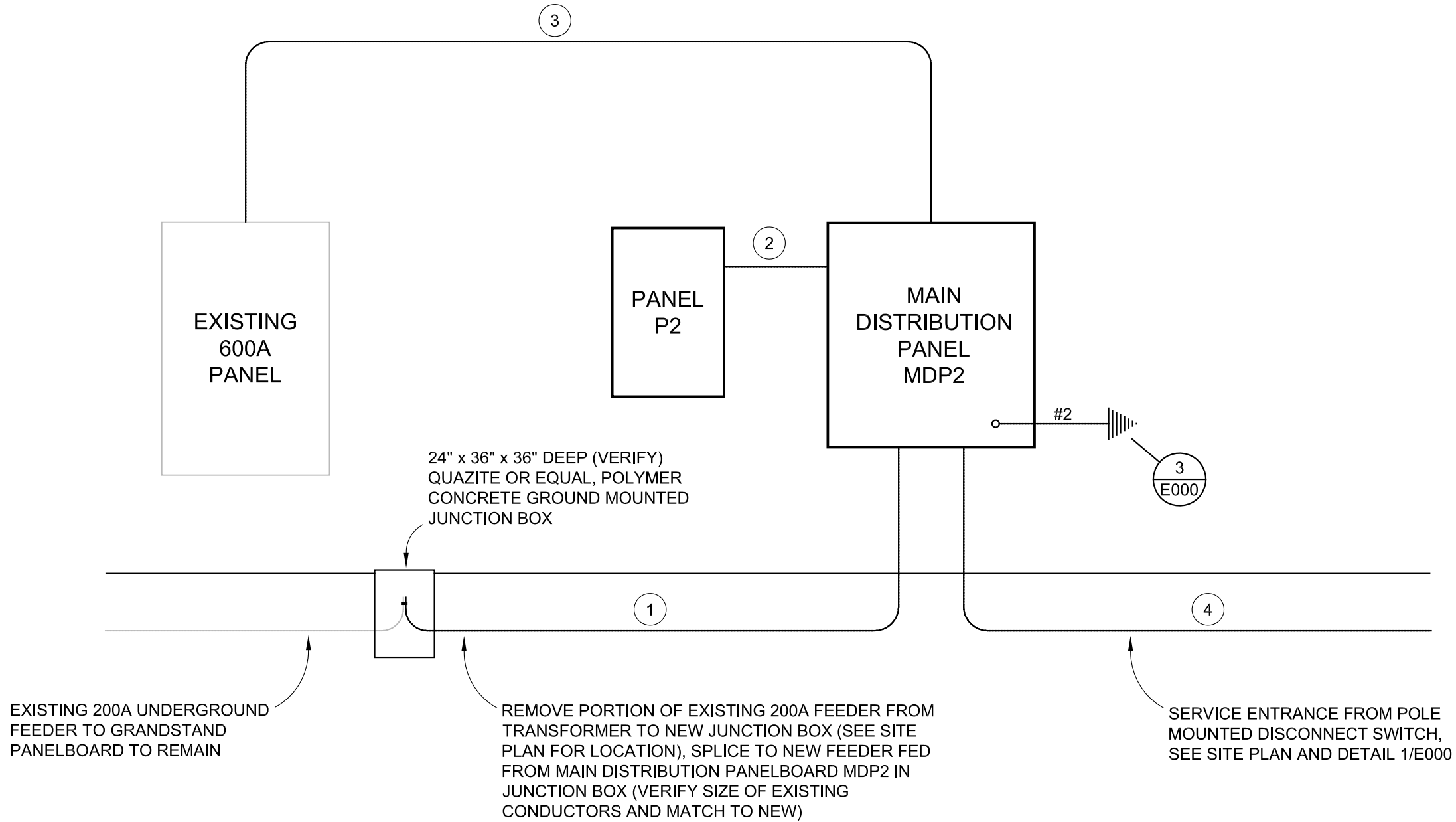


ELECTRICAL SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
	SINGLE POLE TOGGLE SWITCH, 20 AMP, 120 VOLT
	JUNCTION BOX WITH COVER, SIZE PER CODE
	DUPLEX RECEPTACLE, NEMA 5-20R, 20 AMP, 125 VOLT
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, NEMA 5-20R, 20 AMP, 125 VOLT
	SINGLE RECEPTACLE, 240 VOLT (SEE PLANS FOR NEMA CONFIGURATION)
	FIRE ALARM MANUAL PULL STATION
	SMOKE DETECTOR
	FIRE ALARM AUDIBLE / VISUAL SIGNAL DEVICE (15cd UNLESS NOTED OTHERWISE)
	FIRE ALARM VISUAL SIGNAL DEVICE (15cd UNLESS NOTED OTHERWISE)
	FIRE ALARM CONTROL PANEL
	MOTOR CONNECTION
	FUSED DISCONNECT SWITCH (A / P / F INDICATES AMP RATING / NO. POLES / FUSE AMPS)
	PANELBOARD
	GROUNDING POINT
	ELECTRICAL CIRCUIT DESIGNATION
	DRAWING NOTE SYMBOL
	WEATHERPROOF

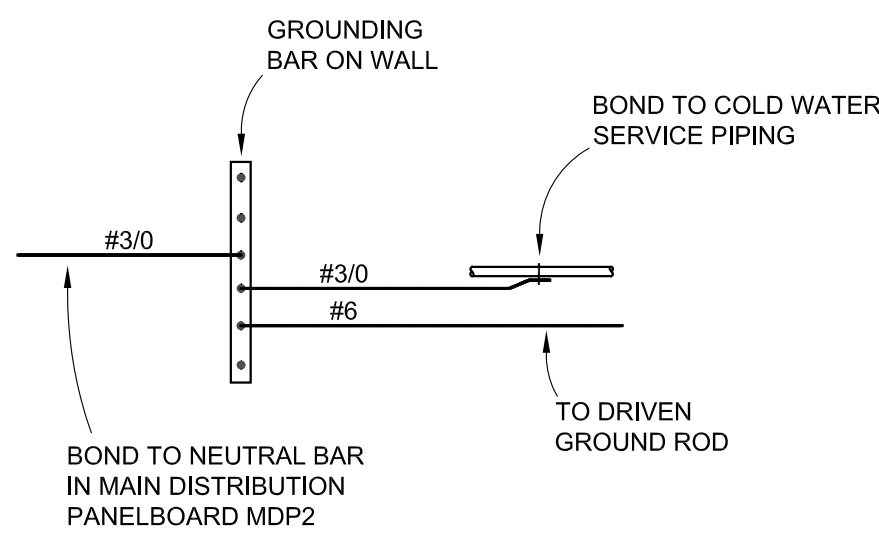


1 SERVICE ENTRANCE DETAIL  
NOT TO SCALE

CIRCUIT SCHEDULE THIS DRAWING	
1	(3) - #3/0 CONDUCTORS, 2-1/2" CONDUIT (120/240V, 1-PH)
2	(3) - #500 CONDUCTORS, #3 GROUND, 3-1/2" CONDUIT (120/240V, 1-PH)
3	(2) SETS: (3) - #350 CONDUCTORS, #1 GROUND, 3" CONDUIT (120/240V, 1-PH)
4	(3) SETS: (3) - #600 CONDUCTORS, 3-1/2" CONDUIT (120/240V, 1-PH)

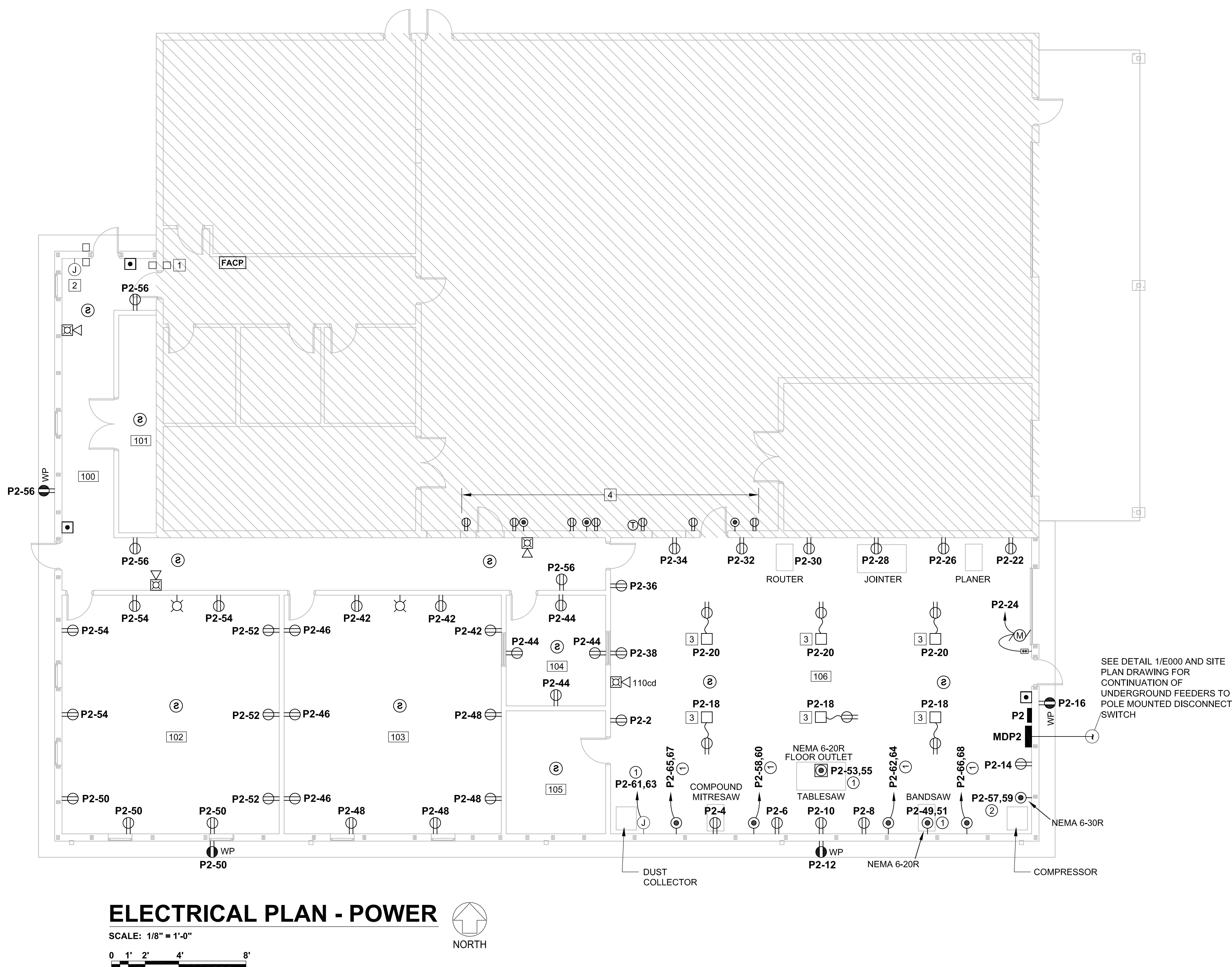


2 ELECTRICAL SCHEMATIC RISER DIAGRAM  
NOT TO SCALE



3 SYSTEM GROUND  
NOT TO SCALE





ELECTRICAL PLAN - POWER

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

0 1' 2' 4' 8'



KEYED NOTES

- DISCONNECT AND REMOVE EXISTING DOOR ACCESS CONTROL DEVICES AT EXISTING DOOR, SALVAGE DEVICES TO BE REUSED AT NEW EXTERIOR DOOR LOCATION.
- PROVIDE JUNCTION BOX AND EMPTY 1/2" CONDUIT HIGH ON WALL NEAR CEILING FOR RELOCATED DOOR ACCESS CONTROL DEVICES. RECONNECT TO EXISTING CIRCUIT AS REQUIRED.
- CEILING MOUNTED CORD REEL WITH 120V RECEPTACLE.
- EXISTING DEVICES ON WALL IN EXISTING BUILDING TO REMAIN (FIELD VERIFY THAT LOCATIONS OF NEW DOORS AND WINDOWS COORDINATE WITH EXISTING DEVICES). DISCONNECT AND REMOVE EXISTING SURFACE CONDUITS ON FACE OF WALL SERVING DEVICES, MODIFY CONDUITS AS REQUIRED AND INSTALL NEW SURFACE CONDUITS TO CLEAR NEW DOOR AND WINDOW LOCATIONS AND RECONNECT CIRCUITS TO EXISTING DEVICES.

GENERAL NOTES

- ALL RECEPTACLES, SWITCHES, ETC. SHALL BE MOUNTED ON FACE OF WALL IN SURFACE BOX. CONDUIT RUNS SHALL BE SURFACE MOUNTED ON FACE OF WALL EXCEPT AS NOTED.
- SEE SITE PLAN DRAWING FOR NEW FIBER OPTIC CABLING BY ELECTRICAL CONTRACTOR.
- CONNECT NEW FIRE ALARM DEVICES TO EXISTING FIRE ALARM CONTROL PANEL AS REQUIRED.
- VERIFY ELECTRICAL CHARACTERISTICS OF EQUIPMENT FURNISHED BY OWNER AND COORDINATE NEMA OUTLET CONFIGURATIONS AND CIRCUIT SIZES AS NECESSARY.

CIRCUIT SCHEDULE  
THIS DRAWING

- (2) - #12 CONDUCTORS, #12 GROUND, 1/2" CONDUIT (240V, 1-PH)
- (2) - #10 CONDUCTORS, #10 GROUND, 3/4" CONDUIT (240V, 1-PH)

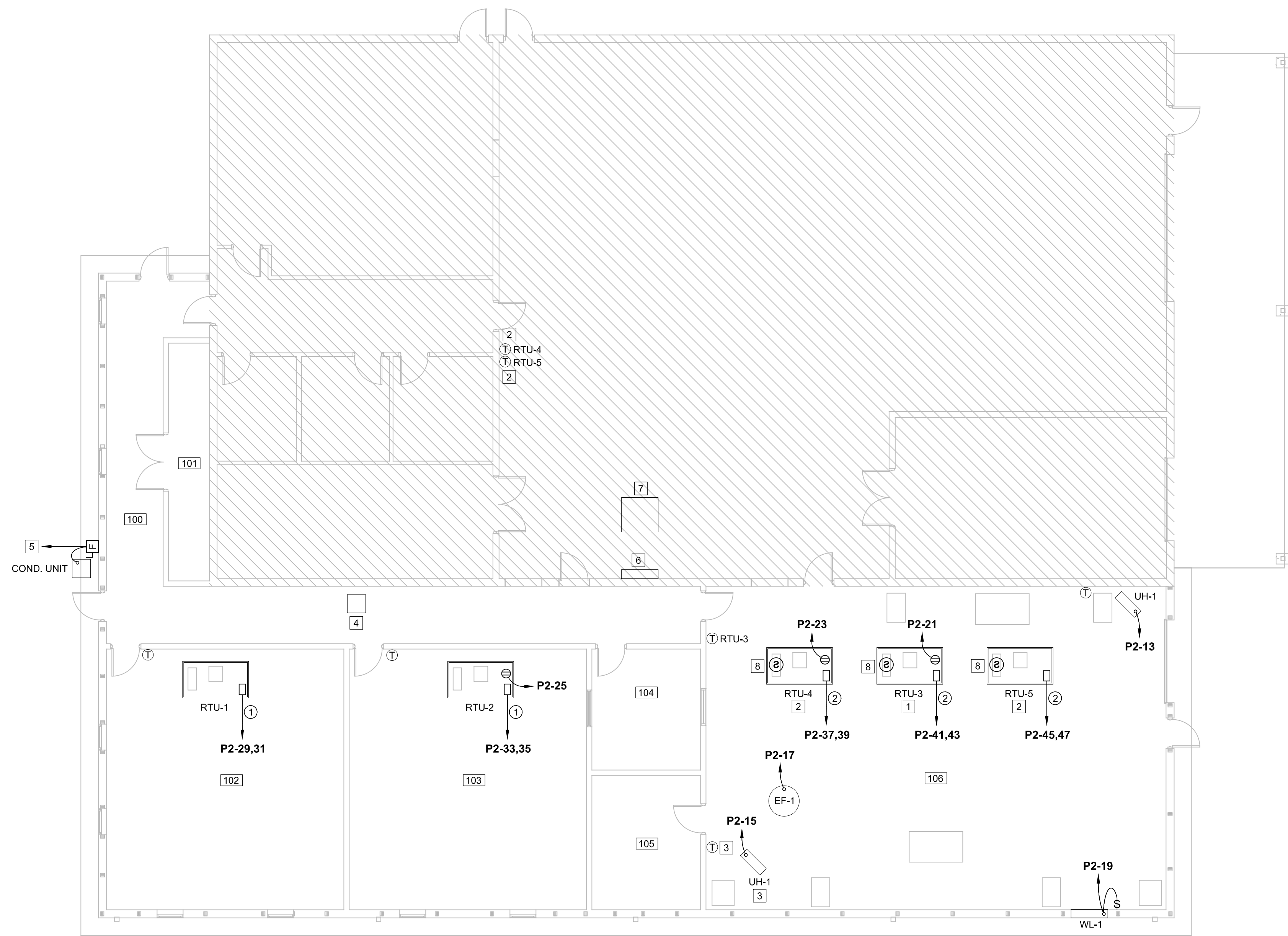
BRANCH PANELBOARD "P2"  
(SQUARE-D "NQ" TYPE NQ84L6C)

VOLTAGE RATING: 120/240		PHASE: 1		WIRE: 3	
MIN. BUSS AMPS: 400		MAIN DEVICE AMPS: MAIN LUG ONLY			
BREAKER A.I.C.: 10,000		MOUNTING: SURFACE NEMA-1			
LOCATION DESCRIPTION	LOAD KW	DEVICE AMPS/P	CIR	PH	LOCATION DESCRIPTION
WOOD SHOP LIGHTS	0.585	20/1	1	A	WOOD SHOP RECEPTACLE
CLASSROOM AREA LIGHTS	0.650	20/1	3	B	COMPOUND MITRESAW
EXTERIOR LIGHTS	0.190	20/1	5	A	WOOD SHOP RECEPTACLE
CORRIDOR LIGHTS	0.390	20/1	7	B	WOOD SHOP RECEPTACLE
EXIT LIGHTS	0.005	20/1	9	A	WOOD SHOP RECEPTACLE
SPARE	---	20/1	11	B	EXTERIOR RECEPTACLE
UNIT HEATER (UH-1)	0.240	20/1	13	A	WOOD SHOP RECEPTACLE
UNIT HEATER (UH-1)	0.240	20/1	15	B	EXTERIOR RECEPTACLE
EXHAUST FAN (EF-1)	1.920	20/1	17	A	CORD REELS POWER
WL-1 DAMPER OPERATOR	0.100	20/1	19	B	CORD REELS POWER
RTU-3 RECEPTACLE	0.180	20/1	21	A	WOOD SHOP RECEPTACLE
RTU-4 RECEPTACLE	0.180	20/1	23	B	OVERHEAD DOOR OPERATOR
RTU-2 RECEPTACLE	0.180	20/1	25	A	PLANER
SPARE	---	20/1	27	B	JOINTER
ROOFTOP UNIT (RTU-1)	5.424	40/2	31	B	ROUTER
ROOFTOP UNIT (RTU-2)	5.424	40/2	33	A	WOOD SHOP RECEPTACLE
ROOFTOP UNIT (RTU-3)	8.400	60/2	37	A	WOOD SHOP RECEPTACLE
ROOFTOP UNIT (RTU-4)	8.400	60/2	39	B	SPARE
ROOFTOP UNIT (RTU-5)	8.400	60/2	41	A	CLASSROOM RECEPTACLES
BANDSAW	3.600	20/2	49	A	CLASSROOM RECEPTACLES
TABLESAW	3.600	20/2	51	B	CLASSROOM RECEPTACLES
AIR COMPRESSOR	5.280	30/2	57	A	240V WALL OUTLET
DUST COLLECTOR	1.125	20/2	61	A	240V WALL OUTLET
240V WALL OUTLET	3.840	20/2	63	B	240V WALL OUTLET
SPARE	---	20/1	69	A	SPARE
SPARE	---	20/1	71	B	SPARE
SPARE	---	20/1	73	A	SPARE
SPARE	---	20/1	75	B	SPARE
SPARE	---	20/1	77	A	SPARE
SPARE	---	20/1	79	B	SPARE
SPARE	---	20/1	81	A	SPARE
SPARE	---	20/1	83	B	SPARE
TOTAL CONNECTED LOAD (KW):		84.858			
TOTAL CONNECTED AMPS:		353.6			

BRANCH PANELBOARD "P2"  
(SQUARE-D "NQ" TYPE NQ84L6C)

VOLTAGE RATING: 120/240			PHASE: 1			WIRE: 3		
MIN. BUSS AMPS: 400			MAIN DEVICE AMPS:			MAIN LUG ONLY		
BREAKER A.I.C.: 10,000			MOUNTING: SURFACE NEMA-1					
LOCATION DESCRIPTION	LOAD KW	DEVICE AMPS/P	CIR	PH	CIR	DEVICE AMPS/P	LOAD KW	LOCATION DESCRIPTION
EXISTING 600A PANELBOARD	115.200	600/2	1	A	2			
			3	C	4			
			5	A	6			
			7	C	8			
			9	A	10			
PANELBOARD P2	84.858	400/2	11	C	12			
			13	A	14			
			15	C	16			
			17	A	18			
			19	C	20			
EXISTING GRANDSTAND	38.400	200/2	21	A	22			
			23	C	24			
			25	A	26			
			27	C	28			
			29	A	30			
SPARE SPACE			31	C	32			
			33	A	34			
			35	C	36			
			37	A	38			
			39	C	40			
			41	A	42			
			43	C	44			
			45	A	46			
			47	C	48			
			49	A	50			
			51	C	52			
			53	A	54			
TOTAL CONNECTED LOAD (KW):		238.458						
TOTAL CONNECTED AMPS:		993.6						





**ELECTRICAL PLAN - HVAC POWER**

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



**KEYED NOTES**

- 1 ROOFTOP UNIT INSTALLED UNDER ALT. BID E-1.
- 2 ROOFTOP UNIT INSTALLED UNDER ALT. BID E-2.
- 3 OMIT UNIT HEATER UNDER ALT. BID E-1.
- 4 DISCONNECT AND REMOVE POWER AND CONTROL CIRCUITS TO EXISTING CONDENSING UNIT. CONDENSING UNIT RELOCATED BY MECHANICAL CONTRACTOR.
- 5 MODIFY EXISTING CONDENSING UNIT POWER AND CONTROL CIRCUITS AS REQUIRED AND RECONNECT TO RELOCATED CONDENSING UNIT.
- 6 DISCONNECT AND REMOVE POWER AND CONTROL CIRCUITS TO EXISTING WALL LOUVER. WALL LOUVER AND DAMPER REMOVED BY MECHANICAL CONTRACTOR.
- 7 MODIFY EXISTING DAMPER POWER AND CONTROL CIRCUITS AS REQUIRED AND RECONNECT TO NEW ROOF MOUNTED LOUVER. SEE MECHANICAL DRAWINGS.
- 8 INSTALL SMOKE DETECTOR IN RETURN AIR DUCT. CONNECT TO EXISTING FIRE ALARM PANEL AS REQUIRED.

**GENERAL NOTES**

1. ALL DEVICES SHALL BE MOUNTED ON FACE OF WALL IN SURFACE BOX. CONDUIT RUNS SHALL BE SURFACE MOUNTED ON FACE OF WALL EXCEPT AS NOTED.

**CIRCUIT SCHEDULE THIS DRAWING**

- 1 (2) - #8 CONDUCTORS, #10 GROUND, 3/4" CONDUIT (240V, 1-PH)
- 2 (2) - #6 CONDUCTORS, #10 GROUND, 1" CONDUIT (240V, 1-PH)

OWNER:  
RALLS COUNTY R-II  
SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MO 63436

RALLS COUNTY R-II SCHOOL DISTRICT  
**AG BUILDING ADDITION**

21622 HIGHWAY 19  
CENTER, MO 63436

**BIDDING PHASE**

**NOT FOR  
CONSTRUCTION**

ISSUE DATE: 03/5/2021

REVISIONS

NO.	Date	Description

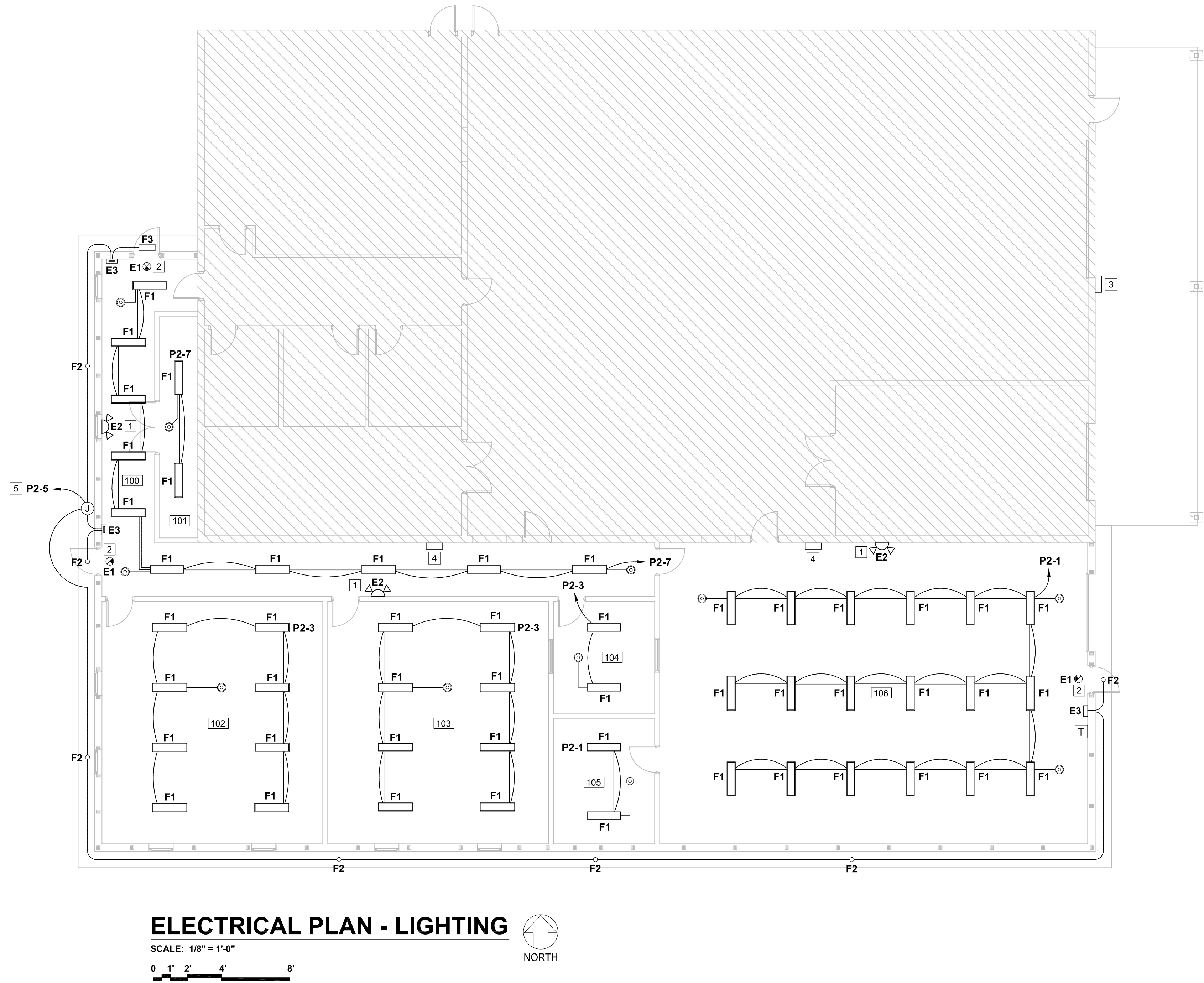
PROJECT NUMBER: 6036

**ELECTRICAL  
HVAC  
POWER  
PLAN**

DWG. NO.

**E101**





### LIGHTING FIXTURE SCHEDULE

MARK	SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NO.	LAMP(S)	VOLTAGE	WATTS	FINISH	REMARKS
F1		1 x 4 LED SURFACE MOUNT WRAPAROUND	LITHONIA LIGHTING	LBL4-4000LM-80CRI-40K-MIN1-nLIGHT-MVOLT	LIGHT EMITTING DIODES	120	32.4	STANDARD	WITH INTEGRATED nLIGHT CONTROLS
F2		RECESSED LED DOWNLIGHT	GOHAM	EV06SH-40/20-0FF-SMO-MVOLT-EZ10	LIGHT EMITTING DIODES	120	19.7	STANDARD	
F3		SURFACE MOUNTED LED WALLPACK	LITHONIA LIGHTING	TWR1-LED-ALO-40K-MVOLT-DDBTXD	LIGHT EMITTING DIODES	120	51.0	STANDARD	WALL MOUNT 144" ABOVE FLOOR
E1		CEILING MOUNTED EXIT LIGHT	LITHONIA LIGHTING	EXR-LED-EL-M6	LIGHT EMITTING DIODES	120	1.0	STANDARD	RED LETTERS, UNIVERSAL MOUNT, SINGLE OR DOUBLE FACE, WITH UNIVERSAL CHEVRONS AND BACK-UP BATTERY
E2		SURFACE MOUNTED LED EMERGENCY LIGHT	LITHONIA LIGHTING	ELM2L-M12	LIGHT EMITTING DIODES	120	1.1	STANDARD	WALL MOUNT 96" ABOVE FLOOR
E3		EMERGENCY LIGHTING INVERTER	POWER SENTRY	EAC-ISSM-20WB-120/277	---	120	20.0	STANDARD	WALL MOUNT 96" ABOVE FLOOR
		DUAL TECHNOLOGY OCCUPANCY SENSOR	LITHONIA LIGHTING	nCM PDT 9	---	---	---	STANDARD	ON / OFF PHOTOCELL OPERATION
		ASTRONOMIC TIME SWITCH	INTERMATIC	ET8015C	---	---	---	STANDARD	MOUNT ADJACENT TO PANELBOARD P2

### WIRING LEGEND

- CAT-5e CABLE
- 120V LINE VOLTAGE POWER WIRING

### KEYED NOTES

- EMERGENCY LIGHT, CONNECT TO LOCAL UNSWITCHED POWER CIRCUIT.
- EXIT LIGHTS POWERED FROM UNSWITCHED CIRCUIT P2-9.
- DISCONNECT CIRCUIT AND REMOVE EXISTING WALLPACK FIXTURE. MODIFY EXISTING CIRCUIT AS REQUIRED AND REINSTALL FIXTURE BELOW NEW CANOPY AS DIRECTED.
- DISCONNECT CIRCUIT AND REMOVE EXISTING WALLPACK FIXTURE. SALVAGE FIXTURE FOR OWNER.
- CIRCUIT CONTROLLED DUSK TO DAWN VIA TIME SWITCH.

### GENERAL NOTES

- ALL LIGHTING CONTROL DEVICES SHALL BE MOUNTED ON FACE OF WALL OR CEILING IN SURFACE BOX. ALL CONDUIT RUNS SHALL BE SURFACE MOUNTED ON FACE OF WALL OR CEILING EXCEPT AS NOTED.

OWNER:  
RALLS COUNTY R#1  
SCHOOL DISTRICT  
21622 HIGHWAY 19  
CENTER, MO 63436

RALLS COUNTY R#1 SCHOOL DISTRICT  
**AG BUILDING ADDITION**

21622 HIGHWAY 19  
CENTER, MO 63436

**BIDDING PHASE**

**NOT FOR  
CONSTRUCTION**  
ISSUE DATE: 03/5/2021

REVISIONS		
NO.	Date	Description

PROJECT NUMBER: 6036

**ELECTRICAL  
LIGHTING  
PLAN**

DWG. NO.  
**E200**